

# TPS7H500x QMLP/SEP Total Ionizing Dose (TID) Report (SLVK177)



## ABSTRACT

This report discusses the results of the total ionizing dose (TID) testing for TPS7H5004-SP QMLP, Texas Instruments 4V to 14V radiation-hardness-assured, current mode, dual output PWM controller optimized for DC-DC converters. The study was done to determine TID effects under high dose rate (HDR) up to 100krad(Si). The results show that all samples passed within the specified limits up to 100krad(Si).

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## 1 Device Information

## 1.1 Product Description

The TPS7H5004-SP QMLP is a dual output radiation-hardness-assured PWM controller suited for usage in non-synchronous push-pull and full-bridge topologies. The controller has configurable leading edge blank time. The maximum duty cycle for this device is 50% and is attained by connecting the DCL pin to AVSS. The device has high switching frequency capability, small footprint, and 0.613-V  $\pm$ 1% reference.

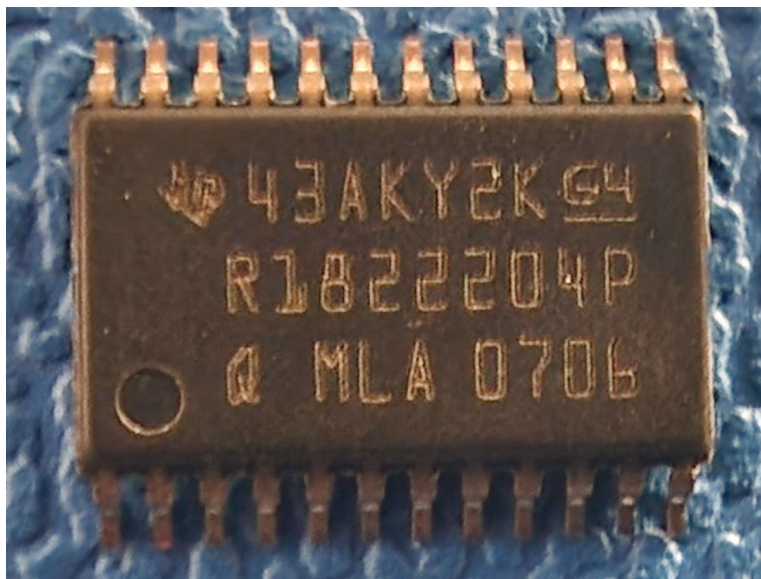
The TPS7H5004-SP QMLP can be driven using an external clock through the SYNC pin or run using the internal oscillator at a frequency programmed by the user. The TPS7H5004-SP QMLP is packaged in a very small 24-pin TSSOP (thin-shrink small outline) package.

## 1.2 Device Details

Table 1-1 lists the device information used in the initial TID HDR characterization.

**Table 1-1. Device and Exposure Details**

| TID Exposure Details    |                                                                 |
|-------------------------|-----------------------------------------------------------------|
| TI Device               | TPS7H5004-SP QMLP                                               |
| TI Part Name            | 5962R1822204PYE                                                 |
| Package                 | 24-pin TSSOP                                                    |
| Technology              | LBC7                                                            |
| Quantity Tested         | 50                                                              |
| Lot Accept/Reject       | All levels tested and passed up to 100krad(Si)                  |
| HDR Radiation Facility  | Texas Instruments - Dallas, TX                                  |
| HDR Dose Level          | 3 krad(Si), 10 krad(Si), 30 krad(Si), 50 krad(Si), 100 krad(Si) |
| HDR Dose Rate           | 175.827 rads(Si)/s [175.824 to 175.830 rad(Si)/s]               |
| HDR Radiation Source    | Gammacell (Hopewell, GR420) Co-60                               |
| Irradiation Temperature | Ambient room temperature                                        |



**Figure 1-1. TPS7H5004-SP QMLP Device Image**

## 2 Total Dose Test Setup

### 2.1 Test Overview

The TPS7H5004-SP QMLP was tested according to MIL-STD-883, Test Method 1019.9. For this testing, Condition A was used. The product was irradiated up to the target radiation level, and then put through full electrical parametric testing on the production automated test equipment (ATE). All devices remained functional passing all parametric test limits.

### 2.2 Test Description and Facilities

The TPS7H5004-SP QMLP HDR exposure was performed on biased and unbiased devices in a Co-60 gamma cell at TI facility in Dallas, Texas. The un-attenuated dose rate of this cell is 175.827 rads(Si)/s [175.824 to 175.830 rad(Si)/s]. After exposure, the devices were packed in dry ice (per MIL-STD-883 Method 1019.9 section 3.10) and full post-radiation electrical evaluation using Texas Instruments ATE was conducted. ATE test limits are set per data sheet electrical limits based on qualification and characterization data. Post-radiation measurements were taken within 30 minutes of removing the devices from the dry ice container. The devices were allowed to reach room temperature prior to electrical post-radiation measurements.

### 2.3 Test Setup Details

The devices under HDR exposure were tested in two conditions, biased and unbiased, as described in the following.

#### 2.3.1 Unbiased

For the unbiased HDR conditions, the exposure was performed with all pins grounded.

#### 2.3.2 Biased

[Figure 2-1](#) shows the diagram for HDR exposure with biased condition.

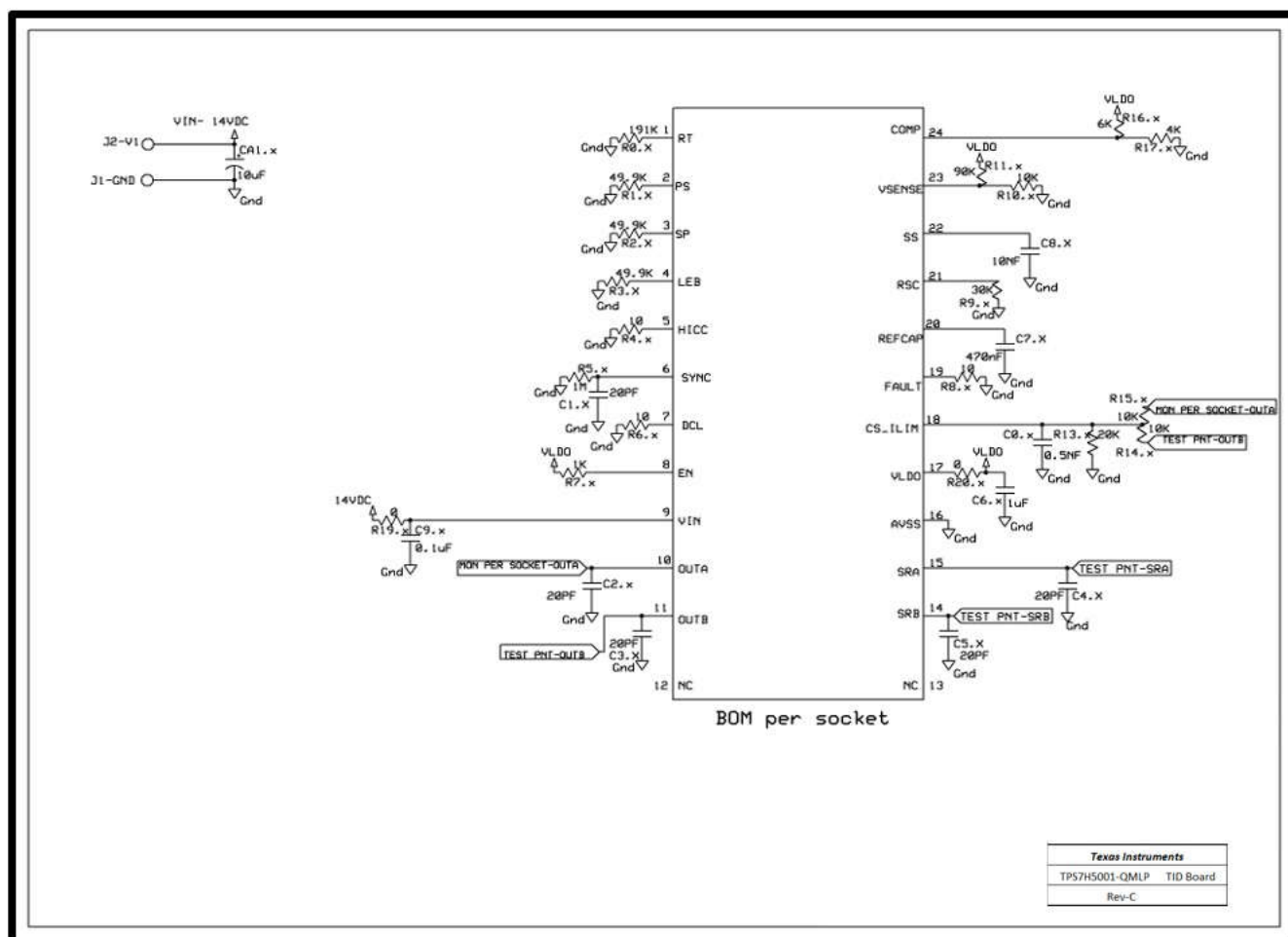


Figure 2-1. Bias Diagram Used in TID Exposure

## 2.4 Test Configuration and Condition

HDR devices were stressed at 3krad(Si), 10krad(Si), 30krad(Si), 50krad(Si), and 100krad(Si) for biased and unbiased conditions.

**Table 2-1. HDR: 3-krad(Si) to 100-krad(Si)/s Biased Device Information**

| Total Samples: 25       |                          |                           |                         |                             |
|-------------------------|--------------------------|---------------------------|-------------------------|-----------------------------|
| Exposure Levels         |                          |                           |                         |                             |
| 3krad(Si)               | 10krad(Si)               | 30krad(Si)                | 50krad(Si)              | 100krad(Si)                 |
| 442, 699, 344, 355, 750 | 540, 387, 787, 1042, 483 | 538, 164, 1018, 462, 1032 | 795, 921, 741, 809, 804 | 1036, 1038, 203, 1029, 1027 |

**Table 2-2. HDR: 3-krad(Si) to 100-krad(Si)/s Unbiased Device Information**

| Total Samples: 25        |                         |                         |                        |                        |
|--------------------------|-------------------------|-------------------------|------------------------|------------------------|
| Exposure Levels          |                         |                         |                        |                        |
| 3krad(Si)                | 10krad(Si)              | 30krad(Si)              | 50krad(Si)             | 100krad(Si)            |
| 689, 688, 700, 482, 1033 | 537, 396, 521, 535, 526 | 597, 853, 416, 949, 221 | 566, 197, 793, 802, 61 | 449, 541, 476, 45, 642 |

### 3 TID Characterization Test Results

#### 3.1 TID Characterization Summary Results

The parametric data for the TPS7H5004-SP QMLP passes up to 100krad(Si) HDR TID irradiation. The drifts of the electrical parameters through HDR were within the data sheet limits.

Overall, the TPS7H5004-SP QMLP showed a strong degree of hardness to HDR TID irradiation up to 100krad(Si) for both biased and unbiased exposure conditions. The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each dose level for both biased and unbiased. The parameters that did show a greater degree of change between pre- and post-irradiation were still within the electrical performance characteristics specified in the data sheet electrical parameters. See [TPS7H500x-SP Radiation-Hardness-Assured 2-MHz Current Mode PWM Controllers](#) for the datasheet electrical parameters and associated tests.

See [Appendix A](#) for specifications requiring clarification.

See [Appendix B](#) for HDR report up to 100krad(Si).

## 3.2 Specification Compliance Matrix

**Table 3-1. TPS7H5004-SP QMLP Electrical Parameters Table**

| PARAMETER                                     | TEST CONDITION                                                                    | TPS7H5004-SP QMLP DATA SHEET |      |      |      | TEST #                                                                                                                                                                                                                                                                   |
|-----------------------------------------------|-----------------------------------------------------------------------------------|------------------------------|------|------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                               |                                                                                   | MIN                          | TYP  | MAX  | UNIT |                                                                                                                                                                                                                                                                          |
| SUPPLY VOLTAGES AND CURRENTS                  |                                                                                   |                              |      |      |      |                                                                                                                                                                                                                                                                          |
| IDD Operating supply current                  | f <sub>SW</sub> = 500 kHz, No load for OUTA, OUTB, SRA, and SRB                   |                              | 6.25 | 8    | mA   | 5.24 __IDD_ACT_500K_NOLOAD_4V, 5.25 __IDD_ACT_500K_NOLOAD_5V, 5.26 __IDD_ACT_500K_NOLOAD_12V, 5.27 __IDD_ACT_500K_NOLOAD_14V                                                                                                                                             |
|                                               | f <sub>SW</sub> = 1 MHz, No load for OUTA, OUTB, SRA, and SRB                     |                              | 6.75 | 9.5  | mA   | 5.28 __IDD_ACT_1M_NOLOAD_4V, 5.29 __IDD_ACT_1M_NOLOAD_5V, 5.30 __IDD_ACT_1M_NOLOAD_12V, 5.31 __IDD_ACT_1M_NOLOAD_14V                                                                                                                                                     |
|                                               | f <sub>SW</sub> = 2 MHz, No load for OUTA, OUTB, SRA, and SRB                     |                              | 8.5  | 13.5 | mA   | 5.36 __IDD_ACT_2M_NOLOAD_4V, 5.37 __IDD_ACT_2M_NOLOAD_5V, 5.38 __IDD_ACT_2M_NOLOAD_12V, 5.39 __IDD_ACT_2M_NOLOAD_14V                                                                                                                                                     |
|                                               | f <sub>SW</sub> = 500 kHz, C <sub>LOAD</sub> = 100pF for OUTA, OUTB, SRA, and SRB |                              | 7.5  | 9.5  | mA   | 5.48 __IDD_ACT_500K_4V, 5.49 __IDD_ACT_500K_5V, 5.50 __IDD_ACT_500K_12V, 5.51 __IDD_ACT_500K_14V                                                                                                                                                                         |
|                                               | f <sub>SW</sub> = 1 MHz, C <sub>LOAD</sub> = 100pF for OUTA, OUTB, SRA, and SRB   |                              | 9    | 12   | mA   | 5.52 __IDD_ACT_1M_4V, 5.53 __IDD_ACT_1M_5V, 5.54 __IDD_ACT_1M_12V, 5.55 __IDD_ACT_1M_14V                                                                                                                                                                                 |
|                                               | f <sub>SW</sub> = 2 MHz, C <sub>LOAD</sub> = 100pF for OUTA, OUTB, SRA, and SRB   |                              | 14   | 19.5 | mA   | 5.60 __IDD_ACT_2M_4V, 5.61 __IDD_ACT_2M_5V, 5.62 __IDD_ACT_2M_12V, 5.63 __IDD_ACT_2M_14V                                                                                                                                                                                 |
| I <sub>DD(dis)</sub> Standby current          | EN = 0V                                                                           |                              |      | 3    | mA   | 5.1 __IDD_DIS_4V, 5.2 __IDD_DIS_5V, 5.3 __IDD_DIS_12V 5.4 __IDD_DIS_14V                                                                                                                                                                                                  |
| VLDO Internal linear regulator output voltage | 5V ≤VIN ≤ 14V, fsw ≤ 1MHz                                                         | 4.75                         | 5    | 5.2  | V    | 5.65 __V_LDO_100K_5V, 5.66 __V_LDO_100K_12V, 5.67 __V_LDO_100K_14V, 5.69 __V_LDO_200K_5V, 5.70 __V_LDO_200K_12V, 5.71 __V_LDO_200K_14V, 5.73 __V_LDO_500K_5V, 5.74 __V_LDO_500K_12V, 5.75 __V_LDO_500K_14V, 5.77 __V_LDO_1M_5V, 5.78 __V_LDO_1M_12V, 5.79 __V_LDO_1M_14V |
|                                               | 5V ≤ VIN ≤ 14V, fsw = 2MHz                                                        | 4.65                         | 5    | 5.2  | V    | 5.85 __V_LDO_2M_5V, 5.86 __V_LDO_2M_12V, 5.87 __V_LDO_2M_14V                                                                                                                                                                                                             |
| ENABLE AND UNDERVOLTAGE LOCKOUT               |                                                                                   |                              |      |      |      |                                                                                                                                                                                                                                                                          |
| V <sub>ENR</sub> EN threshold rising          |                                                                                   | 0.57                         | 0.6  | 0.65 | V    | 6.5 __V_EN_RISE_4V, 6.8 __V_EN_RISE_5V, 6.11 __V_EN_RISE_12V, 6.14 __V_EN_RISE_14V                                                                                                                                                                                       |
| V <sub>ENF</sub> EN threshold falling         |                                                                                   | 0.47                         | 0.5  | 0.55 | V    | 6.6 __V_EN_FALL_4V, 6.9 __V_EN_FALL_5V, 6.12 __V_EN_FALL_12V, 6.15 __V_EN_FALL_14V                                                                                                                                                                                       |
| V <sub>ENH</sub> EN hysteresis voltage        |                                                                                   | 85                           | 95   | 105  | mV   | 6.7 __V_EN_HYS_4V, 6.10 __V_EN_HYS_5V, 6.13 __V_EN_HYS_12V, 6.16 __V_EN_HYS_14V                                                                                                                                                                                          |
| I <sub>EN</sub> EN pin input leakage current  | VIN = 14V, EN = 5V                                                                |                              | 5    | 50   | nA   | 6.1 __I_EN_LEAK_4V, 6.2 __I_EN_LEAK_5V, 6.3 __I_EN_LEAK_12V, 6.4 __I_EN_LEAK_14V                                                                                                                                                                                         |
| VLDO <sub>UVLOR</sub> VLDO UVLO rising        |                                                                                   | 3.44                         | 3.55 | 3.66 | V    | 6.34 __UVLO_VLDO_RISE_1MHz, 6.37 __UVLO_VLDO_RISE_100kHz, 6.40 __UVLO_VLDO_RISE_200kHz, 6.43 __UVLO_VLDO_RISE_500kHz, 6.46 __UVLO_VLDO_RISE_2MHz                                                                                                                         |
| VLDO <sub>UVLOF</sub> VLDO UVLO falling       |                                                                                   | 3.29                         | 3.4  | 3.51 | V    | 6.35 __UVLO_VLDO_FALL_1MHz, 6.38 __UVLO_VLDO_FALL_100kHz, 6.41 __UVLO_VLDO_FALL_200kHz, 6.44 __UVLO_VLDO_FALL_500kHz, 6.47 __UVLO_VLDO_FALL_2MHz                                                                                                                         |
| VLDO <sub>UVLOH</sub> VLDO UVLO hysteresis    |                                                                                   | 115                          | 135  | 160  | mV   | 6.36 __UVLO_VLDO_HYS_1MHz, 6.39 __UVLO_VLDO_HYS_100kHz, 6.42 __UVLO_VLDO_HYS_200kHz, 6.45 __UVLO_VLDO_HYS_500kHz, 6.48 __UVLO_VLDO_HYS_2MHz                                                                                                                              |
| SOFT START                                    |                                                                                   |                              |      |      |      |                                                                                                                                                                                                                                                                          |
| I <sub>SS</sub> Soft-start current            | SS = 0.3V                                                                         | 1.98                         | 2.7  | 3.32 | μA   | 7.1 __I_SS_4V, 7.3 __I_SS_5V, 7.5 __I_SS_12V, 7.7 __I_SS_14V                                                                                                                                                                                                             |
| ERROR AMPLIFIER                               |                                                                                   |                              |      |      |      |                                                                                                                                                                                                                                                                          |
| EA <sub>gm</sub> Transconductance             | −2μA < I <sub>COMP</sub> < 2μA, V <sub>(COMP)</sub> = 1V                          | 1150                         | 1800 | 2500 | μA/V | 8.9 __EA_GM_4V, 8.10 __EA_GM_5V, 8.11 __EA_GM_12V, 8.12 __EA_GM_14V                                                                                                                                                                                                      |

**Table 3-1. TPS7H5004-SP QMLP Electrical Parameters Table (continued)**

| PARAMETER                                                   | TEST CONDITION                                  | TPS7H5004-SP QMLP DATA SHEET |       |       |      | TEST #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------|-------------------------------------------------|------------------------------|-------|-------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                             |                                                 | MIN                          | TYP   | MAX   | UNIT |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| EA <sub>ISRC</sub> Error amplifier source current           | V <sub>(COMP)</sub> = 1V, 100mV input overdrive | 100                          |       | 190   | μA   | 8.13 __EA_I_SOURCE_4V, 8.14 __EA_I_SOURCE_5V, 8.15 __EA_I_SOURCE_12V, 8.16 __EA_I_SOURCE_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| EA <sub>ISINK</sub> Error amplifier sink current            | V <sub>(COMP)</sub> = 1V, 100mV input overdrive | 100                          |       | 190   | μA   | 8.17 __EA_I_SINK_4V, 8.18 __EA_I_SINK_5V, 8.19 __EA_I_SINK_12V, 8.20 __EA_I_SINK_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| EA <sub>OS</sub> Error amplifier offset voltage             |                                                 | -2                           |       | 2     | mV   | 8.5 __EA_OS_4V, 8.6 __EA_OS_5V, 8.7 __EA_OS_12V, 8.8 __EA_OS_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>OSCILLATOR</b>                                           |                                                 |                              |       |       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| SYNC <sub>RT</sub> SYNC out low-to-high rise time (10%/90%) | C <sub>LOAD</sub> = 25pF                        |                              | 6     | 15    | ns   | 9.1 __T_SYNC_RISE_100kHz_4V, 9.5 __T_SYNC_RISE_200kHz_4V, 9.9 __T_SYNC_RISE_500kHz_4V, 9.13 __T_SYNC_RISE_1MHz_4V, 9.17 __T_SYNC_RISE_1p5MHz_4V, 9.21 __T_SYNC_RISE_2MHz_4V, 9.25 __T_SYNC_RISE_100kHz_5V, 9.29 __T_SYNC_RISE_200kHz_5V, 9.33 __T_SYNC_RISE_500kHz_5V, 9.37 __T_SYNC_RISE_1MHz_5V, 9.41 __T_SYNC_RISE_1p5MHz_5V, 9.45 __T_SYNC_RISE_2MHz_5V, 9.49 __T_SYNC_RISE_100kHz_12V, 9.53 __T_SYNC_RISE_200kHz_12V, 9.57 __T_SYNC_RISE_500kHz_12V, 9.61 __T_SYNC_RISE_1MHz_12V, 9.65 __T_SYNC_RISE_1p5MHz_12V, 9.69 __T_SYNC_RISE_2MHz_12V, 9.73 __T_SYNC_RISE_100kHz_14V, 9.77 __T_SYNC_RISE_200kHz_14V, 9.81 __T_SYNC_RISE_500kHz_14V, 9.85 __T_SYNC_RISE_1MHz_14V, 9.89 __T_SYNC_RISE_1p5MHz_14V, 9.93 __T_SYNC_RISE_2MHz_14V |
| SYNC <sub>FT</sub> SYNC out high-to-low fall time (10%/90%) | C <sub>LOAD</sub> = 25pF                        |                              | 6     | 17    | ns   | 9.2 __T_SYNC_FALL_100kHz_4V, 9.14 __T_SYNC_FALL_1MHz_4V, 9.22 __T_SYNC_FALL_2MHz_4V, 9.26 __T_SYNC_FALL_100kHz_5V, 9.38 __T_SYNC_FALL_1MHz_5V, 9.46 __T_SYNC_FALL_2MHz_5V, 9.74 __T_SYNC_FALL_100kHz_14V, 9.86 __T_SYNC_FALL_1MHz_14V, 9.94 __T_SYNC_FALL_2MHz_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| SYNC <sub>OL</sub> SYNC out low level                       | I <sub>OL</sub> = 10mA                          |                              |       | 500   | mV   | 9.186 __SYNC_VOL_4V, 9.187 __SYNC_VOL_5V, 9.188 __SYNC_VOL_12V, 9.189 __SYNC_VOL_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| EXT <sub>DT</sub> Externally set frequency detection time   | RT = Open, f = 200 kHz                          |                              |       | 20    | μs   | 9.185 __T_SYNC_DETECT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| FSW <sub>EXT</sub> Externally set frequency                 | RT = 1.07MΩ                                     | 95                           | 105   | 115   | kHz  | 9.4 __FSW_EXT_RT_100kHz_4V, 9.28 __FSW_EXT_RT_100kHz_5V, 9.52 __FSW_EXT_RT_100kHz_12V, 9.76 __FSW_EXT_RT_100kHz_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                             | RT = 511kΩ                                      | 190                          | 210   | 230   | kHz  | 9.8 __FSW_EXT_RT_200kHz_4V, 9.32 __FSW_EXT_RT_200kHz_5V, 9.56 __FSW_EXT_RT_200kHz_12V, 9.80 __FSW_EXT_RT_200kHz_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                             | RT = 90.9kΩ                                     | 900                          | 1000  | 1100  | kHz  | 9.16 __FSW_EXT_RT_1MHz_4V, 9.40 __FSW_EXT_RT_1MHz_5V, 9.64 __FSW_EXT_RT_1MHz_12V, 9.88 __FSW_EXT_RT_1MHz_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                             | RT = 34.8kΩ                                     | 1700                         | 2000  | 2300  | kHz  | 9.24 __FSW_EXT_RT_2MHz_4V, 9.48 __FSW_EXT_RT_2MHz_5V, 9.72 __FSW_EXT_RT_2MHz_12V, 9.96 __FSW_EXT_RT_2MHz_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>VOLTAGE REFERENCE</b>                                    |                                                 |                              |       |       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| VREF Internal voltage reference initial tolerance           | Measured at COMP, 25°C                          | 0.609                        | 0.613 | 0.615 | V    | 8.1 __VREF_4V, 8.2 __VREF_5V, 8.3 __VREF_12V, 8.4 __VREF_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Table 3-1. TPS7H5004-SP QMLP Electrical Parameters Table (continued)**

| PARAMETER                                                   | TEST CONDITION                                                  | TPS7H5004-SP QMLP DATA SHEET |       |       |      | TEST #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------|-------|-------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                             |                                                                 | MIN                          | TYP   | MAX   | UNIT |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| REFCAP REFCAP voltage                                       | REFCAP = 470nF                                                  | 1.213                        | 1.225 | 1.237 | V    | 5.88 __V_REFCAP_100K_4V, 5.89 __V_REFCAP_100K_5V, 5.90 __V_REFCAP_100K_12V, 5.91 __V_REFCAP_100K_14V, 5.92 __V_REFCAP_200K_4V, 5.93 __V_REFCAP_200K_5V, 5.94 __V_REFCAP_200K_12V, 5.95 __V_REFCAP_200K_14V, 5.96 __V_REFCAP_500K_4V, 5.97 __V_REFCAP_500K_5V, 5.98 __V_REFCAP_500K_12V, 5.99 __V_REFCAP_500K_14V, 5.100 __V_REFCAP_1M_4V, 5.101 __V_REFCAP_1M_5V, 5.102 __V_REFCAP_1M_12V, 5.103 __V_REFCAP_1M_14V, 5.104 __V_REFCAP_1P5M_4V, 5.105 __V_REFCAP_1P5M_5V, 5.106 __V_REFCAP_1P5M_12V, 5.107 __V_REFCAP_1P5M_14V, 5.108 __V_REFCAP_2M_4V, 5.109 __V_REFCAP_2M_5V, 5.110 __V_REFCAP_2M_12V, 5.111 __V_REFCAP_2M_14V |
| <b>CURRENT SENSE, CURRENT LIMIT, AND HICCUP</b>             |                                                                 |                              |       |       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CCSR                                                        | COMP to CS_ILIM ratio                                           | 2.00                         | 2.06  | 2.12  |      | 10.49 __CCSR_Ratio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| V <sub>CS_ILIM</sub> Current limit (over-current) threshold |                                                                 |                              | 1.05  | 1.09  | V    | 10.1 __V_CS_ILIM_OC_Rise_4V, 10.3 __V_CS_ILIM_OC_Rise_5V, 10.5 __V_CS_ILIM_OC_Rise_12V, 10.7 __V_CS_ILIM_OC_Rise_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>FAULT</b>                                                |                                                                 |                              |       |       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| V <sub>FLTR</sub> FLT threshold rising                      |                                                                 | 0.57                         | 0.6   | 0.65  | V    | 12.1 __V_FAULT_RISE_4V, 12.4 __V_FAULT_RISE_5V, 12.7 __V_FAULT_RISE_12V, 12.10 __V_FAULT_RISE_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| V <sub>FLTF</sub> FLT threshold falling                     |                                                                 | 0.47                         | 0.5   | 0.55  | V    | 12.2 __V_FAULT_FALL_4V, 12.5 __V_FAULT_FALL_5V, 12.8 __V_FAULT_FALL_12V, 12.11 __V_FAULT_FALL_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| V <sub>FLTH</sub> FLT hysteresis voltage                    |                                                                 | 90                           | 100   | 110   | mV   | 12.3 __V_FAULT_HYS_4V, 12.6 __V_FAULT_HYS_5V, 12.9 __V_FAULT_HYS_12V, 12.12 __V_FAULT_HYS_14V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| T <sub>FLT</sub> FLT minimum pulse width                    | V <sub>FLT</sub> = 1V                                           | 0.4                          |       | 1.4   | μs   | 12.14 __T_FAULT_MIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| t <sub>DFT</sub> FLT delay duration                         | f <sub>sw</sub> = 100kHz                                        | 140                          | 152   | 169   | μs   | 12.15 __T_FAULT_DELAY_100kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                             | f <sub>sw</sub> = 200kHz                                        | 66                           | 78    | 86    | μs   | 12.17 __T_FAULT_DELAY_200kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                             | f <sub>sw</sub> = 1MHz                                          | 14                           | 17    | 21    | μs   | 12.21 __T_FAULT_DELAY_1MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                             | f <sub>sw</sub> = 2MHz                                          | 7                            | 11    | 14    | μs   | 12.23 __T_FAULT_DELAY_2MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>PRIMARY AND SYNCHRONOUS RECTIFIER OUTPUTS</b>            |                                                                 |                              |       |       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Rise/fall time                                              | R <sub>LOAD</sub> = 50kΩ, C <sub>LOAD</sub> = 100pF, 10% to 90% |                              | 10    | 17    | ns   | 13.1 __OUTA_RISE_1MHz_4V, 13.9 __OUTA_RISE_1MHz_5V, 13.17 __OUTA_RISE_1MHz_12V, 13.25 __OUTA_RISE_1MHz_14V, 13.3 __OUTA_FALL_1MHz_4V, 13.11 __OUTA_FALL_1MHz_5V, 13.19 __OUTA_FALL_1MHz_12V, 13.27 __OUTA_FALL_1MHz_14V, 13.2 __OUTB_RISE_1MHz_4V, 13.10 __OUTB_RISE_1MHz_5V, 13.18 __OUTB_RISE_1MHz_12V, 13.26 __OUTB_RISE_1MHz_14V, 13.4 __OUTB_FALL_1MHz_4V, 13.12 __OUTB_FALL_1MHz_5V, 13.20 __OUTB_FALL_1MHz_12V, 13.28 __OUTB_FALL_1MHz_14V                                                                                                                                                                              |
| t <sub>MIN</sub> Minimum on-time LEB = 10kΩ                 | LEB = 10kΩ, 5V ≤ VIN ≤ 14V                                      |                              |       | 85    | ns   | 13.145 __OUT_T_ON_MIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>DUTY CYCLE</b>                                           |                                                                 |                              |       |       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| D <sub>MAX</sub> Maximum duty cycle                         | DCL = AVSS                                                      | 45                           | 48    | 50    | %    | 13.160 __MAX_DC_DCL_AVSS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## 4 Applicable and Reference Documents

### 4.1 Applicable Documents

- Texas Instruments, [TPS7H500x-SP Radiation-Hardness-Assured 2-MHz Current Mode PWM Controllers](#)
- Texas Instruments, [TPS7H500xEVM Evaluation Module \(EVM\) user's guide](#)

### 4.2 Reference Documents

Texas Instruments total ionizing dose radiation (total dose) test procedure follows the standards put forth in MIL-STD-883 TM 1019. The document can be found at the DLA website.

## A Appendix: Specifications Requiring Clarification

**Table A-1. Specifications Requiring Clarification - Set #1**

| PARAMETER                                 | TEST CONDITION               | TPS7H5004-SP<br>QMLP<br>DATA SHEET |     |      |      |
|-------------------------------------------|------------------------------|------------------------------------|-----|------|------|
|                                           |                              | MIN                                | TYP | MAX  | UNIT |
| VIN Operating voltage                     |                              | 4                                  |     | 14   | V    |
| F <sub>SYNC</sub> SYNC in frequency range |                              | 200                                |     | 4000 | kHz  |
| D <sub>SYNC</sub> SYNC in duty cycle      | Duty cycle of external clock | 40                                 |     | 60   | %    |

**Table A-2. Specifications Requiring Clarification - Set #2**

| PARAMETER                                          | TEST CONDITION         | TPS7H5004-SP QMLP DATA SHEET |       |     |      |
|----------------------------------------------------|------------------------|------------------------------|-------|-----|------|
|                                                    |                        | MIN                          | TYP   | MAX | UNIT |
| EA <sub>DC</sub> DC gain                           | VSENSE = 0.6V          |                              | 10000 |     | V/V  |
| EA <sub>ro</sub> Error amplifier output resistance |                        |                              | 7     |     | MΩ   |
| EA <sub>IB</sub> Error amplifier bias current      |                        |                              |       | 35  | nA   |
| EA <sub>BW</sub> Bandwidth                         |                        |                              | 10    |     | MHz  |
| SYNC <sub>IL</sub> SYNC in low-level               | VIN < 5V               |                              |       | 0.8 | V    |
|                                                    | VIN ≥ 5V               |                              |       | 0.8 |      |
| SYNC <sub>IH</sub> SYNC in high-level              | VIN < 5V               |                              | 3.5   |     | V    |
|                                                    | VIN ≥ 5V               |                              | 3.5   |     |      |
| (VLDO - SYNC <sub>OH</sub> ) SYNC out high level   | I <sub>OH</sub> = 10mA |                              |       | 0.5 | V    |

**Table A-3. Specifications Requiring Clarification - Set #3**

| PARAMETER                                       | TEST CONDITION                                                                                                | TPS7H5004-SP<br>QMLP<br>DATA SHEET |     |     |      |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------|-----|-----|------|
|                                                 |                                                                                                               | MIN                                | TYP | MAX | UNIT |
| I <sub>HICC_DEL</sub> Hiccup delay current      | CS_LIM = 1.3V, COMP = 3V, VSENSE = REFCAP/2V, C <sub>HICC</sub> = 3nF, LEB = 49.9kΩ, f <sub>sw</sub> = 100kHz |                                    | 80  |     | μA   |
| I <sub>HICC_RST</sub> Hiccup restart current    |                                                                                                               |                                    | 1   |     | μA   |
| V <sub>HICC_PU</sub> Hiccup pull-up threshold   |                                                                                                               |                                    | 1.0 |     | V    |
| V <sub>HICC_SD</sub> Hiccup shut-down threshold |                                                                                                               |                                    | 0.6 |     | V    |
| V <sub>HICC_RS</sub> T Hiccup restart threshold |                                                                                                               |                                    | 0.3 |     | V    |

**Table A-3. Specifications Requiring Clarification - Set #3 (continued)**

| PARAMETER          | TEST CONDITION                                         | TPS7H5004-SP<br>QMLP<br>DATA SHEET |       |     |                        |
|--------------------|--------------------------------------------------------|------------------------------------|-------|-----|------------------------|
|                    |                                                        | MIN                                | TYP   | MAX | UNIT                   |
| Slope compensation | $f_{SW} = 100\text{kHz}$ , $RSC = 1.18\text{M}\Omega$  |                                    | 0.033 |     | $\text{V}/\mu\text{s}$ |
|                    | $f_{SW} = 200\text{kHz}$ , $RSC = 562\text{k}\Omega$   |                                    | 0.066 |     |                        |
|                    | $f_{SW} = 1000\text{kHz}$ , $RSC = 100\text{k}\Omega$  |                                    | 0.333 |     |                        |
|                    | $f_{SW} = 2000\text{kHz}$ , $RSC = 49.9\text{k}\Omega$ |                                    | 0.666 |     |                        |

**Table A-3. Specifications Requiring Clarification - Set #3 (continued)**

| PARAMETER                                   | TEST CONDITION             | TPS7H5004-SP<br>QMLP<br>DATA SHEET |     |     |      |
|---------------------------------------------|----------------------------|------------------------------------|-----|-----|------|
|                                             |                            | MIN                                | TYP | MAX | UNIT |
| PRIMARY AND SYNCHRONOUS RECTIFIER OUTPUTS   |                            |                                    |     |     |      |
| Low-level threshold                         | I <sub>SINK</sub> = 10mA   |                                    | 0.5 |     | V    |
| High-level threshold                        | I <sub>SOURCE</sub> = 10mA |                                    | 4.5 |     | V    |
| R <sub>SRC_P</sub> Output source resistance | I <sub>OUT</sub> = 20mA    |                                    | 15  |     | Ω    |
| R <sub>SINK_P</sub> Output sink resistance  | I <sub>OUT</sub> = 20mA    |                                    | 15  |     | Ω    |

**Table A-4. Specifications Requiring Clarification - Set #4**

| PARAMETER                       | TEST CONDITION                           | TPS7H5004-SP QMLP DATA SHEET |       |       |      |
|---------------------------------|------------------------------------------|------------------------------|-------|-------|------|
|                                 |                                          | MIN                          | TYP   | MAX   | UNIT |
| VREF Internal voltage reference | Measured at COMP, $-55^{\circ}\text{C}$  | 0.607                        | 0.609 | 0.612 | V    |
|                                 | Measured at COMP, $+125^{\circ}\text{C}$ | 0.611                        | 0.614 | 0.617 |      |

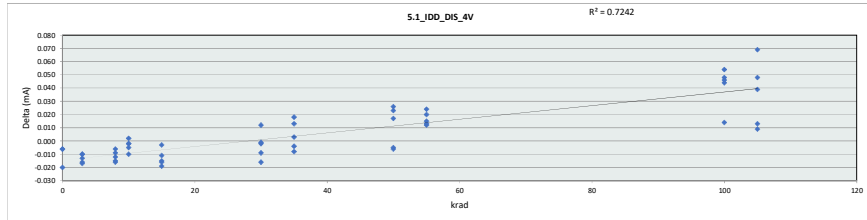
## B Appendix: HDR TID Report Data

This appendix contains the HDR TID report data.

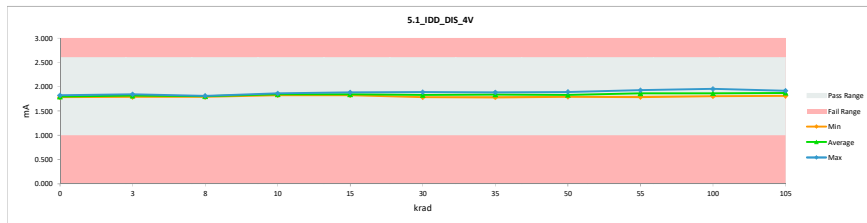
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.1_IDD_DIS_4V |          |         |          |        |
|----------------|----------|---------|----------|--------|
| Test Site      |          |         |          |        |
| Tester         |          |         |          |        |
| Test Number    |          |         |          |        |
| Unit           | mA       | mA      |          |        |
| Max Limit      | 2.6      | 2.6     |          |        |
| Min Limit      | 1        | 1       |          |        |
| krad           | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0              | 552      | 1.802   | 1.782    | -0.020 |
| 0              | 726      | 1.827   | 1.821    | -0.006 |
| 0              | 791      | 1.799   | 1.793    | -0.006 |
| 3              | 689      | 1.831   | 1.821    | -0.010 |
| 3              | 688      | 1.825   | 1.809    | -0.016 |
| 3              | 700      | 1.828   | 1.818    | -0.010 |
| 3              | 482      | 1.860   | 1.843    | -0.017 |
| 3              | 1033     | 1.864   | 1.791    | -0.013 |
| 8              | 442      | 1.820   | 1.804    | -0.016 |
| 8              | 699      | 1.802   | 1.790    | -0.012 |
| 8              | 344      | 1.823   | 1.808    | -0.015 |
| 8              | 355      | 1.802   | 1.793    | -0.009 |
| 8              | 750      | 1.819   | 1.813    | -0.006 |
| 10             | 537      | 1.824   | 1.824    | 0.002  |
| 10             | 396      | 1.852   | 1.842    | -0.010 |
| 10             | 521      | 1.842   | 1.837    | -0.005 |
| 10             | 535      | 1.864   | 1.862    | -0.002 |
| 10             | 526      | 1.860   | 1.858    | -0.002 |
| 15             | 540      | 1.862   | 1.843    | -0.019 |
| 15             | 387      | 1.851   | 1.835    | -0.016 |
| 15             | 787      | 1.836   | 1.825    | -0.011 |
| 15             | 1042     | 1.899   | 1.884    | -0.015 |
| 15             | 483      | 1.829   | 1.826    | -0.003 |
| 30             | 597      | 1.810   | 1.794    | -0.016 |
| 30             | 853      | 1.890   | 1.888    | -0.002 |
| 30             | 416      | 1.825   | 1.824    | -0.001 |
| 30             | 949      | 1.793   | 1.784    | -0.009 |
| 30             | 221      | 1.847   | 1.859    | 0.012  |
| 35             | 538      | 1.861   | 1.874    | 0.013  |
| 35             | 164      | 1.785   | 1.781    | -0.004 |
| 35             | 1018     | 1.864   | 1.882    | 0.018  |
| 35             | 462      | 1.796   | 1.799    | 0.003  |
| 35             | 1032     | 1.873   | 1.865    | -0.008 |
| 50             | 566      | 1.835   | 1.830    | -0.005 |
| 50             | 197      | 1.833   | 1.827    | -0.006 |
| 50             | 793      | 1.792   | 1.818    | 0.026  |
| 50             | 802      | 1.769   | 1.792    | 0.023  |
| 50             | 61       | 1.875   | 1.892    | 0.017  |
| 55             | 795      | 1.775   | 1.788    | 0.013  |
| 55             | 921      | 1.916   | 1.928    | 0.012  |
| 55             | 741      | 1.808   | 1.832    | 0.024  |
| 55             | 809      | 1.908   | 1.923    | 0.015  |
| 55             | 804      | 1.827   | 1.847    | 0.020  |
| 100            | 449      | 1.807   | 1.851    | 0.044  |
| 100            | 541      | 1.756   | 1.804    | 0.048  |
| 100            | 476      | 1.835   | 1.889    | 0.054  |
| 100            | 45       | 1.820   | 1.834    | 0.014  |
| 100            | 642      | 1.908   | 1.954    | 0.046  |
| 105            | 1036     | 1.828   | 1.897    | 0.069  |
| 105            | 1038     | 1.834   | 1.847    | 0.013  |
| 105            | 203      | 1.853   | 1.892    | 0.039  |
| 105            | 1029     | 1.802   | 1.811    | 0.009  |
| 105            | 1027     | 1.870   | 1.918    | 0.048  |
| 105            | Max      | 1.916   | 1.954    | 0.069  |
| 105            | Average  | 1.833   | 1.839    | 0.006  |
| 105            | Min      | 1.756   | 1.781    | -0.020 |
| 105            | Std Dev  | 0.036   | 0.042    | 0.022  |



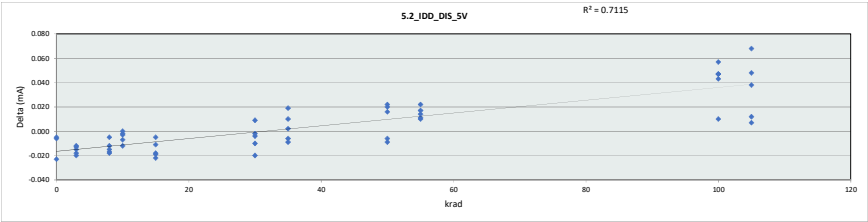
| 5.1_IDD_DIS_4V |       |       |       |       |       |       |       |       |       |       |       |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site      |       |       |       |       |       |       |       |       |       |       |       |
| Tester         |       |       |       |       |       |       |       |       |       |       |       |
| Test Number    |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit      | 2.6   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit      | 1     | mA    |       |       |       |       |       |       |       |       |       |
| krad           | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL             | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Min            | 1.782 | 1.791 | 1.790 | 1.824 | 1.825 | 1.784 | 1.781 | 1.792 | 1.788 | 1.804 | 1.811 |
| Average        | 1.799 | 1.816 | 1.802 | 1.845 | 1.843 | 1.830 | 1.840 | 1.832 | 1.864 | 1.866 | 1.873 |
| Max            | 1.821 | 1.843 | 1.813 | 1.862 | 1.884 | 1.888 | 1.882 | 1.892 | 1.928 | 1.954 | 1.918 |
| UL             | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |



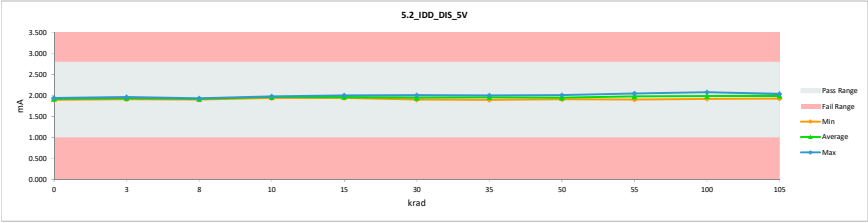
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| S.2_IDD_DIS_V |          |         |          |        |
|---------------|----------|---------|----------|--------|
| Test Site     |          |         |          |        |
| Tester        |          |         |          |        |
| Test Number   |          |         |          |        |
| Unit          | mA       | mA      |          |        |
| Max Limit     | 2.8      | 2.8     |          |        |
| Min Limit     | 1        | 1       |          |        |
| krad          | Serial # | PRE HDR | POST HDR | Delta  |
| 0             | 552      | 1.922   | 1.899    | -0.023 |
| 0             | 726      | 1.948   | 1.942    | -0.006 |
| 0             | 791      | 1.915   | 1.910    | -0.005 |
| 3             | 689      | 1.951   | 1.938    | -0.013 |
| 3             | 688      | 1.945   | 1.927    | -0.018 |
| 3             | 700      | 1.948   | 1.936    | -0.012 |
| 3             | 482      | 1.983   | 1.963    | -0.020 |
| 3             | 1033     | 1.910   | 1.910    | -0.015 |
| 8             | 442      | 1.940   | 1.922    | -0.018 |
| 8             | 699      | 1.922   | 1.907    | -0.015 |
| 8             | 344      | 1.944   | 1.927    | -0.017 |
| 8             | 355      | 1.922   | 1.910    | -0.012 |
| 8             | 750      | 1.937   | 1.932    | -0.005 |
| 10            | 537      | 1.942   | 1.942    | 0.000  |
| 10            | 396      | 1.973   | 1.961    | -0.012 |
| 10            | 521      | 1.962   | 1.955    | -0.007 |
| 10            | 535      | 1.983   | 1.981    | -0.002 |
| 10            | 526      | 1.981   | 1.978    | -0.003 |
| 15            | 540      | 1.984   | 1.962    | -0.022 |
| 15            | 387      | 1.973   | 1.954    | -0.019 |
| 15            | 787      | 1.956   | 1.945    | -0.011 |
| 15            | 1042     | 2.022   | 2.004    | -0.018 |
| 15            | 483      | 1.950   | 1.945    | -0.005 |
| 30            | 597      | 1.932   | 1.912    | -0.020 |
| 30            | 853      | 2.012   | 2.008    | -0.004 |
| 30            | 416      | 1.945   | 1.943    | -0.002 |
| 30            | 949      | 1.913   | 1.903    | -0.010 |
| 30            | 221      | 1.967   | 1.976    | 0.009  |
| 35            | 538      | 1.983   | 1.993    | 0.010  |
| 35            | 164      | 1.905   | 1.899    | -0.006 |
| 35            | 1018     | 1.983   | 2.002    | 0.019  |
| 35            | 462      | 1.913   | 1.915    | 0.002  |
| 35            | 1032     | 1.993   | 1.984    | -0.009 |
| 50            | 566      | 1.954   | 1.948    | -0.006 |
| 50            | 197      | 1.954   | 1.945    | -0.009 |
| 50            | 793      | 1.912   | 1.934    | 0.022  |
| 50            | 802      | 1.890   | 1.910    | 0.020  |
| 50            | 61       | 1.955   | 2.011    | 0.016  |
| 55            | 795      | 1.894   | 1.905    | 0.011  |
| 55            | 921      | 2.039   | 2.049    | 0.010  |
| 55            | 741      | 1.928   | 1.950    | 0.022  |
| 55            | 809      | 2.030   | 2.044    | 0.014  |
| 55            | 804      | 1.948   | 1.965    | 0.017  |
| 100           | 449      | 1.928   | 1.971    | 0.043  |
| 100           | 541      | 1.875   | 1.922    | 0.047  |
| 100           | 476      | 1.952   | 2.009    | 0.057  |
| 100           | 45       | 1.941   | 1.951    | 0.010  |
| 100           | 642      | 2.030   | 2.077    | 0.047  |
| 105           | 1036     | 1.948   | 2.016    | 0.068  |
| 105           | 1038     | 1.953   | 1.965    | 0.012  |
| 105           | 203      | 1.974   | 2.012    | 0.038  |
| 105           | 1029     | 1.921   | 1.928    | 0.007  |
| 105           | 1027     | 1.990   | 2.038    | 0.048  |
| 105           | Max      | 2.039   | 2.077    | 0.068  |
|               | Average  | 1.953   | 1.957    | 0.004  |
|               | Min      | 1.875   | 1.899    | -0.023 |
|               | Std Dev  | 0.036   | 0.043    | 0.022  |



| S.2_IDD_DIS_V |       |       |       |       |       |       |       |       |       |       |       |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site     |       |       |       |       |       |       |       |       |       |       |       |
| Tester        |       |       |       |       |       |       |       |       |       |       |       |
| Test Number   |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit     | 2.8   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit     | 1     | mA    |       |       |       |       |       |       |       |       |       |
| krad          | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL            | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Min           | 1.899 | 1.910 | 1.907 | 1.942 | 1.945 | 1.903 | 1.899 | 1.910 | 1.905 | 1.922 | 1.928 |
| Average       | 1.917 | 1.935 | 1.920 | 1.963 | 1.962 | 1.948 | 1.959 | 1.950 | 1.983 | 1.986 | 1.992 |
| Max           | 1.942 | 1.963 | 1.932 | 1.981 | 2.004 | 2.008 | 2.002 | 2.011 | 2.049 | 2.077 | 2.038 |
| UL            | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 |

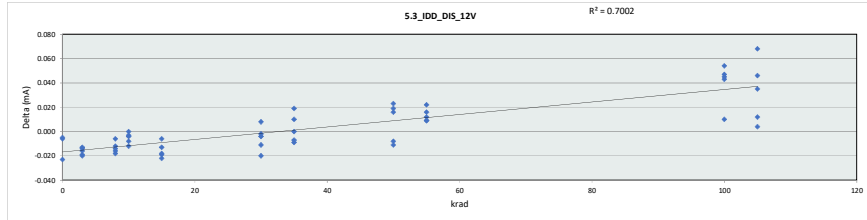


# HDR TID Report

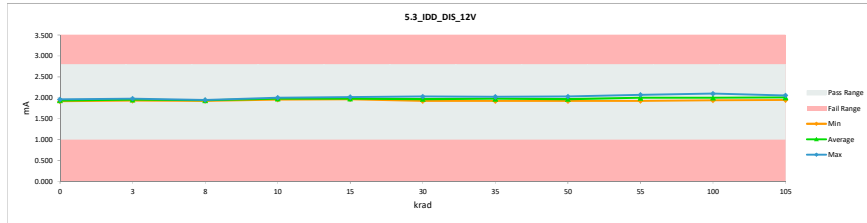
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.3_IDD_DIS_12V |          |         |          |        |
|-----------------|----------|---------|----------|--------|
| Test Site       |          |         |          |        |
| Tester          |          |         |          |        |
| Test Number     |          |         |          |        |
| Unit            | mA       | mA      |          |        |
| Max Limit       | 2.8      | 2.8     |          |        |
| Min Limit       | 1        | 1       |          |        |
| krad            | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0               | 552      | 1.938   | 1.915    | -0.023 |
| 0               | 726      | 1.968   | 1.962    | -0.006 |
| 0               | 791      | 1.934   | 1.929    | -0.005 |
| 3               | 689      | 1.968   | 1.955    | -0.013 |
| 3               | 688      | 1.965   | 1.946    | -0.019 |
| 3               | 700      | 1.973   | 1.959    | -0.014 |
| 3               | 482      | 2.003   | 1.983    | -0.020 |
| 3               | 1033     | 2.006   | 1.930    | -0.016 |
| 8               | 442      | 1.960   | 1.942    | -0.018 |
| 8               | 699      | 1.939   | 1.925    | -0.014 |
| 8               | 344      | 1.964   | 1.948    | -0.016 |
| 8               | 355      | 1.943   | 1.931    | -0.012 |
| 8               | 750      | 1.956   | 1.950    | -0.006 |
| 10              | 537      | 1.956   | 1.955    | 0.000  |
| 10              | 396      | 1.990   | 1.978    | -0.012 |
| 10              | 521      | 1.982   | 1.974    | -0.008 |
| 10              | 535      | 2.001   | 1.997    | -0.004 |
| 10              | 526      | 2.006   | 2.003    | -0.003 |
| 15              | 540      | 2.005   | 1.983    | -0.022 |
| 15              | 387      | 1.991   | 1.972    | -0.019 |
| 15              | 787      | 1.980   | 1.967    | -0.013 |
| 15              | 1042     | 2.037   | 2.019    | -0.018 |
| 15              | 483      | 1.974   | 1.968    | -0.006 |
| 30              | 597      | 1.948   | 1.928    | -0.020 |
| 30              | 853      | 2.033   | 2.029    | -0.004 |
| 30              | 416      | 1.965   | 1.963    | -0.002 |
| 30              | 949      | 1.932   | 1.921    | -0.011 |
| 30              | 221      | 1.989   | 1.997    | 0.008  |
| 35              | 538      | 1.997   | 2.007    | 0.010  |
| 35              | 164      | 1.928   | 1.921    | -0.007 |
| 35              | 1018     | 2.004   | 2.023    | 0.019  |
| 35              | 462      | 1.933   | 1.933    | 0.000  |
| 35              | 1032     | 2.015   | 2.006    | -0.009 |
| 50              | 566      | 1.972   | 1.964    | -0.008 |
| 50              | 197      | 1.977   | 1.966    | -0.011 |
| 50              | 793      | 1.934   | 1.957    | 0.023  |
| 50              | 802      | 1.904   | 1.923    | 0.019  |
| 50              | 61       | 2.014   | 2.030    | 0.016  |
| 55              | 795      | 1.915   | 1.924    | 0.009  |
| 55              | 921      | 2.062   | 2.071    | 0.009  |
| 55              | 741      | 1.949   | 1.971    | 0.022  |
| 55              | 809      | 2.051   | 2.063    | 0.012  |
| 55              | 804      | 1.966   | 1.982    | 0.016  |
| 100             | 449      | 1.945   | 1.988    | 0.043  |
| 100             | 541      | 1.892   | 1.939    | 0.047  |
| 100             | 476      | 1.973   | 2.027    | 0.054  |
| 100             | 45       | 1.960   | 1.970    | 0.010  |
| 100             | 642      | 2.054   | 2.059    | 0.045  |
| 105             | 1036     | 1.967   | 2.035    | 0.068  |
| 105             | 1038     | 1.972   | 1.984    | 0.012  |
| 105             | 203      | 1.996   | 2.031    | 0.035  |
| 105             | 1029     | 1.943   | 1.947    | 0.004  |
| 105             | 1027     | 2.011   | 2.057    | 0.046  |
| 105             | Max      | 2.062   | 2.059    | 0.068  |
|                 | Average  | 1.973   | 1.976    | 0.003  |
|                 | Min      | 1.892   | 1.915    | -0.023 |
|                 | Std Dev  | 0.037   | 0.043    | 0.022  |



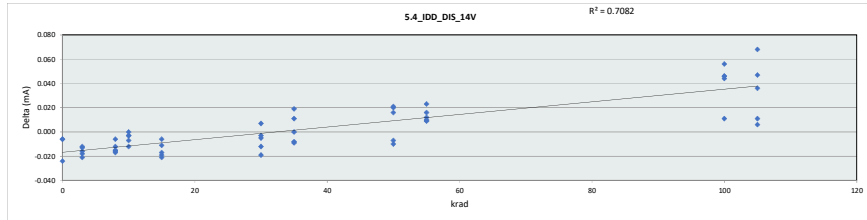
| 5.3_IDD_DIS_12V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site       |       |       |       |       |       |       |       |       |       |       |       |
| Tester          |       |       |       |       |       |       |       |       |       |       |       |
| Test Number     |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit       | 2.8   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit       | 1     | mA    |       |       |       |       |       |       |       |       |       |
| krad            | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL              | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Min             | 1.915 | 1.930 | 1.925 | 1.956 | 1.967 | 1.921 | 1.921 | 1.923 | 1.924 | 1.939 | 1.947 |
| Average         | 1.935 | 1.955 | 1.939 | 1.982 | 1.982 | 1.968 | 1.978 | 1.968 | 2.002 | 2.005 | 2.011 |
| Max             | 1.962 | 1.983 | 1.950 | 2.003 | 2.019 | 2.029 | 2.023 | 2.030 | 2.071 | 2.099 | 2.057 |
| UL              | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 |



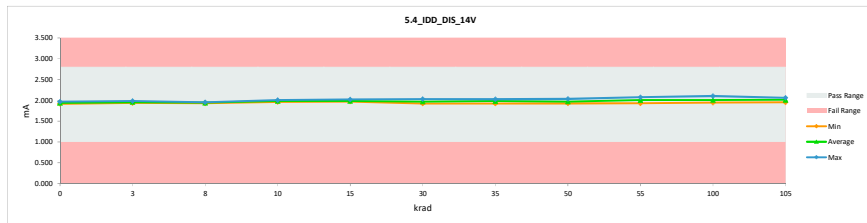
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.4_IDD_DIS_14V |          |         |          |        |
|-----------------|----------|---------|----------|--------|
| Test Site       |          |         |          |        |
| Tester          |          |         |          |        |
| Test Number     |          |         |          |        |
| Unit            |          |         |          |        |
| Max Limit       |          |         |          |        |
| Min Limit       |          |         |          |        |
| krad            | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0               | 552      | 1.943   | 1.919    | -0.024 |
| 0               | 726      | 1.973   | 1.967    | -0.006 |
| 0               | 791      | 1.939   | 1.933    | -0.006 |
| 3               | 689      | 1.972   | 1.960    | -0.012 |
| 3               | 688      | 1.968   | 1.950    | -0.018 |
| 3               | 700      | 1.977   | 1.964    | -0.013 |
| 3               | 482      | 2.008   | 1.987    | -0.021 |
| 3               | 1033     | 1.960   | 1.934    | -0.016 |
| 8               | 442      | 1.964   | 1.947    | -0.017 |
| 8               | 699      | 1.944   | 1.929    | -0.015 |
| 8               | 344      | 1.968   | 1.952    | -0.016 |
| 8               | 355      | 1.948   | 1.936    | -0.012 |
| 8               | 750      | 1.961   | 1.955    | -0.006 |
| 10              | 537      | 1.960   | 1.960    | 0.000  |
| 10              | 396      | 1.994   | 1.982    | -0.012 |
| 10              | 521      | 1.986   | 1.979    | -0.007 |
| 10              | 535      | 2.005   | 2.002    | -0.003 |
| 10              | 526      | 2.010   | 2.007    | -0.003 |
| 15              | 540      | 2.009   | 1.988    | -0.021 |
| 15              | 387      | 1.995   | 1.976    | -0.019 |
| 15              | 787      | 1.984   | 1.973    | -0.011 |
| 15              | 1042     | 2.040   | 2.023    | -0.017 |
| 15              | 483      | 1.979   | 1.973    | -0.006 |
| 30              | 597      | 1.953   | 1.934    | -0.019 |
| 30              | 853      | 2.038   | 2.033    | -0.005 |
| 30              | 416      | 1.969   | 1.966    | -0.003 |
| 30              | 949      | 1.937   | 1.925    | -0.012 |
| 30              | 221      | 1.994   | 2.001    | 0.007  |
| 35              | 538      | 2.001   | 2.012    | 0.011  |
| 35              | 164      | 1.932   | 1.924    | -0.008 |
| 35              | 1018     | 2.008   | 2.027    | 0.019  |
| 35              | 462      | 1.938   | 1.938    | 0.000  |
| 35              | 1032     | 2.019   | 2.010    | -0.009 |
| 50              | 566      | 1.976   | 1.969    | -0.007 |
| 50              | 197      | 1.981   | 1.971    | -0.010 |
| 50              | 793      | 1.939   | 1.960    | 0.021  |
| 50              | 802      | 1.908   | 1.928    | 0.020  |
| 50              | 61       | 2.019   | 2.035    | 0.016  |
| 55              | 795      | 1.919   | 1.929    | 0.010  |
| 55              | 921      | 2.066   | 2.075    | 0.009  |
| 55              | 741      | 1.953   | 1.976    | 0.023  |
| 55              | 809      | 2.055   | 2.067    | 0.012  |
| 55              | 804      | 1.971   | 1.987    | 0.016  |
| 100             | 449      | 1.949   | 1.993    | 0.044  |
| 100             | 541      | 1.897   | 1.943    | 0.046  |
| 100             | 476      | 1.977   | 2.033    | 0.056  |
| 100             | 45       | 1.964   | 1.975    | 0.011  |
| 100             | 642      | 2.057   | 2.103    | 0.046  |
| 105             | 1036     | 1.971   | 2.039    | 0.068  |
| 105             | 1038     | 1.976   | 1.987    | 0.011  |
| 105             | 203      | 2.000   | 2.036    | 0.036  |
| 105             | 1029     | 1.947   | 1.953    | 0.006  |
| 105             | 1027     | 2.015   | 2.062    | 0.047  |
| 105             | Max      | 2.066   | 2.103    | 0.037  |
| 105             | Average  | 1.977   | 1.981    | 0.003  |
| 105             | Min      | 1.897   | 1.919    | -0.024 |
| 105             | Std Dev  | 0.037   | 0.043    | 0.022  |



| 5.4_IDD_DIS_14V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site       |       |       |       |       |       |       |       |       |       |       |       |
| Tester          |       |       |       |       |       |       |       |       |       |       |       |
| Test Number     |       |       |       |       |       |       |       |       |       |       |       |
| Unit            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit       |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit       |       |       |       |       |       |       |       |       |       |       |       |
| krad            | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL              | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Min             | 1.919 | 1.934 | 1.929 | 1.960 | 1.973 | 1.925 | 1.924 | 1.928 | 1.929 | 1.943 | 1.953 |
| Average         | 1.940 | 1.959 | 1.944 | 1.986 | 1.987 | 1.972 | 1.982 | 1.973 | 2.007 | 2.009 | 2.015 |
| Max             | 1.967 | 1.987 | 1.955 | 2.007 | 2.023 | 2.033 | 2.027 | 2.035 | 2.075 | 2.103 | 2.062 |
| UL              | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 | 2.800 |

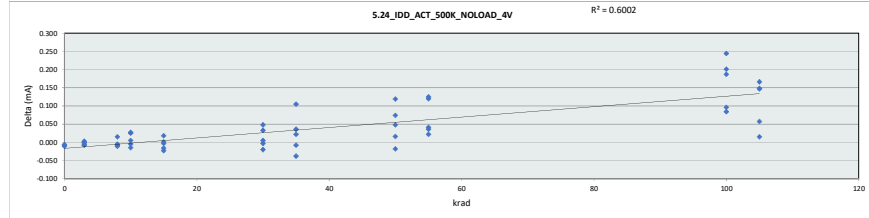


# HDR TID Report

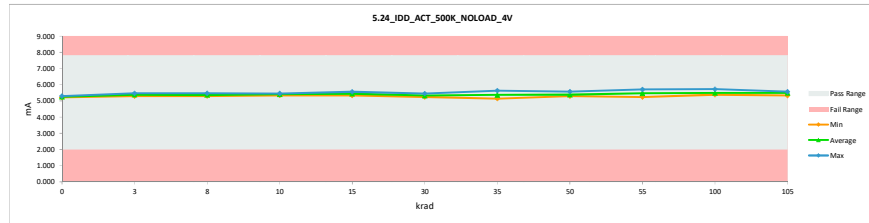
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.24_IDD_ACT_500K_NOLOAD_4V |          |         |          |        |
|-----------------------------|----------|---------|----------|--------|
| Test Site                   |          |         |          |        |
| Tester                      |          |         |          |        |
| Test Number                 |          |         |          |        |
| Unit                        |          |         |          |        |
| Max Limit                   |          |         |          |        |
| Min Limit                   |          |         |          |        |
| krad                        | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                           | 552      | 5.308   | 5.297    | -0.011 |
| 0                           | 726      | 5.285   | 5.277    | -0.008 |
| 0                           | 791      | 5.222   | 5.216    | -0.006 |
| 3                           | 689      | 5.402   | 5.402    | 0.000  |
| 3                           | 688      | 5.355   | 5.348    | -0.007 |
| 3                           | 700      | 5.416   | 5.414    | -0.002 |
| 3                           | 482      | 5.477   | 5.469    | -0.008 |
| 3                           | 1033     | 5.299   | 5.299    | 0.003  |
| 8                           | 442      | 5.312   | 5.307    | -0.005 |
| 8                           | 699      | 5.372   | 5.364    | -0.008 |
| 8                           | 344      | 5.481   | 5.470    | -0.011 |
| 8                           | 355      | 5.298   | 5.313    | 0.015  |
| 8                           | 790      | 5.369   | 5.362    | -0.007 |
| 10                          | 537      | 5.318   | 5.345    | 0.027  |
| 10                          | 396      | 5.441   | 5.426    | -0.015 |
| 10                          | 521      | 5.369   | 5.374    | 0.005  |
| 10                          | 535      | 5.466   | 5.461    | -0.005 |
| 10                          | 526      | 5.415   | 5.440    | 0.025  |
| 15                          | 940      | 5.412   | 5.389    | -0.023 |
| 15                          | 387      | 5.481   | 5.478    | -0.003 |
| 15                          | 787      | 5.472   | 5.456    | -0.016 |
| 15                          | 1042     | 5.557   | 5.558    | 0.001  |
| 15                          | 483      | 5.317   | 5.335    | 0.018  |
| 30                          | 597      | 5.267   | 5.247    | -0.020 |
| 30                          | 853      | 5.457   | 5.454    | -0.003 |
| 30                          | 416      | 5.244   | 5.277    | 0.033  |
| 30                          | 949      | 5.242   | 5.247    | 0.005  |
| 30                          | 221      | 5.365   | 5.413    | 0.048  |
| 35                          | 538      | 5.384   | 5.420    | 0.036  |
| 35                          | 164      | 5.120   | 5.142    | 0.022  |
| 35                          | 1018     | 5.532   | 5.637    | 0.105  |
| 35                          | 462      | 5.234   | 5.226    | -0.008 |
| 35                          | 1032     | 5.483   | 5.445    | -0.038 |
| 50                          | 566      | 5.419   | 5.401    | -0.018 |
| 50                          | 197      | 5.327   | 5.343    | 0.016  |
| 50                          | 793      | 5.230   | 5.304    | 0.074  |
| 50                          | 802      | 5.249   | 5.297    | 0.048  |
| 50                          | 61       | 5.458   | 5.577    | 0.119  |
| 55                          | 795      | 5.200   | 5.241    | 0.041  |
| 55                          | 921      | 5.552   | 5.588    | 0.036  |
| 55                          | 741      | 5.243   | 5.265    | 0.022  |
| 55                          | 809      | 5.584   | 5.709    | 0.125  |
| 55                          | 804      | 5.421   | 5.541    | 0.120  |
| 100                         | 449      | 5.318   | 5.519    | 0.201  |
| 100                         | 541      | 5.203   | 5.390    | 0.187  |
| 100                         | 476      | 5.287   | 5.383    | 0.096  |
| 100                         | 45       | 5.389   | 5.473    | 0.084  |
| 100                         | 642      | 5.479   | 5.723    | 0.244  |
| 105                         | 1036     | 5.387   | 5.553    | 0.166  |
| 105                         | 1038     | 5.442   | 5.457    | 0.015  |
| 105                         | 203      | 5.418   | 5.565    | 0.147  |
| 105                         | 1029     | 5.271   | 5.328    | 0.057  |
| 105                         | 1027     | 5.420   | 5.568    | 0.148  |
| 105                         | Max      | 5.584   | 5.723    | 0.244  |
| 105                         | Average  | 5.367   | 5.406    | 0.039  |
| 105                         | Min      | 5.120   | 5.142    | -0.038 |
| 105                         | Std Dev  | 0.105   | 0.126    | 0.065  |



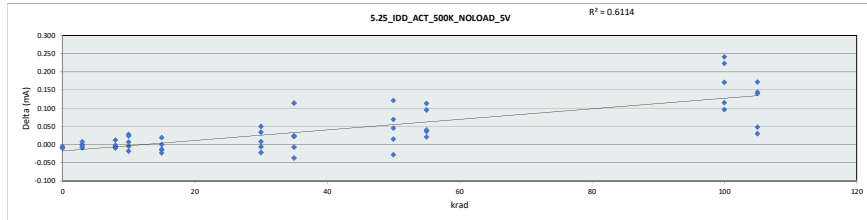
| 5.24_IDD_ACT_500K_NOLOAD |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                |       |       |       |       |       |       |       |       |       |       |       |
| Tester                   |       |       |       |       |       |       |       |       |       |       |       |
| Test Number              |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                | 7.8   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                | 2     | mA    |       |       |       |       |       |       |       |       |       |
| krad                     | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                       | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 |
| Min                      | 5.216 | 5.299 | 5.307 | 5.345 | 5.335 | 5.247 | 5.142 | 5.297 | 5.241 | 5.383 | 5.328 |
| Average                  | 5.263 | 5.386 | 5.363 | 5.409 | 5.443 | 5.328 | 5.374 | 5.384 | 5.469 | 5.498 | 5.494 |
| Max                      | 5.297 | 5.469 | 5.470 | 5.461 | 5.558 | 5.454 | 5.637 | 5.577 | 5.709 | 5.723 | 5.568 |
| UL                       | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 |



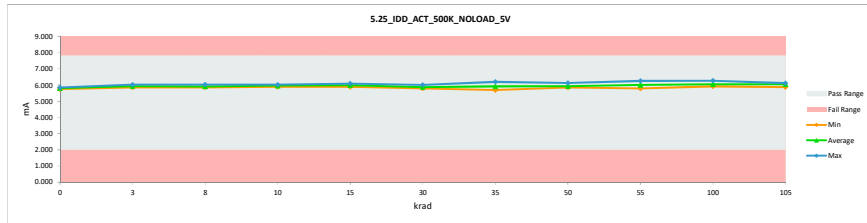
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.25_IDD_ACT_500K_NOLOAD_5V |          |         |          |        |
|-----------------------------|----------|---------|----------|--------|
| Test Site                   |          |         |          |        |
| Tester                      |          |         |          |        |
| Test Number                 |          |         |          |        |
| Unit                        | mA       | mA      |          |        |
| Max Limit                   | 7.8      | 7.8     |          |        |
| Min Limit                   | 2        | 2       |          |        |
| krad                        | Serial # | PRE HDR | POST HDR | Delta  |
| 0                           | 552      | 5.848   | 5.838    | -0.010 |
| 0                           | 726      | 5.825   | 5.820    | -0.005 |
| 0                           | 791      | 5.766   | 5.757    | -0.009 |
| 3                           | 689      | 5.946   | 5.945    | -0.001 |
| 3                           | 688      | 5.899   | 5.892    | -0.007 |
| 3                           | 700      | 5.954   | 5.954    | 0.000  |
| 3                           | 482      | 6.028   | 6.019    | -0.009 |
| 3                           | 1033     | 5.850   | 5.850    | 0.000  |
| 8                           | 442      | 5.856   | 5.854    | -0.002 |
| 8                           | 699      | 5.916   | 5.907    | -0.009 |
| 8                           | 344      | 6.029   | 6.022    | -0.007 |
| 8                           | 355      | 5.842   | 5.854    | 0.012  |
| 8                           | 750      | 5.911   | 5.902    | -0.009 |
| 10                          | 537      | 5.860   | 5.888    | 0.028  |
| 10                          | 396      | 5.991   | 5.973    | -0.018 |
| 10                          | 521      | 5.915   | 5.922    | 0.007  |
| 10                          | 535      | 6.018   | 6.013    | -0.005 |
| 10                          | 526      | 5.962   | 5.986    | 0.024  |
| 15                          | 540      | 5.958   | 5.935    | -0.023 |
| 15                          | 387      | 6.027   | 6.027    | 0.000  |
| 15                          | 787      | 6.023   | 6.008    | -0.015 |
| 15                          | 1042     | 6.103   | 6.090    | -0.013 |
| 15                          | 483      | 5.861   | 5.880    | 0.019  |
| 30                          | 597      | 5.811   | 5.789    | -0.022 |
| 30                          | 853      | 6.012   | 6.006    | -0.006 |
| 30                          | 416      | 5.789   | 5.823    | 0.034  |
| 30                          | 949      | 5.785   | 5.793    | 0.008  |
| 30                          | 221      | 5.908   | 5.958    | 0.050  |
| 35                          | 538      | 5.930   | 5.954    | 0.024  |
| 35                          | 164      | 5.662   | 5.684    | 0.022  |
| 35                          | 1018     | 6.078   | 6.192    | 0.114  |
| 35                          | 462      | 5.769   | 5.762    | -0.007 |
| 35                          | 1032     | 6.030   | 5.993    | -0.037 |
| 50                          | 566      | 5.967   | 5.939    | -0.028 |
| 50                          | 197      | 5.873   | 5.888    | 0.015  |
| 50                          | 793      | 5.780   | 5.849    | 0.069  |
| 50                          | 802      | 5.797   | 5.842    | 0.045  |
| 50                          | 61       | 6.001   | 6.122    | 0.121  |
| 55                          | 795      | 5.742   | 5.782    | 0.040  |
| 55                          | 921      | 6.103   | 6.139    | 0.036  |
| 55                          | 741      | 5.788   | 5.809    | 0.021  |
| 55                          | 809      | 6.138   | 6.251    | 0.113  |
| 55                          | 804      | 5.961   | 6.056    | 0.095  |
| 100                         | 449      | 5.858   | 6.081    | 0.223  |
| 100                         | 541      | 5.743   | 5.914    | 0.171  |
| 100                         | 476      | 5.828   | 5.924    | 0.096  |
| 100                         | 45       | 5.940   | 6.055    | 0.115  |
| 100                         | 642      | 6.024   | 6.265    | 0.241  |
| 105                         | 1036     | 5.934   | 6.106    | 0.172  |
| 105                         | 1038     | 5.988   | 6.018    | 0.030  |
| 105                         | 203      | 5.965   | 6.105    | 0.140  |
| 105                         | 1029     | 5.819   | 5.867    | 0.048  |
| 105                         | 1027     | 5.971   | 6.115    | 0.144  |
| 105                         | Max      | 6.138   | 6.265    | 0.241  |
| 105                         | Average  | 5.913   | 5.951    | 0.039  |
| 105                         | Min      | 5.662   | 5.684    | -0.037 |
| 105                         | Std Dev  | 0.107   | 0.128    | 0.066  |



| 5.25_IDD_ACT_500K_NOLOAD |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                |       |       |       |       |       |       |       |       |       |       |       |
| Tester                   |       |       |       |       |       |       |       |       |       |       |       |
| Test Number              |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                | 7.8   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                | 2     | mA    |       |       |       |       |       |       |       |       |       |
| krad                     | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                       | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 |
| Min                      | 5.757 | 5.850 | 5.854 | 5.888 | 5.880 | 5.789 | 5.684 | 5.842 | 5.782 | 5.914 | 5.867 |
| Average                  | 5.805 | 5.932 | 5.908 | 5.956 | 5.988 | 5.874 | 5.917 | 5.928 | 6.007 | 6.048 | 6.042 |
| Max                      | 5.838 | 6.019 | 6.022 | 6.013 | 6.090 | 6.006 | 6.192 | 6.122 | 6.251 | 6.265 | 6.115 |
| UL                       | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 |

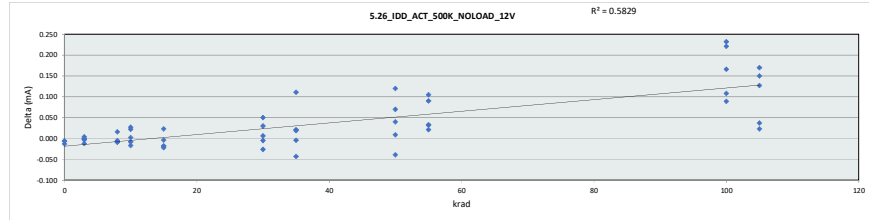


# HDR TID Report

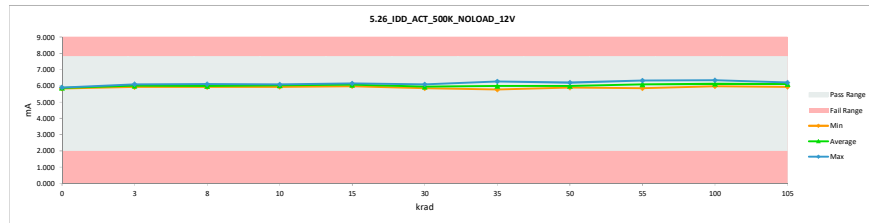
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.26_IDD_ACT_500K_NOLOAD_12V |          |         |          |        |
|------------------------------|----------|---------|----------|--------|
| Test Site                    |          |         |          |        |
| Tester                       |          |         |          |        |
| Test Number                  |          |         |          |        |
| Unit                         | mA       | mA      |          |        |
| Max Limit                    | 7.8      | 7.8     |          |        |
| Min Limit                    | 2        | 2       |          |        |
| krad                         | Serial # | PRE HDR | POST HDR | Delta  |
| 0                            | 552      | 5.913   | 5.900    | -0.013 |
| 0                            | 726      | 5.907   | 5.901    | -0.006 |
| 0                            | 791      | 5.840   | 5.834    | -0.006 |
| 3                            | 689      | 6.017   | 6.017    | 0.000  |
| 3                            | 688      | 5.976   | 5.973    | -0.003 |
| 3                            | 700      | 6.056   | 6.054    | -0.002 |
| 3                            | 482      | 6.111   | 6.099    | -0.012 |
| 3                            | 1033     | 5.926   | 5.933    | 0.004  |
| 8                            | 442      | 5.943   | 5.935    | -0.008 |
| 8                            | 699      | 5.986   | 5.977    | -0.009 |
| 8                            | 344      | 6.112   | 6.104    | -0.008 |
| 8                            | 355      | 5.928   | 5.944    | 0.016  |
| 8                            | 750      | 5.986   | 5.981    | -0.005 |
| 10                           | 537      | 5.913   | 5.940    | 0.027  |
| 10                           | 396      | 6.057   | 6.040    | -0.017 |
| 10                           | 521      | 5.997   | 5.999    | 0.002  |
| 10                           | 535      | 6.087   | 6.079    | -0.008 |
| 10                           | 526      | 6.065   | 6.087    | 0.022  |
| 15                           | 540      | 6.042   | 6.020    | -0.022 |
| 15                           | 387      | 6.101   | 6.097    | -0.004 |
| 15                           | 787      | 6.118   | 6.100    | -0.018 |
| 15                           | 1042     | 6.169   | 6.151    | -0.018 |
| 15                           | 483      | 5.959   | 5.982    | 0.023  |
| 30                           | 597      | 5.879   | 5.853    | -0.026 |
| 30                           | 853      | 6.094   | 6.089    | -0.005 |
| 30                           | 416      | 5.869   | 5.899    | 0.030  |
| 30                           | 949      | 5.861   | 5.867    | 0.006  |
| 30                           | 221      | 5.998   | 6.048    | 0.050  |
| 35                           | 538      | 5.985   | 6.006    | 0.021  |
| 35                           | 164      | 5.751   | 5.770    | 0.019  |
| 35                           | 1018     | 6.166   | 6.227    | 0.111  |
| 35                           | 462      | 5.852   | 5.848    | -0.004 |
| 35                           | 1032     | 6.122   | 6.079    | -0.043 |
| 50                           | 566      | 6.039   | 6.000    | -0.039 |
| 50                           | 197      | 5.967   | 5.976    | 0.009  |
| 50                           | 793      | 5.870   | 5.940    | 0.070  |
| 50                           | 802      | 5.849   | 5.889    | 0.040  |
| 50                           | 61       | 6.080   | 6.200    | 0.120  |
| 55                           | 795      | 5.821   | 5.854    | 0.033  |
| 55                           | 921      | 6.198   | 6.230    | 0.032  |
| 55                           | 741      | 5.874   | 5.895    | 0.021  |
| 55                           | 809      | 6.218   | 6.323    | 0.105  |
| 55                           | 804      | 6.037   | 6.127    | 0.090  |
| 100                          | 449      | 5.925   | 6.146    | 0.221  |
| 100                          | 541      | 5.812   | 5.978    | 0.166  |
| 100                          | 476      | 5.911   | 6.000    | 0.089  |
| 100                          | 45       | 6.021   | 6.129    | 0.108  |
| 100                          | 642      | 6.118   | 6.350    | 0.232  |
| 105                          | 1036     | 6.006   | 6.176    | 0.170  |
| 105                          | 1038     | 6.067   | 6.090    | 0.023  |
| 105                          | 203      | 6.052   | 6.179    | 0.127  |
| 105                          | 1029     | 5.905   | 5.942    | 0.037  |
| 105                          | 1027     | 6.053   | 6.203    | 0.150  |
| 105                          | Max      | 6.218   | 6.350    | 0.232  |
| 105                          | Average  | 5.993   | 6.028    | 0.036  |
| 105                          | Min      | 5.751   | 5.770    | -0.043 |
| 105                          | Std Dev  | 0.109   | 0.129    | 0.065  |



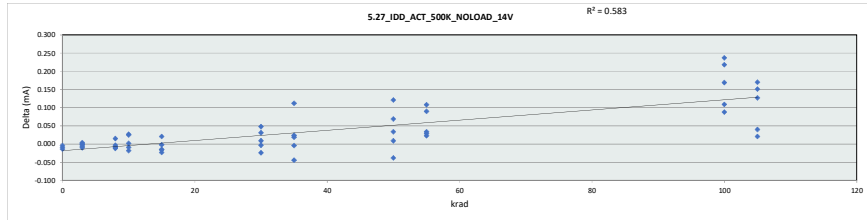
| 5.26_IDD_ACT_500K_NOLOAD |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                |       |       |       |       |       |       |       |       |       |       |       |
| Tester                   |       |       |       |       |       |       |       |       |       |       |       |
| Test Number              |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                | 7.8   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                | 2     | mA    |       |       |       |       |       |       |       |       |       |
| krad                     | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                       | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 |
| Min                      | 5.834 | 5.933 | 5.935 | 5.940 | 5.962 | 5.853 | 5.770 | 5.889 | 5.854 | 5.978 | 5.942 |
| Average                  | 5.878 | 6.015 | 5.988 | 6.029 | 6.070 | 5.951 | 5.996 | 6.001 | 6.086 | 6.121 | 6.118 |
| Max                      | 5.901 | 6.099 | 6.104 | 6.087 | 6.151 | 6.089 | 6.277 | 6.200 | 6.323 | 6.350 | 6.203 |
| UL                       | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 |



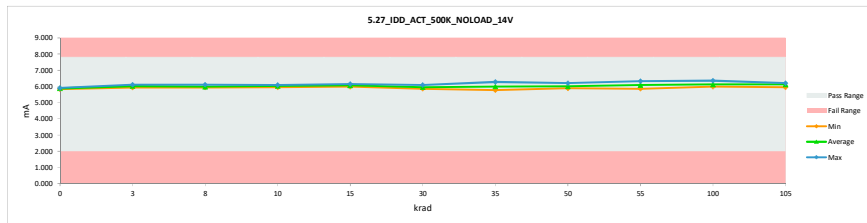
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.27_IDD_ACT_500K_NOLOAD_14V |          |         |          |        |
|------------------------------|----------|---------|----------|--------|
| Test Site                    |          |         |          |        |
| Tester                       |          |         |          |        |
| Test Number                  |          |         |          |        |
| Unit                         | mA       | mA      |          |        |
| Max Limit                    | 7.8      | 7.8     |          |        |
| Min Limit                    | 2        | 2       |          |        |
| krad                         | Serial # | PRE HDR | POST HDR | Delta  |
| 0                            | 552      | 5.919   | 5.905    | -0.014 |
| 0                            | 726      | 5.915   | 5.906    | -0.009 |
| 0                            | 791      | 5.842   | 5.838    | -0.004 |
| 3                            | 689      | 6.020   | 6.021    | 0.001  |
| 3                            | 688      | 5.981   | 5.975    | -0.006 |
| 3                            | 700      | 6.061   | 6.059    | -0.002 |
| 3                            | 482      | 6.116   | 6.106    | -0.010 |
| 3                            | 1033     | 5.932   | 5.936    | 0.004  |
| 8                            | 442      | 5.944   | 5.941    | -0.003 |
| 8                            | 699      | 5.990   | 5.980    | -0.010 |
| 8                            | 344      | 6.119   | 6.107    | -0.012 |
| 8                            | 355      | 5.935   | 5.950    | 0.015  |
| 8                            | 790      | 5.993   | 5.985    | -0.008 |
| 10                           | 537      | 5.945   | 5.945    | 0.027  |
| 10                           | 396      | 6.061   | 6.043    | -0.018 |
| 10                           | 521      | 6.003   | 6.005    | 0.002  |
| 10                           | 535      | 6.092   | 6.083    | -0.009 |
| 10                           | 526      | 6.068   | 6.093    | 0.025  |
| 15                           | 540      | 6.045   | 6.022    | -0.023 |
| 15                           | 387      | 6.103   | 6.101    | -0.002 |
| 15                           | 787      | 6.124   | 6.109    | -0.015 |
| 15                           | 1042     | 6.171   | 6.155    | -0.016 |
| 15                           | 483      | 5.964   | 5.985    | 0.021  |
| 30                           | 597      | 5.881   | 5.857    | -0.024 |
| 30                           | 853      | 6.097   | 6.094    | -0.003 |
| 30                           | 416      | 5.873   | 5.904    | 0.031  |
| 30                           | 949      | 5.865   | 5.874    | 0.009  |
| 30                           | 221      | 6.003   | 6.051    | 0.048  |
| 35                           | 538      | 5.989   | 6.013    | 0.024  |
| 35                           | 164      | 5.755   | 5.774    | 0.019  |
| 35                           | 1018     | 6.167   | 6.279    | 0.112  |
| 35                           | 462      | 5.854   | 5.850    | -0.004 |
| 35                           | 1032     | 6.126   | 6.082    | -0.044 |
| 50                           | 566      | 6.045   | 6.007    | -0.038 |
| 50                           | 197      | 5.971   | 5.980    | 0.009  |
| 50                           | 793      | 5.874   | 5.943    | 0.069  |
| 50                           | 802      | 5.857   | 5.891    | 0.034  |
| 50                           | 61       | 6.082   | 6.203    | 0.121  |
| 55                           | 795      | 5.826   | 5.860    | 0.034  |
| 55                           | 921      | 6.200   | 6.229    | 0.029  |
| 55                           | 741      | 5.877   | 5.900    | 0.023  |
| 55                           | 809      | 6.222   | 6.330    | 0.108  |
| 55                           | 804      | 6.042   | 6.132    | 0.090  |
| 100                          | 449      | 5.930   | 6.148    | 0.218  |
| 100                          | 541      | 5.817   | 5.986    | 0.169  |
| 100                          | 476      | 5.914   | 6.002    | 0.088  |
| 100                          | 45       | 6.024   | 6.133    | 0.109  |
| 100                          | 642      | 6.119   | 6.356    | 0.237  |
| 105                          | 1036     | 6.010   | 6.180    | 0.170  |
| 105                          | 1038     | 6.075   | 6.096    | 0.021  |
| 105                          | 203      | 6.057   | 6.184    | 0.127  |
| 105                          | 1029     | 5.910   | 5.950    | 0.040  |
| 105                          | 1027     | 6.055   | 6.206    | 0.151  |
| 105                          | Max      | 6.222   | 6.356    | 0.237  |
|                              | Average  | 5.997   | 6.033    | 0.036  |
|                              | Min      | 5.755   | 5.774    | -0.044 |
|                              | Std Dev  | 0.108   | 0.129    | 0.065  |



| 5.27_IDD_ACT_500K_NOLOAD |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                |       |       |       |       |       |       |       |       |       |       |       |
| Tester                   |       |       |       |       |       |       |       |       |       |       |       |
| Test Number              |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                | 7.8   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                | 2     | mA    |       |       |       |       |       |       |       |       |       |
| krad                     | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                       | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 |
| Min                      | 5.838 | 5.936 | 5.941 | 5.945 | 5.985 | 5.857 | 5.774 | 5.891 | 5.860 | 5.986 | 5.950 |
| Average                  | 5.883 | 6.019 | 5.993 | 6.034 | 6.074 | 5.956 | 6.000 | 6.005 | 6.090 | 6.125 | 6.123 |
| Max                      | 5.906 | 6.106 | 6.107 | 6.093 | 6.155 | 6.094 | 6.279 | 6.203 | 6.330 | 6.356 | 6.206 |
| UL                       | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 | 7.800 |

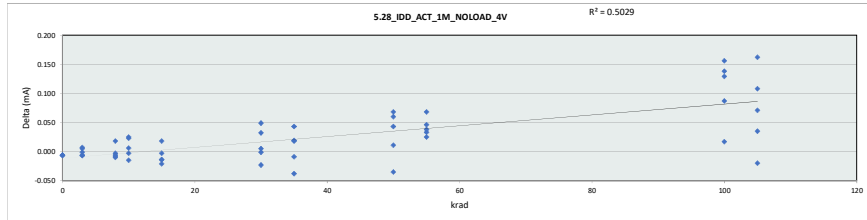


# HDR TID Report

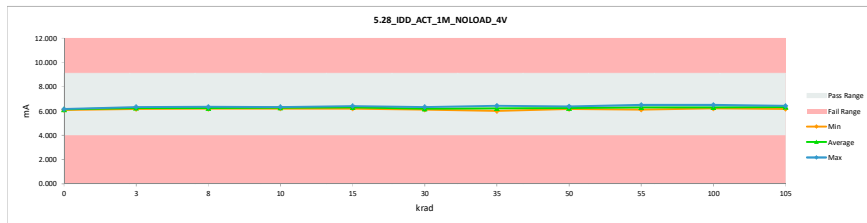
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.28_IDD_ACT_1M_NOLOAD_4V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      | mA       | mA      |          |        |
| Max Limit                 | 9.1      | 9.1     |          |        |
| Min Limit                 | 4        | 4       |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 6.167   | 6.160    | -0.007 |
| 0                         | 726      | 6.155   | 6.149    | -0.006 |
| 0                         | 791      | 6.090   | 6.084    | -0.006 |
| 3                         | 689      | 6.263   | 6.268    | 0.005  |
| 3                         | 688      | 6.222   | 6.215    | -0.007 |
| 3                         | 700      | 6.272   | 6.271    | -0.001 |
| 3                         | 482      | 6.342   | 6.336    | -0.006 |
| 3                         | 1033     | 6.168   | 6.168    | 0.007  |
| 8                         | 442      | 6.190   | 6.187    | -0.003 |
| 8                         | 699      | 6.234   | 6.226    | -0.008 |
| 8                         | 344      | 6.353   | 6.343    | -0.010 |
| 8                         | 355      | 6.163   | 6.181    | 0.018  |
| 8                         | 790      | 6.228   | 6.222    | -0.006 |
| 10                        | 537      | 6.184   | 6.207    | 0.023  |
| 10                        | 396      | 6.318   | 6.303    | -0.015 |
| 10                        | 521      | 6.243   | 6.249    | 0.006  |
| 10                        | 535      | 6.338   | 6.335    | -0.003 |
| 10                        | 526      | 6.282   | 6.307    | 0.025  |
| 15                        | 540      | 6.273   | 6.252    | -0.021 |
| 15                        | 387      | 6.352   | 6.349    | -0.003 |
| 15                        | 787      | 6.336   | 6.322    | -0.014 |
| 15                        | 1042     | 6.422   | 6.408    | -0.014 |
| 15                        | 483      | 6.184   | 6.202    | 0.018  |
| 30                        | 597      | 6.134   | 6.111    | -0.023 |
| 30                        | 853      | 6.330   | 6.329    | -0.001 |
| 30                        | 416      | 6.112   | 6.144    | 0.032  |
| 30                        | 949      | 6.109   | 6.114    | 0.005  |
| 30                        | 221      | 6.233   | 6.282    | 0.049  |
| 35                        | 538      | 6.252   | 6.270    | 0.018  |
| 35                        | 164      | 5.982   | 6.001    | 0.019  |
| 35                        | 1018     | 6.389   | 6.432    | 0.043  |
| 35                        | 462      | 6.096   | 6.087    | -0.009 |
| 35                        | 1032     | 6.345   | 6.307    | -0.038 |
| 50                        | 566      | 6.290   | 6.255    | -0.035 |
| 50                        | 197      | 6.198   | 6.209    | 0.011  |
| 50                        | 793      | 6.112   | 6.180    | 0.068  |
| 50                        | 802      | 6.126   | 6.169    | 0.043  |
| 50                        | 61       | 6.319   | 6.379    | 0.060  |
| 55                        | 795      | 6.068   | 6.106    | 0.038  |
| 55                        | 921      | 6.416   | 6.449    | 0.033  |
| 55                        | 741      | 6.111   | 6.136    | 0.025  |
| 55                        | 809      | 6.449   | 6.495    | 0.046  |
| 55                        | 804      | 6.280   | 6.348    | 0.068  |
| 100                       | 449      | 6.177   | 6.306    | 0.129  |
| 100                       | 541      | 6.071   | 6.209    | 0.138  |
| 100                       | 476      | 6.154   | 6.241    | 0.087  |
| 100                       | 45       | 6.259   | 6.276    | 0.017  |
| 100                       | 642      | 6.339   | 6.495    | 0.156  |
| 105                       | 1036     | 6.253   | 6.415    | 0.162  |
| 105                       | 1038     | 6.308   | 6.288    | -0.020 |
| 105                       | 203      | 6.286   | 6.394    | 0.108  |
| 105                       | 1029     | 6.141   | 6.176    | 0.035  |
| 105                       | 1027     | 6.290   | 6.361    | 0.071  |
| 105                       | Max      | 6.449   | 6.495    | 0.162  |
| 105                       | Average  | 6.234   | 6.259    | 0.025  |
| 105                       | Min      | 5.982   | 6.001    | -0.038 |
| 105                       | Std Dev  | 0.104   | 0.109    | 0.047  |



| 5.28_IDD_ACT_1M_NOLOAD_4V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                 | 9.1   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                 | 4     | mA    |       |       |       |       |       |       |       |       |       |
| krad                      | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                        | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 |
| Min                       | 6.084 | 6.168 | 6.181 | 6.207 | 6.202 | 6.111 | 6.001 | 6.169 | 6.106 | 6.209 | 6.176 |
| Average                   | 6.131 | 6.252 | 6.232 | 6.280 | 6.307 | 6.196 | 6.219 | 6.238 | 6.307 | 6.305 | 6.327 |
| Max                       | 6.160 | 6.336 | 6.343 | 6.335 | 6.408 | 6.329 | 6.432 | 6.379 | 6.495 | 6.495 | 6.415 |
| UL                        | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 |

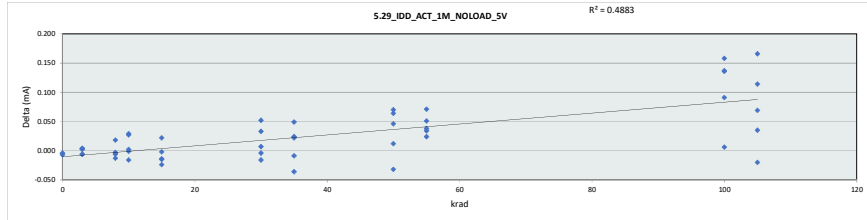


# HDR TID Report

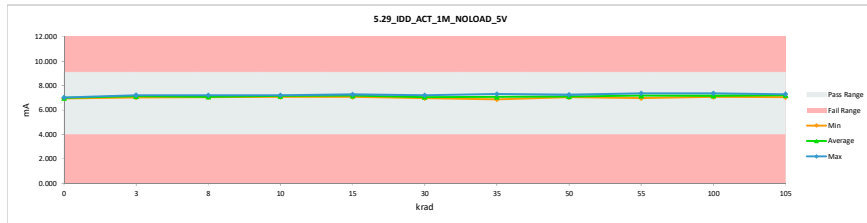
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.29_IDD_ACT_1M_NOLOAD_5V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      |          |         |          |        |
| Max Limit                 |          |         |          |        |
| Min Limit                 |          |         |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 7.028   | 7.023    | -0.005 |
| 0                         | 726      | 7.021   | 7.014    | -0.007 |
| 0                         | 791      | 6.953   | 6.949    | -0.004 |
| 3                         | 689      | 7.128   | 7.130    | 0.002  |
| 3                         | 688      | 7.087   | 7.081    | -0.006 |
| 3                         | 700      | 7.127   | 7.130    | 0.003  |
| 3                         | 482      | 7.221   | 7.215    | -0.006 |
| 3                         | 1033     | 7.034   | 7.035    | 0.004  |
| 8                         | 442      | 7.062   | 7.059    | -0.003 |
| 8                         | 699      | 7.094   | 7.088    | -0.006 |
| 8                         | 344      | 7.223   | 7.210    | -0.013 |
| 8                         | 355      | 7.025   | 7.043    | 0.018  |
| 8                         | 750      | 7.089   | 7.085    | -0.004 |
| 10                        | 537      | 7.044   | 7.073    | 0.029  |
| 10                        | 396      | 7.191   | 7.175    | -0.016 |
| 10                        | 521      | 7.120   | 7.122    | 0.002  |
| 10                        | 535      | 7.209   | 7.208    | -0.001 |
| 10                        | 526      | 7.150   | 7.177    | 0.027  |
| 15                        | 540      | 7.140   | 7.116    | -0.024 |
| 15                        | 387      | 7.224   | 7.222    | -0.002 |
| 15                        | 787      | 7.208   | 7.193    | -0.015 |
| 15                        | 1042     | 7.288   | 7.274    | -0.014 |
| 15                        | 483      | 7.049   | 7.071    | 0.022  |
| 30                        | 597      | 6.995   | 6.979    | -0.016 |
| 30                        | 853      | 7.210   | 7.206    | -0.004 |
| 30                        | 416      | 6.979   | 7.012    | 0.033  |
| 30                        | 949      | 6.978   | 6.985    | 0.007  |
| 30                        | 221      | 7.099   | 7.151    | 0.052  |
| 35                        | 538      | 7.123   | 7.145    | 0.022  |
| 35                        | 164      | 6.841   | 6.865    | 0.024  |
| 35                        | 1018     | 7.254   | 7.303    | 0.049  |
| 35                        | 462      | 6.955   | 6.946    | -0.009 |
| 35                        | 1032     | 7.210   | 7.174    | -0.036 |
| 50                        | 566      | 7.160   | 7.128    | -0.032 |
| 50                        | 197      | 7.067   | 7.079    | 0.012  |
| 50                        | 793      | 6.987   | 7.057    | 0.070  |
| 50                        | 802      | 6.999   | 7.045    | 0.046  |
| 50                        | 61       | 7.182   | 7.246    | 0.064  |
| 55                        | 795      | 6.930   | 6.968    | 0.038  |
| 55                        | 921      | 7.287   | 7.321    | 0.034  |
| 55                        | 741      | 6.976   | 7.000    | 0.024  |
| 55                        | 809      | 7.324   | 7.375    | 0.051  |
| 55                        | 804      | 7.144   | 7.215    | 0.071  |
| 100                       | 449      | 7.036   | 7.173    | 0.137  |
| 100                       | 541      | 6.941   | 7.077    | 0.136  |
| 100                       | 476      | 7.019   | 7.110    | 0.091  |
| 100                       | 45       | 7.131   | 7.137    | 0.006  |
| 100                       | 642      | 7.203   | 7.361    | 0.158  |
| 105                       | 1036     | 7.126   | 7.292    | 0.166  |
| 105                       | 1038     | 7.176   | 7.156    | -0.020 |
| 105                       | 203      | 7.157   | 7.271    | 0.114  |
| 105                       | 1029     | 7.010   | 7.045    | 0.035  |
| 105                       | 1027     | 7.165   | 7.234    | 0.069  |
| 105                       | Max      | 7.324   | 7.375    | 0.166  |
| 105                       | Average  | 7.101   | 7.127    | 0.026  |
| 105                       | Min      | 6.841   | 6.865    | -0.036 |
| 105                       | Std Dev  | 0.106   | 0.112    | 0.048  |



| 5.29_IDD_ACT_1M_NOLOAD_5V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                 | 9.1   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                 | 4     | mA    |       |       |       |       |       |       |       |       |       |
| krad                      |       |       |       |       |       |       |       |       |       |       |       |
| LL                        | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 |
| Min                       | 6.949 | 7.035 | 7.043 | 7.073 | 7.071 | 6.979 | 6.865 | 7.045 | 6.968 | 7.077 | 7.045 |
| Average                   | 6.995 | 7.118 | 7.097 | 7.151 | 7.175 | 7.067 | 7.087 | 7.111 | 7.176 | 7.172 | 7.200 |
| Max                       | 7.023 | 7.215 | 7.210 | 7.208 | 7.274 | 7.206 | 7.303 | 7.246 | 7.375 | 7.361 | 7.292 |
| UL                        | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 |

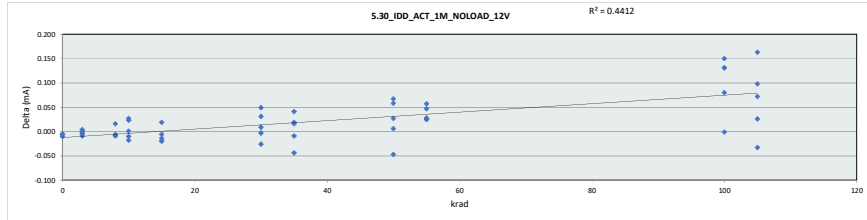


# HDR TID Report

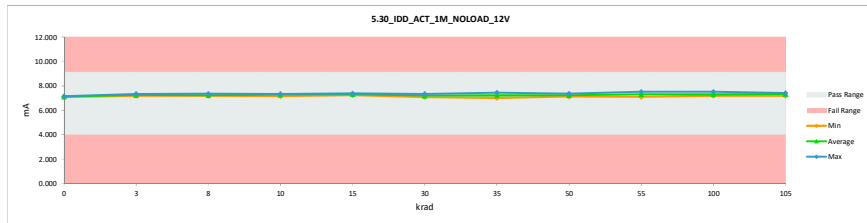
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.30_IDD_ACT_1M_NOLOAD_12V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 7.138   | 7.128    | -0.010 |
| 0                          | 726      | 7.155   | 7.149    | -0.006 |
| 0                          | 791      | 7.081   | 7.076    | -0.005 |
| 3                          | 689      | 7.250   | 7.251    | 0.001  |
| 3                          | 688      | 7.218   | 7.213    | -0.005 |
| 3                          | 700      | 7.301   | 7.299    | -0.002 |
| 3                          | 482      | 7.357   | 7.348    | -0.009 |
| 3                          | 1033     | 7.195   | 7.179    | 0.004  |
| 8                          | 442      | 7.206   | 7.197    | -0.009 |
| 8                          | 699      | 7.216   | 7.210    | -0.006 |
| 8                          | 344      | 7.363   | 7.355    | -0.008 |
| 8                          | 355      | 7.177   | 7.193    | 0.016  |
| 8                          | 750      | 7.220   | 7.212    | -0.008 |
| 10                         | 537      | 7.138   | 7.165    | 0.027  |
| 10                         | 396      | 7.307   | 7.289    | -0.018 |
| 10                         | 521      | 7.258   | 7.259    | 0.001  |
| 10                         | 535      | 7.332   | 7.322    | -0.010 |
| 10                         | 526      | 7.321   | 7.344    | 0.023  |
| 15                         | 540      | 7.278   | 7.258    | -0.020 |
| 15                         | 387      | 7.352   | 7.346    | -0.006 |
| 15                         | 787      | 7.368   | 7.354    | -0.014 |
| 15                         | 1042     | 7.395   | 7.376    | -0.019 |
| 15                         | 483      | 7.212   | 7.231    | 0.019  |
| 30                         | 597      | 7.112   | 7.086    | -0.026 |
| 30                         | 853      | 7.350   | 7.367    | -0.003 |
| 30                         | 416      | 7.113   | 7.144    | 0.031  |
| 30                         | 949      | 7.105   | 7.114    | 0.009  |
| 30                         | 221      | 7.248   | 7.297    | 0.049  |
| 35                         | 538      | 7.219   | 7.238    | 0.019  |
| 35                         | 164      | 6.992   | 7.008    | 0.016  |
| 35                         | 1018     | 7.401   | 7.442    | 0.041  |
| 35                         | 462      | 7.095   | 7.086    | -0.009 |
| 35                         | 1032     | 7.367   | 7.323    | -0.044 |
| 50                         | 566      | 7.282   | 7.235    | -0.047 |
| 50                         | 197      | 7.224   | 7.230    | 0.006  |
| 50                         | 793      | 7.136   | 7.203    | 0.067  |
| 50                         | 802      | 7.095   | 7.122    | 0.027  |
| 50                         | 61       | 7.311   | 7.369    | 0.058  |
| 55                         | 795      | 7.068   | 7.096    | 0.028  |
| 55                         | 921      | 7.444   | 7.469    | 0.025  |
| 55                         | 741      | 7.124   | 7.149    | 0.025  |
| 55                         | 809      | 7.462   | 7.509    | 0.047  |
| 55                         | 804      | 7.275   | 7.332    | 0.057  |
| 100                        | 449      | 7.146   | 7.277    | 0.131  |
| 100                        | 541      | 7.061   | 7.192    | 0.131  |
| 100                        | 476      | 7.159   | 7.239    | 0.080  |
| 100                        | 45       | 7.264   | 7.263    | -0.001 |
| 100                        | 642      | 7.356   | 7.506    | 0.150  |
| 105                        | 1036     | 7.246   | 7.409    | 0.163  |
| 105                        | 1038     | 7.312   | 7.279    | -0.033 |
| 105                        | 203      | 7.306   | 7.404    | 0.098  |
| 105                        | 1029     | 7.155   | 7.181    | 0.026  |
| 105                        | 1027     | 7.307   | 7.329    | 0.022  |
| 105                        | Max      | 7.462   | 7.509    | 0.163  |
| 105                        | Average  | 7.237   | 7.258    | 0.021  |
| 105                        | Min      | 6.992   | 7.008    | -0.047 |
| 105                        | Std Dev  | 0.109   | 0.114    | 0.047  |



| 5.30_IDD_ACT_1M_NOLOAD_1 |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                |       |       |       |       |       |       |       |       |       |       |       |
| Tester                   |       |       |       |       |       |       |       |       |       |       |       |
| Test Number              |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                | 9.1   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                | 4     | mA    |       |       |       |       |       |       |       |       |       |
| krad                     |       |       |       |       |       |       |       |       |       |       |       |
| LL                       | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 |
| Min                      | 7.076 | 7.179 | 7.193 | 7.165 | 7.231 | 7.086 | 7.008 | 7.122 | 7.096 | 7.192 | 7.181 |
| Average                  | 7.118 | 7.258 | 7.233 | 7.276 | 7.313 | 7.198 | 7.219 | 7.232 | 7.311 | 7.295 | 7.330 |
| Max                      | 7.149 | 7.348 | 7.355 | 7.344 | 7.376 | 7.347 | 7.442 | 7.369 | 7.509 | 7.506 | 7.409 |
| UL                       | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 |

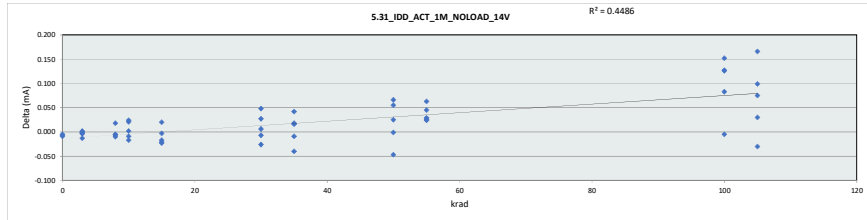


# HDR TID Report

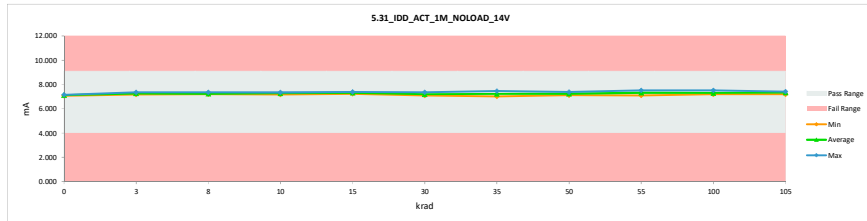
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.31_IDD_ACT_1M_NOLoad_14V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       | mA       | mA      |          |        |
| Max Limit                  | 9.1      | 9.1     |          |        |
| Min Limit                  | 4        | 4       |          |        |
| krad                       | Serial # | PRE HDR | POST HDR | Delta  |
| 0                          | 552      | 7.140   | 7.133    | -0.007 |
| 0                          | 726      | 7.161   | 7.152    | -0.009 |
| 0                          | 791      | 7.086   | 7.081    | -0.005 |
| 3                          | 689      | 7.254   | 7.254    | 0.000  |
| 3                          | 688      | 7.224   | 7.220    | -0.004 |
| 3                          | 700      | 7.303   | 7.301    | -0.002 |
| 3                          | 482      | 7.365   | 7.352    | -0.013 |
| 3                          | 1033     | 7.182   | 7.182    | 0.002  |
| 8                          | 442      | 7.209   | 7.203    | -0.006 |
| 8                          | 699      | 7.220   | 7.215    | -0.005 |
| 8                          | 344      | 7.368   | 7.358    | -0.010 |
| 8                          | 355      | 7.182   | 7.200    | 0.018  |
| 8                          | 750      | 7.224   | 7.218    | -0.006 |
| 10                         | 537      | 7.143   | 7.167    | 0.024  |
| 10                         | 396      | 7.311   | 7.294    | -0.017 |
| 10                         | 521      | 7.261   | 7.263    | 0.002  |
| 10                         | 535      | 7.336   | 7.327    | -0.009 |
| 10                         | 526      | 7.328   | 7.349    | 0.021  |
| 15                         | 540      | 7.287   | 7.264    | -0.023 |
| 15                         | 387      | 7.354   | 7.351    | -0.003 |
| 15                         | 787      | 7.374   | 7.357    | -0.017 |
| 15                         | 1042     | 7.400   | 7.379    | -0.021 |
| 15                         | 483      | 7.219   | 7.239    | 0.020  |
| 30                         | 597      | 7.116   | 7.090    | -0.026 |
| 30                         | 853      | 7.358   | 7.351    | -0.007 |
| 30                         | 416      | 7.119   | 7.146    | 0.027  |
| 30                         | 949      | 7.112   | 7.118    | 0.006  |
| 30                         | 221      | 7.254   | 7.302    | 0.048  |
| 35                         | 538      | 7.225   | 7.243    | 0.018  |
| 35                         | 164      | 6.996   | 7.012    | 0.016  |
| 35                         | 1018     | 7.406   | 7.448    | 0.042  |
| 35                         | 462      | 7.099   | 7.090    | -0.009 |
| 35                         | 1032     | 7.369   | 7.329    | -0.040 |
| 50                         | 566      | 7.285   | 7.238    | -0.047 |
| 50                         | 197      | 7.230   | 7.229    | -0.001 |
| 50                         | 793      | 7.142   | 7.208    | 0.066  |
| 50                         | 802      | 7.100   | 7.125    | 0.025  |
| 50                         | 61       | 7.318   | 7.373    | 0.055  |
| 55                         | 795      | 7.069   | 7.098    | 0.029  |
| 55                         | 921      | 7.450   | 7.475    | 0.025  |
| 55                         | 741      | 7.129   | 7.153    | 0.024  |
| 55                         | 809      | 7.467   | 7.512    | 0.045  |
| 55                         | 804      | 7.278   | 7.341    | 0.063  |
| 100                        | 449      | 7.152   | 7.279    | 0.127  |
| 100                        | 541      | 7.067   | 7.193    | 0.126  |
| 100                        | 476      | 7.161   | 7.244    | 0.083  |
| 100                        | 45       | 7.269   | 7.264    | -0.005 |
| 100                        | 642      | 7.361   | 7.513    | 0.152  |
| 105                        | 1036     | 7.250   | 7.416    | 0.166  |
| 105                        | 1038     | 7.314   | 7.284    | -0.030 |
| 105                        | 203      | 7.310   | 7.409    | 0.099  |
| 105                        | 1029     | 7.159   | 7.189    | 0.030  |
| 105                        | 1027     | 7.310   | 7.385    | 0.075  |
| 105                        | Max      | 7.467   | 7.513    | 0.166  |
| 105                        | Average  | 7.242   | 7.263    | 0.021  |
| 105                        | Min      | 6.996   | 7.012    | -0.047 |
| 105                        | Std Dev  | 0.109   | 0.114    | 0.047  |



| 5.31_IDD_ACT_1M_NOLoad_14V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  | 9.1   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                  | 4     | mA    |       |       |       |       |       |       |       |       |       |
| krad                       |       |       |       |       |       |       |       |       |       |       |       |
| LL                         | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 |
| Min                        | 7.081 | 7.182 | 7.200 | 7.167 | 7.239 | 7.090 | 7.012 | 7.125 | 7.098 | 7.193 | 7.189 |
| Average                    | 7.122 | 7.262 | 7.239 | 7.280 | 7.318 | 7.201 | 7.224 | 7.235 | 7.316 | 7.299 | 7.337 |
| Max                        | 7.152 | 7.352 | 7.358 | 7.349 | 7.379 | 7.351 | 7.448 | 7.373 | 7.512 | 7.513 | 7.416 |
| UL                         | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 | 9.100 |

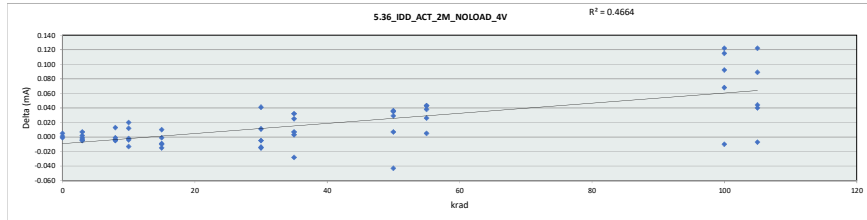


# HDR TID Report

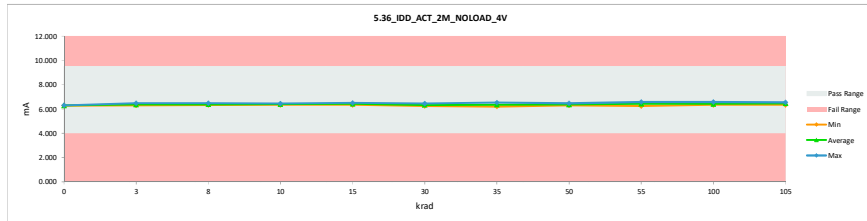
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.36_IDD_ACT_2M_NOLOAD_4V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      | mA       | mA      |          |        |
| Max Limit                 | 9.5      | 9.5     |          |        |
| Min Limit                 | 4        | 4       |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 6.291   | 6.296    | 0.005  |
| 0                         | 726      | 6.304   | 6.303    | -0.001 |
| 0                         | 791      | 6.267   | 6.268    | 0.001  |
| 3                         | 689      | 6.369   | 6.376    | 0.007  |
| 3                         | 688      | 6.358   | 6.353    | -0.005 |
| 3                         | 700      | 6.360   | 6.362    | 0.002  |
| 3                         | 482      | 6.483   | 6.480    | -0.003 |
| 3                         | 1033     | 6.299   | 6.299    | -0.001 |
| 8                         | 442      | 6.330   | 6.329    | -0.001 |
| 8                         | 699      | 6.348   | 6.343    | -0.005 |
| 8                         | 344      | 6.476   | 6.472    | -0.004 |
| 8                         | 355      | 6.321   | 6.334    | 0.013  |
| 8                         | 750      | 6.417   | 6.413    | -0.004 |
| 10                        | 537      | 6.332   | 6.344    | 0.012  |
| 10                        | 396      | 6.446   | 6.433    | -0.013 |
| 10                        | 521      | 6.367   | 6.365    | -0.002 |
| 10                        | 535      | 6.452   | 6.448    | -0.004 |
| 10                        | 526      | 6.395   | 6.415    | 0.020  |
| 15                        | 540      | 6.379   | 6.364    | -0.015 |
| 15                        | 387      | 6.476   | 6.475    | -0.001 |
| 15                        | 787      | 6.472   | 6.463    | -0.009 |
| 15                        | 1042     | 6.507   | 6.497    | -0.010 |
| 15                        | 483      | 6.332   | 6.342    | 0.010  |
| 30                        | 597      | 6.266   | 6.252    | -0.014 |
| 30                        | 853      | 6.458   | 6.443    | -0.015 |
| 30                        | 416      | 6.292   | 6.303    | 0.011  |
| 30                        | 949      | 6.284   | 6.279    | -0.005 |
| 30                        | 221      | 6.347   | 6.388    | 0.041  |
| 35                        | 538      | 6.380   | 6.387    | 0.007  |
| 35                        | 164      | 6.177   | 6.202    | 0.025  |
| 35                        | 1018     | 6.493   | 6.525    | 0.032  |
| 35                        | 462      | 6.248   | 6.251    | 0.003  |
| 35                        | 1032     | 6.438   | 6.410    | -0.028 |
| 50                        | 566      | 6.409   | 6.366    | -0.043 |
| 50                        | 197      | 6.364   | 6.371    | 0.007  |
| 50                        | 793      | 6.292   | 6.328    | 0.036  |
| 50                        | 802      | 6.277   | 6.306    | 0.029  |
| 50                        | 61       | 6.429   | 6.464    | 0.035  |
| 55                        | 795      | 6.206   | 6.244    | 0.038  |
| 55                        | 921      | 6.544   | 6.570    | 0.026  |
| 55                        | 741      | 6.274   | 6.279    | 0.005  |
| 55                        | 809      | 6.519   | 6.562    | 0.043  |
| 55                        | 804      | 6.417   | 6.460    | 0.043  |
| 100                       | 449      | 6.335   | 6.427    | 0.092  |
| 100                       | 541      | 6.226   | 6.341    | 0.115  |
| 100                       | 476      | 6.283   | 6.351    | 0.068  |
| 100                       | 45       | 6.417   | 6.407    | -0.010 |
| 100                       | 642      | 6.452   | 6.574    | 0.122  |
| 105                       | 1036     | 6.423   | 6.545    | 0.122  |
| 105                       | 1038     | 6.387   | 6.380    | -0.007 |
| 105                       | 203      | 6.450   | 6.539    | 0.089  |
| 105                       | 1029     | 6.300   | 6.340    | 0.040  |
| 105                       | 1027     | 6.418   | 6.462    | 0.044  |
| 105                       |          | 6.544   | 6.574    | 0.122  |
|                           | Max      |         |          |        |
|                           | Average  | 6.370   | 6.387    | 0.018  |
|                           | Min      | 6.177   | 6.202    | -0.043 |
|                           | Std Dev  | 0.086   | 0.091    | 0.036  |



| 5.36_IDD_ACT_2M_NOLOAD_4V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                 | 9.5   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                 | 4     | mA    |       |       |       |       |       |       |       |       |       |
| krad                      |       |       |       |       |       |       |       |       |       |       |       |
| LL                        | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 |
| Min                       | 6.268 | 6.299 | 6.329 | 6.344 | 6.342 | 6.252 | 6.202 | 6.306 | 6.244 | 6.341 | 6.340 |
| Average                   | 6.289 | 6.374 | 6.378 | 6.401 | 6.428 | 6.333 | 6.355 | 6.367 | 6.423 | 6.420 | 6.453 |
| Max                       | 6.303 | 6.480 | 6.472 | 6.448 | 6.497 | 6.443 | 6.525 | 6.464 | 6.570 | 6.574 | 6.545 |
| UL                        | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 |

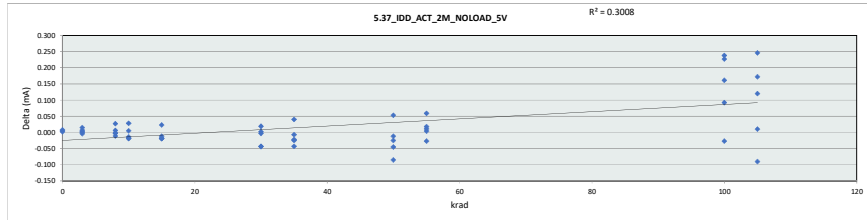


# HDR TID Report

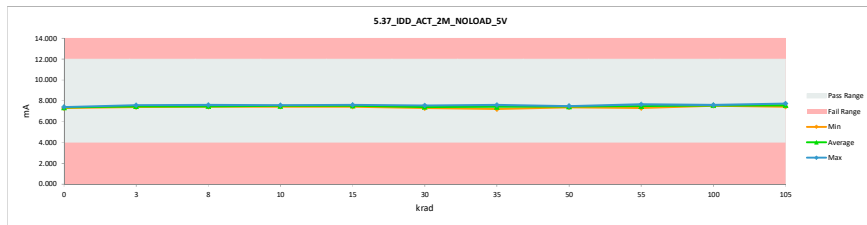
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.37_IDD_ACT_2M_NOLOAD_5V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      | mA       | mA      |          |        |
| Max Limit                 | 12       | 12      |          |        |
| Min Limit                 | 4        | 4       |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 7.374   | 7.382    | 0.008  |
| 0                         | 726      | 7.410   | 7.415    | 0.005  |
| 0                         | 791      | 7.312   | 7.314    | 0.002  |
| 3                         | 689      | 7.455   | 7.470    | 0.015  |
| 3                         | 688      | 7.476   | 7.479    | 0.003  |
| 3                         | 700      | 7.435   | 7.435    | 0.000  |
| 3                         | 482      | 7.584   | 7.580    | -0.004 |
| 3                         | 1033     | 7.401   | 7.401    | 0.007  |
| 8                         | 442      | 7.484   | 7.481    | -0.003 |
| 8                         | 699      | 7.470   | 7.468    | -0.002 |
| 8                         | 344      | 7.612   | 7.601    | -0.011 |
| 8                         | 355      | 7.405   | 7.432    | 0.027  |
| 8                         | 750      | 7.446   | 7.452    | 0.006  |
| 10                        | 537      | 7.437   | 7.452    | 0.028  |
| 10                        | 396      | 7.606   | 7.587    | -0.019 |
| 10                        | 521      | 7.490   | 7.476    | -0.014 |
| 10                        | 535      | 7.573   | 7.555    | -0.018 |
| 10                        | 526      | 7.517   | 7.522    | 0.005  |
| 15                        | 540      | 7.487   | 7.469    | -0.018 |
| 15                        | 387      | 7.636   | 7.617    | -0.019 |
| 15                        | 787      | 7.608   | 7.596    | -0.012 |
| 15                        | 1042     | 7.574   | 7.555    | -0.019 |
| 15                        | 483      | 7.427   | 7.450    | 0.023  |
| 30                        | 597      | 7.348   | 7.305    | -0.043 |
| 30                        | 853      | 7.604   | 7.560    | -0.044 |
| 30                        | 416      | 7.354   | 7.373    | 0.019  |
| 30                        | 949      | 7.360   | 7.357    | -0.003 |
| 30                        | 221      | 7.493   | 7.495    | 0.002  |
| 35                        | 538      | 7.513   | 7.491    | -0.022 |
| 35                        | 164      | 7.173   | 7.213    | 0.040  |
| 35                        | 1018     | 7.611   | 7.604    | -0.007 |
| 35                        | 462      | 7.332   | 7.307    | -0.025 |
| 35                        | 1032     | 7.526   | 7.483    | -0.043 |
| 50                        | 566      | 7.551   | 7.466    | -0.085 |
| 50                        | 197      | 7.477   | 7.465    | -0.012 |
| 50                        | 793      | 7.402   | 7.455    | 0.053  |
| 50                        | 802      | 7.415   | 7.390    | -0.025 |
| 50                        | 61       | 7.544   | 7.499    | -0.045 |
| 55                        | 795      | 7.311   | 7.315    | 0.004  |
| 55                        | 921      | 7.644   | 7.662    | 0.018  |
| 55                        | 741      | 7.346   | 7.319    | -0.027 |
| 55                        | 809      | 7.571   | 7.582    | 0.011  |
| 55                        | 804      | 7.499   | 7.558    | 0.059  |
| 100                       | 449      | 7.364   | 7.602    | 0.238  |
| 100                       | 541      | 7.318   | 7.545    | 0.227  |
| 100                       | 476      | 7.400   | 7.561    | 0.161  |
| 100                       | 45       | 7.503   | 7.595    | 0.092  |
| 100                       | 642      | 7.565   | 7.538    | -0.027 |
| 105                       | 1036     | 7.498   | 7.744    | 0.246  |
| 105                       | 1038     | 7.439   | 7.449    | 0.010  |
| 105                       | 203      | 7.556   | 7.728    | 0.172  |
| 105                       | 1029     | 7.372   | 7.492    | 0.120  |
| 105                       | 1027     | 7.552   | 7.462    | -0.090 |
| 105                       | Max      | 7.644   | 7.744    | 0.246  |
| 105                       | Average  | 7.469   | 7.487    | 0.018  |
| 105                       | Min      | 7.173   | 7.213    | -0.090 |
| 105                       | Std Dev  | 0.102   | 0.108    | 0.072  |



| 5.37_IDD_ACT_2M_NOLOAD_5V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 12     | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 4      | mA     |        |        |        |        |        |        |        |        |        |
| krad                      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                       | 7.314  | 7.401  | 7.432  | 7.452  | 7.450  | 7.305  | 7.213  | 7.390  | 7.315  | 7.538  | 7.449  |
| Average                   | 7.370  | 7.473  | 7.487  | 7.518  | 7.537  | 7.418  | 7.420  | 7.455  | 7.487  | 7.568  | 7.575  |
| Max                       | 7.415  | 7.580  | 7.601  | 7.587  | 7.617  | 7.560  | 7.604  | 7.499  | 7.662  | 7.602  | 7.744  |
| UL                        | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 |

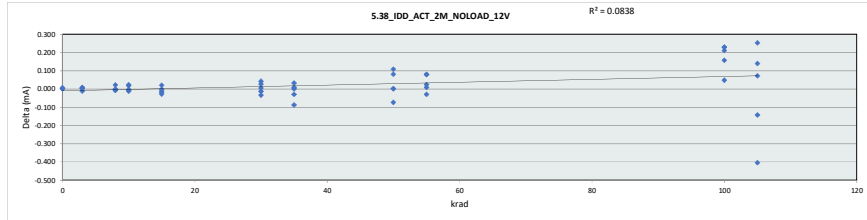


# HDR TID Report

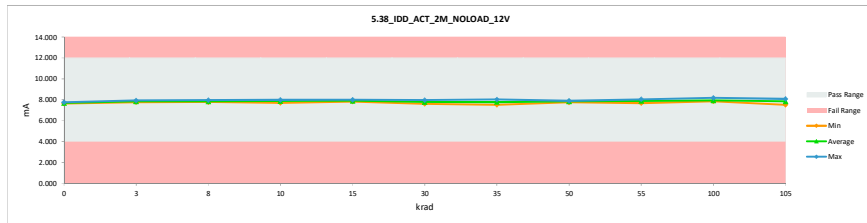
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.38_IDD_ACT_2M_NOLOAD_12V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       | mA       | mA      |          |        |
| Max Limit                  | 12       | 12      |          |        |
| Min Limit                  | 4        | 4       |          |        |
| krad                       | Serial # | PRE HDR | POST HDR | Delta  |
| 0                          | 552      | 7.670   | 7.678    | 0.008  |
| 0                          | 726      | 7.767   | 7.769    | 0.002  |
| 0                          | 791      | 7.641   | 7.642    | 0.001  |
| 3                          | 689      | 7.813   | 7.822    | 0.009  |
| 3                          | 688      | 7.819   | 7.823    | 0.004  |
| 3                          | 700      | 7.915   | 7.921    | 0.006  |
| 3                          | 482      | 7.941   | 7.930    | -0.011 |
| 3                          | 1033     | 7.770   | 7.770    | 0.003  |
| 8                          | 442      | 7.849   | 7.847    | -0.002 |
| 8                          | 699      | 7.798   | 7.792    | -0.006 |
| 8                          | 344      | 7.973   | 7.966    | -0.007 |
| 8                          | 355      | 7.797   | 7.820    | 0.023  |
| 8                          | 750      | 7.790   | 7.790    | 0.000  |
| 10                         | 537      | 7.689   | 7.708    | 0.019  |
| 10                         | 396      | 7.912   | 7.901    | -0.011 |
| 10                         | 521      | 7.882   | 7.880    | -0.002 |
| 10                         | 535      | 7.927   | 7.919    | -0.008 |
| 10                         | 526      | 7.962   | 7.986    | 0.024  |
| 15                         | 540      | 7.851   | 7.833    | -0.018 |
| 15                         | 387      | 7.971   | 7.970    | -0.001 |
| 15                         | 787      | 8.012   | 8.001    | -0.011 |
| 15                         | 1042     | 7.937   | 7.909    | -0.028 |
| 15                         | 483      | 7.843   | 7.864    | 0.021  |
| 30                         | 597      | 7.653   | 7.620    | -0.033 |
| 30                         | 853      | 7.985   | 7.973    | -0.012 |
| 30                         | 416      | 7.704   | 7.747    | 0.043  |
| 30                         | 949      | 7.701   | 7.728    | 0.027  |
| 30                         | 221      | 7.873   | 7.879    | 0.006  |
| 35                         | 538      | 7.769   | 7.778    | 0.009  |
| 35                         | 164      | 7.551   | 7.522    | -0.029 |
| 35                         | 1018     | 7.990   | 8.023    | 0.033  |
| 35                         | 462      | 7.705   | 7.706    | 0.001  |
| 35                         | 1032     | 7.955   | 7.868    | -0.087 |
| 50                         | 566      | 7.885   | 7.812    | -0.073 |
| 50                         | 197      | 7.879   | 7.881    | 0.002  |
| 50                         | 793      | 7.791   | 7.900    | 0.109  |
| 50                         | 802      | 7.875   | 7.756    | -0.081 |
| 50                         | 61       | 7.884   | 7.886    | 0.002  |
| 55                         | 795      | 7.663   | 7.688    | 0.025  |
| 55                         | 921      | 8.042   | 8.051    | 0.009  |
| 55                         | 741      | 7.723   | 7.803    | 0.080  |
| 55                         | 809      | 8.021   | 7.992    | -0.029 |
| 55                         | 804      | 7.836   | 7.916    | 0.080  |
| 100                        | 449      | 7.661   | 7.891    | 0.230  |
| 100                        | 541      | 7.646   | 7.857    | 0.211  |
| 100                        | 476      | 7.761   | 7.919    | 0.158  |
| 100                        | 45       | 7.853   | 7.902    | 0.049  |
| 100                        | 642      | 7.956   | 8.185    | 0.229  |
| 105                        | 1036     | 7.818   | 8.071    | 0.253  |
| 105                        | 1038     | 7.872   | 7.730    | -0.142 |
| 105                        | 203      | 7.947   | 8.087    | 0.140  |
| 105                        | 1029     | 7.751   | 7.824    | 0.073  |
| 105                        | 1027     | 7.936   | 7.532    | -0.404 |
| 105                        | Max      | 8.042   | 8.185    | 0.253  |
| 105                        | Average  | 7.830   | 7.850    | 0.020  |
| 105                        | Min      | 7.551   | 7.522    | -0.404 |
| 105                        | Std Dev  | 0.119   | 0.133    | 0.096  |



| 5.38_IDD_ACT_2M_NOLOAD_1 |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 12     | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 4      | mA     |        |        |        |        |        |        |        |        |        |
| krad                     | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                      | 7.642  | 7.770  | 7.790  | 7.708  | 7.833  | 7.620  | 7.522  | 7.756  | 7.688  | 7.857  | 7.532  |
| Average                  | 7.696  | 7.853  | 7.843  | 7.879  | 7.915  | 7.789  | 7.779  | 7.847  | 7.890  | 7.951  | 7.849  |
| Max                      | 7.769  | 7.930  | 7.966  | 7.986  | 8.001  | 7.973  | 8.023  | 7.900  | 8.051  | 8.185  | 8.087  |
| UL                       | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 |

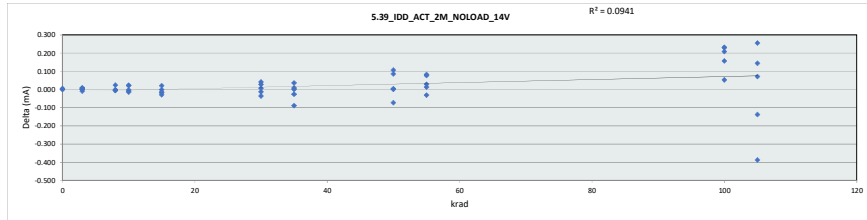


# HDR TID Report

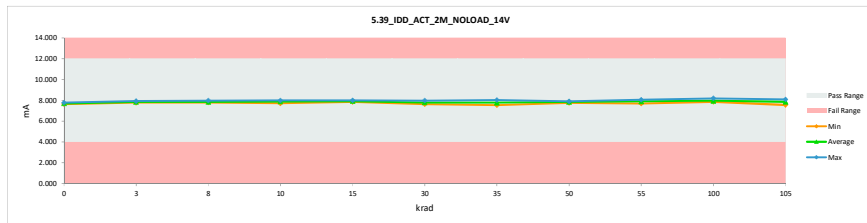
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.39_IDD_ACT_2M_NOLOAD_14V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 7.674   | 7.679    | 0.005  |
| 0                          | 726      | 7.773   | 7.774    | 0.001  |
| 0                          | 791      | 7.648   | 7.648    | 0.000  |
| 3                          | 689      | 7.815   | 7.824    | 0.009  |
| 3                          | 688      | 7.825   | 7.826    | 0.001  |
| 3                          | 700      | 7.920   | 7.924    | 0.004  |
| 3                          | 482      | 7.943   | 7.934    | -0.009 |
| 3                          | 1033     | 7.772   | 7.772    | 0.001  |
| 8                          | 442      | 7.853   | 7.849    | -0.004 |
| 8                          | 699      | 7.801   | 7.797    | -0.004 |
| 8                          | 344      | 7.978   | 7.972    | -0.006 |
| 8                          | 355      | 7.801   | 7.825    | 0.024  |
| 8                          | 750      | 7.795   | 7.794    | -0.001 |
| 10                         | 537      | 7.991   | 7.713    | 0.022  |
| 10                         | 396      | 7.913   | 7.903    | -0.010 |
| 10                         | 521      | 7.887   | 7.885    | -0.002 |
| 10                         | 535      | 7.934   | 7.920    | -0.014 |
| 10                         | 526      | 7.964   | 7.986    | 0.022  |
| 15                         | 540      | 7.854   | 7.836    | -0.018 |
| 15                         | 387      | 7.976   | 7.975    | -0.001 |
| 15                         | 787      | 8.017   | 8.003    | -0.014 |
| 15                         | 1042     | 7.941   | 7.912    | -0.029 |
| 15                         | 483      | 7.846   | 7.867    | 0.021  |
| 30                         | 597      | 7.659   | 7.623    | -0.036 |
| 30                         | 853      | 7.992   | 7.979    | -0.013 |
| 30                         | 416      | 7.710   | 7.751    | 0.041  |
| 30                         | 949      | 7.706   | 7.734    | 0.028  |
| 30                         | 221      | 7.877   | 7.884    | 0.007  |
| 35                         | 538      | 7.775   | 7.783    | 0.008  |
| 35                         | 164      | 7.553   | 7.527    | -0.026 |
| 35                         | 1018     | 7.992   | 8.028    | 0.036  |
| 35                         | 462      | 7.710   | 7.711    | 0.001  |
| 35                         | 1032     | 7.960   | 7.871    | -0.089 |
| 50                         | 566      | 7.890   | 7.817    | -0.073 |
| 50                         | 197      | 7.882   | 7.883    | 0.001  |
| 50                         | 793      | 7.798   | 7.905    | 0.107  |
| 50                         | 802      | 7.677   | 7.762    | 0.085  |
| 50                         | 61       | 7.888   | 7.892    | 0.004  |
| 55                         | 795      | 7.665   | 7.694    | 0.029  |
| 55                         | 921      | 8.043   | 8.056    | 0.013  |
| 55                         | 741      | 7.727   | 7.804    | 0.077  |
| 55                         | 809      | 8.026   | 7.995    | -0.031 |
| 55                         | 804      | 7.839   | 7.921    | 0.082  |
| 100                        | 449      | 7.667   | 7.896    | 0.229  |
| 100                        | 541      | 7.651   | 7.859    | 0.208  |
| 100                        | 476      | 7.764   | 7.921    | 0.157  |
| 100                        | 45       | 7.858   | 7.911    | 0.053  |
| 100                        | 642      | 7.958   | 8.190    | 0.232  |
| 105                        | 1036     | 7.820   | 8.075    | 0.255  |
| 105                        | 1038     | 7.875   | 7.737    | -0.138 |
| 105                        | 203      | 7.948   | 8.092    | 0.144  |
| 105                        | 1029     | 7.757   | 7.828    | 0.071  |
| 105                        | 1027     | 7.939   | 7.551    | -0.388 |
| 105                        | Max      | 8.043   | 8.190    | 0.255  |
| 105                        | Average  | 7.834   | 7.855    | 0.020  |
| 105                        | Min      | 7.553   | 7.527    | -0.388 |
| 105                        | Std Dev  | 0.119   | 0.132    | 0.095  |



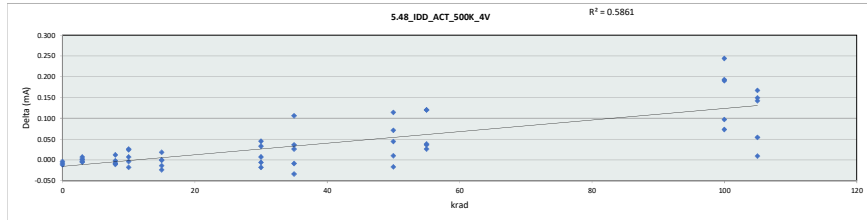
| 5.39_IDD_ACT_2M_NOLOAD_14V |        |        |        |        |        |        |        |        |        |        |        |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                  |        |        |        |        |        |        |        |        |        |        |        |
| Tester                     |        |        |        |        |        |        |        |        |        |        |        |
| Test Number                |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                  | 12     | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit                  | 4      | mA     |        |        |        |        |        |        |        |        |        |
| krad                       |        |        |        |        |        |        |        |        |        |        |        |
|                            | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                         | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                        | 7.648  | 7.772  | 7.794  | 7.713  | 7.836  | 7.623  | 7.527  | 7.762  | 7.694  | 7.859  | 7.551  |
| Average                    | 7.700  | 7.856  | 7.847  | 7.881  | 7.919  | 7.794  | 7.784  | 7.852  | 7.894  | 7.955  | 7.857  |
| Max                        | 7.774  | 7.934  | 7.972  | 7.986  | 8.003  | 7.979  | 8.028  | 7.905  | 8.056  | 8.190  | 8.092  |
| UL                         | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 |



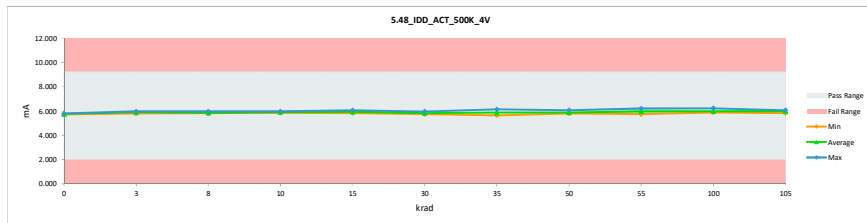
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.48_IDD_ACT_500K_4V |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 | mA       | mA      |          |        |
| Max Limit            | 9.2      | 9.2     |          |        |
| Min Limit            | 2        | 2       |          |        |
| krad                 | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                    | 552      | 5.803   | 5.791    | -0.012 |
| 0                    | 726      | 5.780   | 5.776    | -0.004 |
| 0                    | 791      | 5.725   | 5.717    | -0.008 |
| 3                    | 689      | 5.898   | 5.900    | 0.002  |
| 3                    | 688      | 5.853   | 5.848    | -0.005 |
| 3                    | 700      | 5.907   | 5.907    | 0.000  |
| 3                    | 482      | 5.977   | 5.972    | -0.005 |
| 3                    | 1033     | 5.795   | 5.802    | 0.007  |
| 8                    | 442      | 5.812   | 5.810    | -0.002 |
| 8                    | 699      | 5.870   | 5.862    | -0.008 |
| 8                    | 344      | 5.980   | 5.971    | -0.009 |
| 8                    | 355      | 5.798   | 5.810    | 0.012  |
| 8                    | 750      | 5.864   | 5.853    | -0.011 |
| 10                   | 537      | 5.813   | 5.839    | 0.026  |
| 10                   | 396      | 5.943   | 5.925    | -0.018 |
| 10                   | 521      | 5.872   | 5.879    | 0.007  |
| 10                   | 535      | 5.969   | 5.965    | -0.004 |
| 10                   | 526      | 5.914   | 5.938    | 0.024  |
| 15                   | 540      | 5.911   | 5.887    | -0.024 |
| 15                   | 387      | 5.979   | 5.978    | -0.001 |
| 15                   | 787      | 5.969   | 5.955    | -0.014 |
| 15                   | 1042     | 6.054   | 6.054    | 0.000  |
| 15                   | 483      | 5.817   | 5.835    | 0.018  |
| 30                   | 597      | 5.764   | 5.746    | -0.018 |
| 30                   | 853      | 5.961   | 5.955    | -0.006 |
| 30                   | 416      | 5.744   | 5.777    | 0.033  |
| 30                   | 949      | 5.740   | 5.747    | 0.007  |
| 30                   | 221      | 5.863   | 5.908    | 0.045  |
| 35                   | 538      | 5.885   | 5.921    | 0.036  |
| 35                   | 164      | 5.618   | 5.644    | 0.026  |
| 35                   | 1018     | 6.024   | 6.130    | 0.106  |
| 35                   | 462      | 5.728   | 5.719    | -0.009 |
| 35                   | 1032     | 5.979   | 5.945    | -0.034 |
| 50                   | 566      | 5.919   | 5.902    | -0.017 |
| 50                   | 197      | 5.831   | 5.841    | 0.010  |
| 50                   | 793      | 5.738   | 5.809    | 0.071  |
| 50                   | 802      | 5.753   | 5.797    | 0.044  |
| 50                   | 61       | 5.956   | 6.070    | 0.114  |
| 55                   | 795      | 5.702   | 5.738    | 0.036  |
| 55                   | 921      | 6.047   | 6.085    | 0.038  |
| 55                   | 741      | 5.743   | 5.769    | 0.026  |
| 55                   | 809      | 6.086   | 6.206    | 0.120  |
| 55                   | 804      | 5.913   | 6.033    | 0.120  |
| 100                  | 449      | 5.811   | 6.004    | 0.193  |
| 100                  | 541      | 5.699   | 5.889    | 0.190  |
| 100                  | 476      | 5.785   | 5.882    | 0.097  |
| 100                  | 45       | 5.893   | 5.966    | 0.073  |
| 100                  | 642      | 5.977   | 6.221    | 0.244  |
| 105                  | 1036     | 5.890   | 6.057    | 0.167  |
| 105                  | 1038     | 5.944   | 5.953    | 0.009  |
| 105                  | 203      | 5.919   | 6.068    | 0.149  |
| 105                  | 1029     | 5.776   | 5.830    | 0.054  |
| 105                  | 1027     | 5.923   | 6.065    | 0.142  |
| 105                  | Max      | 6.086   | 6.221    | 0.244  |
| 105                  | Average  | 5.866   | 5.905    | 0.038  |
| 105                  | Min      | 5.618   | 5.644    | -0.034 |
| 105                  | Std Dev  | 0.104   | 0.125    | 0.065  |



| 5.48_IDD_ACT_500K_4V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            | 9.2   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit            | 2     | mA    |       |       |       |       |       |       |       |       |       |
| krad                 |       |       |       |       |       |       |       |       |       |       |       |
| LL                   | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 |
| Min                  | 5.717 | 5.802 | 5.810 | 5.839 | 5.835 | 5.746 | 5.644 | 5.797 | 5.738 | 5.882 | 5.830 |
| Average              | 5.761 | 5.886 | 5.861 | 5.909 | 5.942 | 5.827 | 5.872 | 5.884 | 5.966 | 5.992 | 5.995 |
| Max                  | 5.791 | 5.972 | 5.971 | 5.965 | 6.054 | 5.955 | 6.130 | 6.070 | 6.206 | 6.221 | 6.068 |
| UL                   | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 |

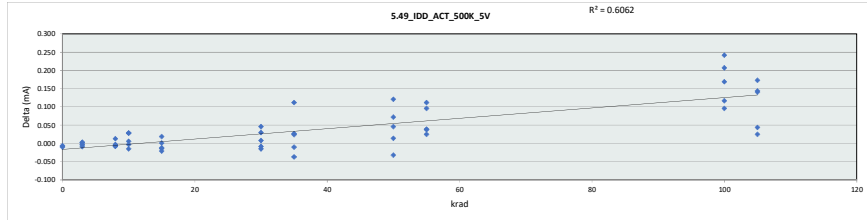


# HDR TID Report

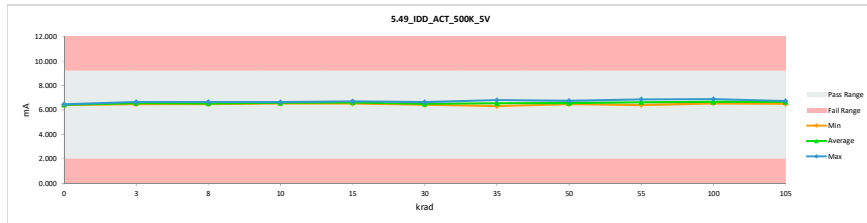
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.49_IDD_ACT_500K_SV |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 |          |         |          |        |
| Max Limit            |          |         |          |        |
| Min Limit            |          |         |          |        |
| krad                 | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                    | 552      | 6.471   | 6.461    | -0.010 |
| 0                    | 726      | 6.456   | 6.448    | -0.008 |
| 0                    | 791      | 6.395   | 6.389    | -0.006 |
| 3                    | 689      | 6.575   | 6.573    | -0.002 |
| 3                    | 688      | 6.529   | 6.525    | -0.004 |
| 3                    | 700      | 6.574   | 6.577    | 0.003  |
| 3                    | 482      | 6.665   | 6.656    | -0.009 |
| 3                    | 1033     | 6.471   | 6.477    | 0.003  |
| 8                    | 442      | 6.493   | 6.488    | -0.005 |
| 8                    | 699      | 6.541   | 6.538    | -0.003 |
| 8                    | 344      | 6.658   | 6.650    | -0.008 |
| 8                    | 355      | 6.469   | 6.482    | 0.013  |
| 8                    | 790      | 6.534   | 6.527    | -0.007 |
| 10                   | 537      | 6.485   | 6.514    | 0.029  |
| 10                   | 396      | 6.623   | 6.608    | -0.015 |
| 10                   | 521      | 6.555   | 6.561    | 0.006  |
| 10                   | 535      | 6.651   | 6.648    | -0.003 |
| 10                   | 526      | 6.588   | 6.616    | 0.028  |
| 15                   | 540      | 6.583   | 6.562    | -0.021 |
| 15                   | 387      | 6.658   | 6.659    | 0.001  |
| 15                   | 787      | 6.649   | 6.635    | -0.014 |
| 15                   | 1042     | 6.726   | 6.714    | -0.012 |
| 15                   | 483      | 6.494   | 6.513    | 0.019  |
| 30                   | 597      | 6.437   | 6.422    | -0.015 |
| 30                   | 853      | 6.648   | 6.640    | -0.008 |
| 30                   | 416      | 6.422   | 6.452    | 0.030  |
| 30                   | 949      | 6.415   | 6.423    | 0.008  |
| 30                   | 221      | 6.539   | 6.585    | 0.046  |
| 35                   | 538      | 6.565   | 6.589    | 0.024  |
| 35                   | 164      | 6.287   | 6.314    | 0.027  |
| 35                   | 1018     | 6.701   | 6.813    | 0.112  |
| 35                   | 462      | 6.391   | 6.381    | -0.010 |
| 35                   | 1032     | 6.655   | 6.618    | -0.037 |
| 50                   | 566      | 6.599   | 6.567    | -0.032 |
| 50                   | 197      | 6.509   | 6.523    | 0.014  |
| 50                   | 793      | 6.416   | 6.488    | 0.072  |
| 50                   | 802      | 6.431   | 6.477    | 0.046  |
| 50                   | 61       | 6.631   | 6.752    | 0.121  |
| 55                   | 795      | 6.370   | 6.409    | 0.039  |
| 55                   | 921      | 6.726   | 6.764    | 0.038  |
| 55                   | 741      | 6.419   | 6.444    | 0.025  |
| 55                   | 809      | 6.766   | 6.878    | 0.112  |
| 55                   | 804      | 6.587   | 6.683    | 0.096  |
| 100                  | 449      | 6.481   | 6.688    | 0.207  |
| 100                  | 541      | 6.373   | 6.542    | 0.169  |
| 100                  | 476      | 6.460   | 6.556    | 0.096  |
| 100                  | 45       | 6.573   | 6.690    | 0.117  |
| 100                  | 642      | 6.650   | 6.892    | 0.242  |
| 105                  | 1036     | 6.568   | 6.741    | 0.173  |
| 105                  | 1038     | 6.619   | 6.644    | 0.025  |
| 105                  | 203      | 6.599   | 6.740    | 0.141  |
| 105                  | 1029     | 6.454   | 6.498    | 0.044  |
| 105                  | 1027     | 6.761   | 6.745    | -0.014 |
| 105                  | Max      | 6.766   | 6.892    | 0.242  |
| 105                  | Average  | 6.542   | 6.581    | 0.039  |
| 105                  | Min      | 6.287   | 6.314    | -0.037 |
| 105                  | Std Dev  | 0.106   | 0.127    | 0.065  |



| 5.49_IDD_ACT_500K_SV |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit            |       |       |       |       |       |       |       |       |       |       |       |
|                      | 9.2   | mA    |       |       |       |       |       |       |       |       |       |
|                      | 2     |       |       |       |       |       |       |       |       |       |       |
| krad                 |       |       |       |       |       |       |       |       |       |       |       |
|                      | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                   | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 |
| Min                  | 6.389 | 6.477 | 6.482 | 6.514 | 6.513 | 6.422 | 6.314 | 6.477 | 6.409 | 6.542 | 6.498 |
| Average              | 6.433 | 6.562 | 6.537 | 6.589 | 6.617 | 6.504 | 6.543 | 6.561 | 6.636 | 6.674 | 6.674 |
| Max                  | 6.461 | 6.656 | 6.650 | 6.648 | 6.714 | 6.640 | 6.813 | 6.752 | 6.878 | 6.892 | 6.745 |
| UL                   | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 |

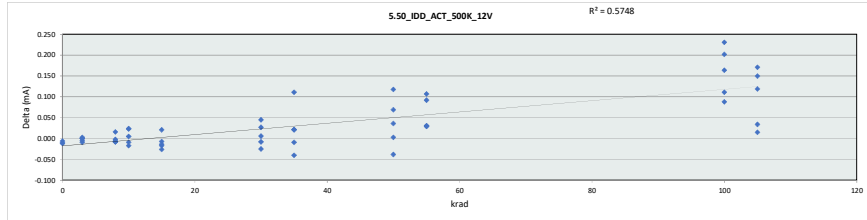


# HDR TID Report

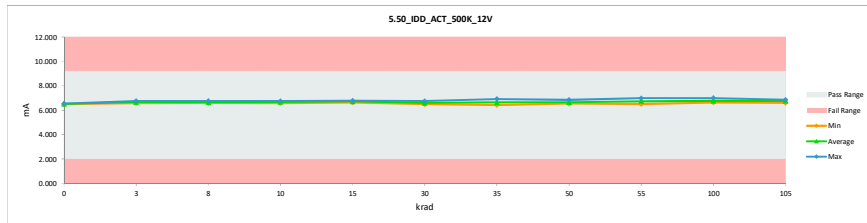
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.50_IDD_ACT_500K_12V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  | mA       | mA      |          |        |
| Max Limit             | 9.2      | 9.2     |          |        |
| Min Limit             | 2        | 2       |          |        |
| krad                  | Serial # | PRE HDR | POST HDR | Delta  |
| 0                     | 552      | 6.559   | 6.547    | -0.012 |
| 0                     | 726      | 6.561   | 6.551    | -0.010 |
| 0                     | 791      | 6.495   | 6.489    | -0.006 |
| 3                     | 689      | 6.666   | 6.666    | 0.000  |
| 3                     | 688      | 6.630   | 6.625    | -0.005 |
| 3                     | 700      | 6.708   | 6.708    | 0.000  |
| 3                     | 482      | 6.772   | 6.763    | -0.009 |
| 3                     | 1033     | 6.589   | 6.589    | 0.003  |
| 8                     | 442      | 6.598   | 6.596    | -0.002 |
| 8                     | 699      | 6.635   | 6.629    | -0.006 |
| 8                     | 344      | 6.769   | 6.761    | -0.008 |
| 8                     | 355      | 6.585   | 6.601    | 0.016  |
| 8                     | 790      | 6.635   | 6.627    | -0.008 |
| 10                    | 537      | 6.559   | 6.583    | 0.024  |
| 10                    | 396      | 6.712   | 6.695    | -0.017 |
| 10                    | 521      | 6.659   | 6.664    | 0.005  |
| 10                    | 535      | 6.746   | 6.737    | -0.009 |
| 10                    | 526      | 6.725   | 6.748    | 0.023  |
| 15                    | 540      | 6.696   | 6.670    | -0.026 |
| 15                    | 387      | 6.760   | 6.753    | -0.007 |
| 15                    | 787      | 6.775   | 6.761    | -0.014 |
| 15                    | 1042     | 6.809   | 6.792    | -0.017 |
| 15                    | 483      | 6.620   | 6.641    | 0.021  |
| 30                    | 597      | 6.528   | 6.503    | -0.025 |
| 30                    | 853      | 6.761   | 6.753    | -0.008 |
| 30                    | 416      | 6.526   | 6.553    | 0.027  |
| 30                    | 949      | 6.519   | 6.525    | 0.006  |
| 30                    | 221      | 6.655   | 6.700    | 0.045  |
| 35                    | 538      | 6.640   | 6.661    | 0.021  |
| 35                    | 164      | 6.407   | 6.429    | 0.022  |
| 35                    | 1018     | 6.815   | 6.926    | 0.111  |
| 35                    | 462      | 6.499   | 6.490    | -0.009 |
| 35                    | 1032     | 6.776   | 6.736    | -0.040 |
| 50                    | 566      | 6.696   | 6.658    | -0.038 |
| 50                    | 197      | 6.632   | 6.635    | 0.003  |
| 50                    | 793      | 6.535   | 6.604    | 0.069  |
| 50                    | 802      | 6.502   | 6.538    | 0.036  |
| 50                    | 61       | 6.733   | 6.851    | 0.118  |
| 55                    | 795      | 6.476   | 6.507    | 0.031  |
| 55                    | 921      | 6.851   | 6.881    | 0.030  |
| 55                    | 741      | 6.530   | 6.559    | 0.029  |
| 55                    | 809      | 6.875   | 6.982    | 0.107  |
| 55                    | 804      | 6.688   | 6.780    | 0.092  |
| 100                   | 449      | 6.568   | 6.770    | 0.202  |
| 100                   | 541      | 6.466   | 6.630    | 0.164  |
| 100                   | 476      | 6.566   | 6.654    | 0.088  |
| 100                   | 45       | 6.677   | 6.788    | 0.111  |
| 100                   | 642      | 6.770   | 7.001    | 0.231  |
| 105                   | 1036     | 6.660   | 6.831    | 0.171  |
| 105                   | 1038     | 6.723   | 6.738    | 0.015  |
| 105                   | 203      | 6.714   | 6.833    | 0.119  |
| 105                   | 1029     | 6.568   | 6.602    | 0.034  |
| 105                   | 1027     | 6.709   | 6.859    | 0.150  |
| 105                   | Max      | 6.875   | 7.001    | 0.231  |
| 105                   | Average  | 6.648   | 6.683    | 0.035  |
| 105                   | Min      | 6.407   | 6.429    | -0.040 |
| 105                   | Std Dev  | 0.109   | 0.128    | 0.064  |



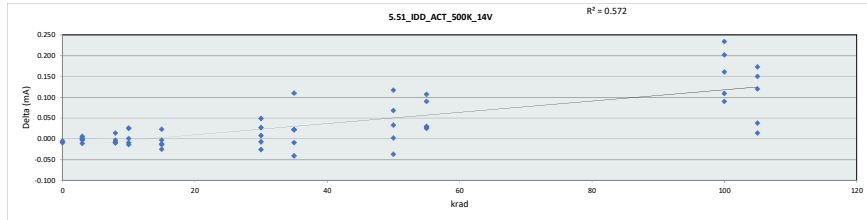
| 5.50_IDD_ACT_500K_12V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             | 9.2   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit             | 2     | mA    |       |       |       |       |       |       |       |       |       |
| krad                  |       |       |       |       |       |       |       |       |       |       |       |
|                       | 0     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |       |       |
| LL                    | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 |
| Min                   | 6.489 | 6.589 | 6.596 | 6.583 | 6.641 | 6.503 | 6.429 | 6.538 | 6.507 | 6.630 | 6.602 |
| Average               | 6.529 | 6.670 | 6.643 | 6.685 | 6.723 | 6.607 | 6.648 | 6.657 | 6.742 | 6.769 | 6.773 |
| Max                   | 6.551 | 6.763 | 6.761 | 6.748 | 6.792 | 6.753 | 6.926 | 6.851 | 6.982 | 7.001 | 6.859 |
| UL                    | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 |



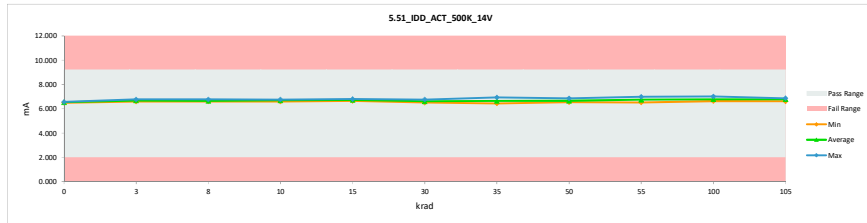
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.51_IDD_ACT_500K_14V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  | mA       | mA      |          |        |
| Max Limit             | 9.2      | 9.2     |          |        |
| Min Limit             | 2        | 2       |          |        |
| krad                  | Serial # | PRE HDR | POST HDR | Delta  |
| 0                     | 552      | 6.561   | 6.552    | -0.009 |
| 0                     | 726      | 6.564   | 6.556    | -0.008 |
| 0                     | 791      | 6.499   | 6.494    | -0.005 |
| 3                     | 689      | 6.672   | 6.671    | -0.001 |
| 3                     | 688      | 6.634   | 6.631    | -0.003 |
| 3                     | 700      | 6.712   | 6.714    | 0.002  |
| 3                     | 482      | 6.777   | 6.766    | -0.011 |
| 3                     | 1033     | 6.595   | 6.595    | 0.006  |
| 8                     | 442      | 6.603   | 6.600    | -0.003 |
| 8                     | 699      | 6.641   | 6.633    | -0.008 |
| 8                     | 344      | 6.774   | 6.764    | -0.010 |
| 8                     | 355      | 6.590   | 6.604    | 0.014  |
| 8                     | 790      | 6.642   | 6.633    | -0.009 |
| 10                    | 537      | 6.561   | 6.587    | 0.026  |
| 10                    | 396      | 6.716   | 6.702    | -0.014 |
| 10                    | 521      | 6.666   | 6.667    | 0.001  |
| 10                    | 535      | 6.751   | 6.742    | -0.009 |
| 10                    | 526      | 6.728   | 6.753    | 0.025  |
| 15                    | 540      | 6.700   | 6.675    | -0.025 |
| 15                    | 387      | 6.761   | 6.758    | -0.003 |
| 15                    | 787      | 6.779   | 6.767    | -0.012 |
| 15                    | 1042     | 6.813   | 6.799    | -0.014 |
| 15                    | 483      | 6.622   | 6.645    | 0.023  |
| 30                    | 597      | 6.532   | 6.506    | -0.026 |
| 30                    | 853      | 6.765   | 6.758    | -0.007 |
| 30                    | 416      | 6.531   | 6.558    | 0.027  |
| 30                    | 949      | 6.524   | 6.532    | 0.008  |
| 30                    | 221      | 6.658   | 6.707    | 0.049  |
| 35                    | 538      | 6.644   | 6.666    | 0.022  |
| 35                    | 164      | 6.410   | 6.432    | 0.022  |
| 35                    | 1018     | 6.822   | 6.932    | 0.110  |
| 35                    | 462      | 6.505   | 6.496    | -0.009 |
| 35                    | 1032     | 6.781   | 6.740    | -0.041 |
| 50                    | 566      | 6.698   | 6.661    | -0.037 |
| 50                    | 197      | 6.638   | 6.640    | 0.002  |
| 50                    | 793      | 6.540   | 6.608    | 0.068  |
| 50                    | 802      | 6.508   | 6.541    | 0.033  |
| 50                    | 61       | 6.738   | 6.855    | 0.117  |
| 55                    | 795      | 6.482   | 6.512    | 0.030  |
| 55                    | 921      | 6.854   | 6.882    | 0.028  |
| 55                    | 741      | 6.536   | 6.561    | 0.025  |
| 55                    | 809      | 6.878   | 6.985    | 0.107  |
| 55                    | 804      | 6.692   | 6.782    | 0.090  |
| 100                   | 449      | 6.572   | 6.774    | 0.202  |
| 100                   | 541      | 6.470   | 6.631    | 0.161  |
| 100                   | 476      | 6.569   | 6.659    | 0.090  |
| 100                   | 45       | 6.684   | 6.793    | 0.109  |
| 100                   | 642      | 6.774   | 7.008    | 0.234  |
| 105                   | 1036     | 6.665   | 6.838    | 0.173  |
| 105                   | 1038     | 6.728   | 6.742    | 0.014  |
| 105                   | 203      | 6.721   | 6.841    | 0.120  |
| 105                   | 1029     | 6.572   | 6.610    | 0.038  |
| 105                   | 1027     | 6.715   | 6.865    | 0.150  |
| 105                   | Max      | 6.878   | 7.008    | 0.234  |
|                       | Average  | 6.652   | 6.687    | 0.035  |
|                       | Min      | 6.410   | 6.432    | -0.041 |
|                       | Std Dev  | 0.109   | 0.129    | 0.064  |



| 5.51_IDD_ACT_500K_14V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             | 9.2   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit             | 2     | mA    |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 |
| Min                   | 6.494 | 6.595 | 6.600 | 6.587 | 6.645 | 6.506 | 6.432 | 6.541 | 6.512 | 6.631 | 6.610 |
| Average               | 6.534 | 6.675 | 6.647 | 6.690 | 6.729 | 6.612 | 6.653 | 6.661 | 6.744 | 6.773 | 6.779 |
| Max                   | 6.556 | 6.766 | 6.764 | 6.753 | 6.799 | 6.758 | 6.932 | 6.855 | 6.985 | 7.008 | 6.865 |
| UL                    | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 | 9.200 |

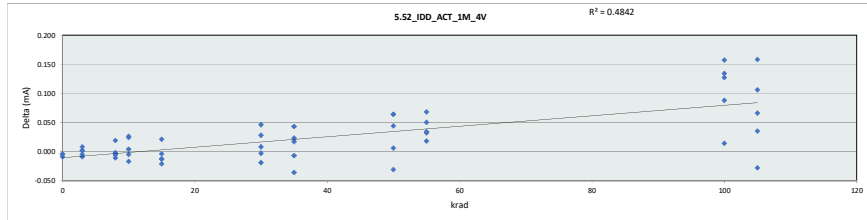


# HDR TID Report

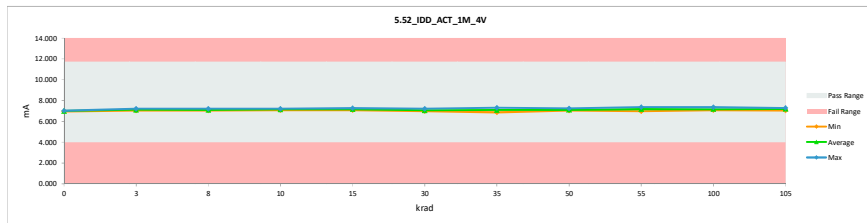
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.52_IDD_ACT_1M_4V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               | mA       | mA      |          |        |
| Max Limit          | 11.7     | 11.7    |          |        |
| Min Limit          | 4        | 4       |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 7.031   | 7.022    | -0.009 |
| 0                  | 726      | 7.024   | 7.019    | -0.005 |
| 0                  | 791      | 6.963   | 6.959    | -0.004 |
| 3                  | 689      | 7.133   | 7.134    | 0.001  |
| 3                  | 688      | 7.094   | 7.089    | -0.005 |
| 3                  | 700      | 7.133   | 7.135    | 0.002  |
| 3                  | 482      | 7.221   | 7.212    | -0.009 |
| 3                  | 1033     | 7.049   | 7.041    | 0.008  |
| 8                  | 442      | 7.064   | 7.062    | -0.002 |
| 8                  | 699      | 7.101   | 7.097    | -0.004 |
| 8                  | 344      | 7.224   | 7.213    | -0.011 |
| 8                  | 355      | 7.031   | 7.050    | 0.019  |
| 8                  | 750      | 7.092   | 7.086    | -0.006 |
| 10                 | 537      | 7.137   | 7.075    | 0.025  |
| 10                 | 396      | 7.195   | 7.178    | -0.017 |
| 10                 | 521      | 7.125   | 7.129    | 0.004  |
| 10                 | 535      | 7.217   | 7.212    | -0.005 |
| 10                 | 526      | 7.152   | 7.176    | 0.024  |
| 15                 | 540      | 7.138   | 7.117    | -0.021 |
| 15                 | 387      | 7.227   | 7.223    | -0.004 |
| 15                 | 787      | 7.207   | 7.194    | -0.013 |
| 15                 | 1042     | 7.285   | 7.272    | -0.013 |
| 15                 | 483      | 7.054   | 7.075    | 0.021  |
| 30                 | 597      | 7.000   | 6.981    | -0.019 |
| 30                 | 853      | 7.215   | 7.212    | -0.003 |
| 30                 | 416      | 6.987   | 7.015    | 0.028  |
| 30                 | 949      | 6.982   | 6.990    | 0.008  |
| 30                 | 221      | 7.102   | 7.148    | 0.046  |
| 35                 | 538      | 7.130   | 7.147    | 0.017  |
| 35                 | 164      | 6.845   | 6.868    | 0.023  |
| 35                 | 1018     | 7.255   | 7.298    | 0.043  |
| 35                 | 462      | 6.956   | 6.949    | -0.007 |
| 35                 | 1032     | 7.216   | 7.180    | -0.036 |
| 50                 | 566      | 7.161   | 7.130    | -0.031 |
| 50                 | 197      | 7.079   | 7.085    | 0.006  |
| 50                 | 793      | 6.994   | 7.058    | 0.064  |
| 50                 | 802      | 7.001   | 7.045    | 0.044  |
| 50                 | 61       | 7.187   | 7.251    | 0.064  |
| 55                 | 795      | 6.938   | 6.972    | 0.034  |
| 55                 | 921      | 7.281   | 7.313    | 0.032  |
| 55                 | 741      | 6.987   | 7.005    | 0.018  |
| 55                 | 809      | 7.318   | 7.368    | 0.050  |
| 55                 | 804      | 7.145   | 7.213    | 0.068  |
| 100                | 449      | 7.036   | 7.163    | 0.127  |
| 100                | 541      | 6.942   | 7.076    | 0.134  |
| 100                | 476      | 7.025   | 7.113    | 0.088  |
| 100                | 45       | 7.135   | 7.149    | 0.014  |
| 100                | 642      | 7.202   | 7.359    | 0.157  |
| 105                | 1036     | 7.130   | 7.288    | 0.158  |
| 105                | 1038     | 7.180   | 7.152    | -0.028 |
| 105                | 203      | 7.164   | 7.270    | 0.106  |
| 105                | 1029     | 7.015   | 7.050    | 0.035  |
| 105                | 1027     | 7.166   | 7.232    | 0.066  |
| 105                | Max      | 7.318   | 7.368    | 0.158  |
| 105                | Average  | 7.105   | 7.129    | 0.024  |
| 105                | Min      | 6.845   | 6.868    | -0.036 |
| 105                | Std Dev  | 0.104   | 0.109    | 0.046  |



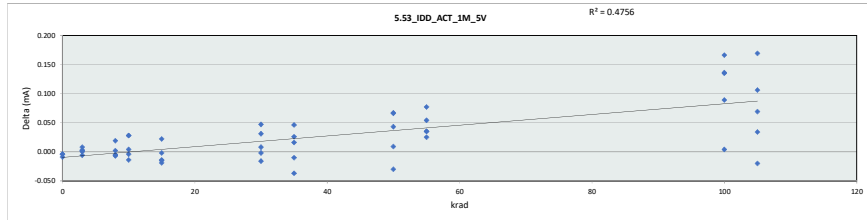
| 5.52_IDD_ACT_1M_4V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site          |        |        |        |        |        |        |        |        |        |        |        |
| Tester             |        |        |        |        |        |        |        |        |        |        |        |
| Test Number        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit          | 11.7   | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit          | 4      | mA     |        |        |        |        |        |        |        |        |        |
| krad               | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                 | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                | 6.959  | 7.041  | 7.050  | 7.075  | 7.075  | 6.981  | 6.868  | 7.045  | 6.972  | 7.076  | 7.050  |
| Average            | 7.000  | 7.122  | 7.102  | 7.154  | 7.176  | 7.069  | 7.088  | 7.114  | 7.174  | 7.172  | 7.198  |
| Max                | 7.022  | 7.212  | 7.213  | 7.212  | 7.272  | 7.212  | 7.298  | 7.251  | 7.368  | 7.359  | 7.288  |
| UL                 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 |



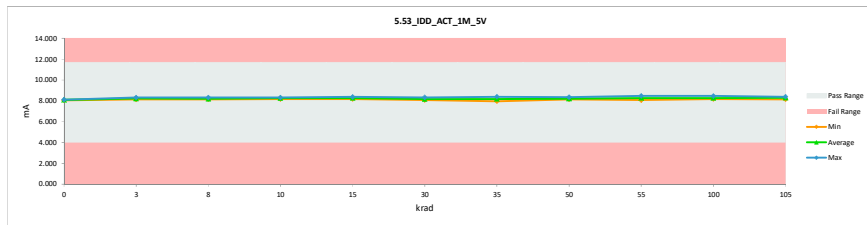
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.53_IDD_ACT_1M_5V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               | mA       | mA      |          |        |
| Max Limit          | 11.7     | 11.7    |          |        |
| Min Limit          | 4        | 4       |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 8.125   | 8.116    | -0.009 |
| 0                  | 726      | 8.120   | 8.116    | -0.004 |
| 0                  | 791      | 8.059   | 8.055    | -0.004 |
| 3                  | 689      | 8.232   | 8.234    | 0.002  |
| 3                  | 688      | 8.189   | 8.189    | 0.000  |
| 3                  | 700      | 8.225   | 8.228    | 0.003  |
| 3                  | 482      | 8.331   | 8.325    | -0.006 |
| 3                  | 1033     | 8.141   | 8.141    | 0.008  |
| 8                  | 442      | 8.174   | 8.176    | 0.002  |
| 8                  | 699      | 8.199   | 8.193    | -0.006 |
| 8                  | 344      | 8.328   | 8.321    | -0.007 |
| 8                  | 355      | 8.126   | 8.145    | 0.019  |
| 8                  | 750      | 8.183   | 8.178    | -0.005 |
| 10                 | 537      | 8.146   | 8.174    | 0.028  |
| 10                 | 396      | 8.303   | 8.289    | -0.014 |
| 10                 | 521      | 8.235   | 8.239    | 0.004  |
| 10                 | 535      | 8.326   | 8.322    | -0.004 |
| 10                 | 526      | 8.251   | 8.279    | 0.028  |
| 15                 | 540      | 8.235   | 8.216    | -0.019 |
| 15                 | 387      | 8.335   | 8.313    | -0.002 |
| 15                 | 787      | 8.314   | 8.300    | -0.014 |
| 15                 | 1042     | 8.387   | 8.372    | -0.015 |
| 15                 | 483      | 8.156   | 8.178    | 0.022  |
| 30                 | 597      | 8.097   | 8.081    | -0.016 |
| 30                 | 853      | 8.330   | 8.328    | -0.002 |
| 30                 | 416      | 8.085   | 8.116    | 0.031  |
| 30                 | 949      | 8.084   | 8.092    | 0.008  |
| 30                 | 221      | 8.207   | 8.254    | 0.047  |
| 35                 | 538      | 8.238   | 8.254    | 0.016  |
| 35                 | 164      | 7.936   | 7.962    | 0.026  |
| 35                 | 1018     | 8.355   | 8.401    | 0.046  |
| 35                 | 462      | 8.045   | 8.035    | -0.010 |
| 35                 | 1032     | 8.318   | 8.281    | -0.037 |
| 50                 | 566      | 8.268   | 8.238    | -0.030 |
| 50                 | 197      | 8.184   | 8.193    | 0.009  |
| 50                 | 793      | 8.104   | 8.170    | 0.066  |
| 50                 | 802      | 8.111   | 8.154    | 0.043  |
| 50                 | 61       | 8.285   | 8.352    | 0.067  |
| 55                 | 795      | 8.033   | 8.068    | 0.035  |
| 55                 | 921      | 8.385   | 8.420    | 0.035  |
| 55                 | 741      | 8.085   | 8.110    | 0.025  |
| 55                 | 809      | 8.429   | 8.483    | 0.054  |
| 55                 | 804      | 8.239   | 8.316    | 0.077  |
| 100                | 449      | 8.125   | 8.261    | 0.136  |
| 100                | 541      | 8.044   | 8.179    | 0.135  |
| 100                | 476      | 8.124   | 8.213    | 0.089  |
| 100                | 45       | 8.243   | 8.247    | 0.004  |
| 100                | 642      | 8.300   | 8.466    | 0.166  |
| 105                | 1036     | 8.232   | 8.401    | 0.169  |
| 105                | 1038     | 8.281   | 8.261    | -0.020 |
| 105                | 203      | 8.270   | 8.376    | 0.106  |
| 105                | 1029     | 8.117   | 8.151    | 0.034  |
| 105                | 1027     | 8.270   | 8.339    | 0.069  |
| 105                | Max      | 8.429   | 8.483    | 0.169  |
| 105                | Average  | 8.206   | 8.232    | 0.026  |
| 105                | Min      | 7.936   | 7.962    | -0.037 |
| 105                | Std Dev  | 0.107   | 0.113    | 0.048  |



| 5.53_IDD_ACT_1M_5V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site          |        |        |        |        |        |        |        |        |        |        |        |
| Tester             |        |        |        |        |        |        |        |        |        |        |        |
| Test Number        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit          | 11.7   | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit          | 4      | mA     |        |        |        |        |        |        |        |        |        |
| krad               | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                 | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                | 8.055  | 8.141  | 8.145  | 8.174  | 8.178  | 8.081  | 7.962  | 8.154  | 8.068  | 8.179  | 8.151  |
| Average            | 8.096  | 8.223  | 8.203  | 8.261  | 8.280  | 8.174  | 8.187  | 8.221  | 8.279  | 8.273  | 8.306  |
| Max                | 8.116  | 8.325  | 8.321  | 8.322  | 8.372  | 8.328  | 8.401  | 8.352  | 8.483  | 8.466  | 8.401  |
| UL                 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 |

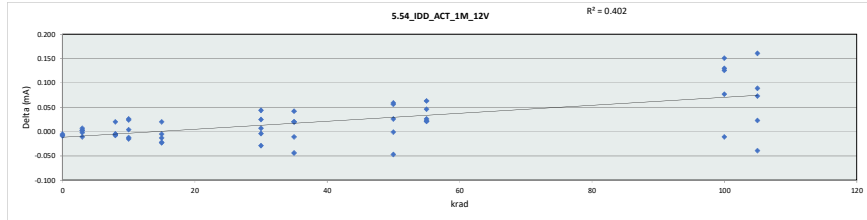


# HDR TID Report

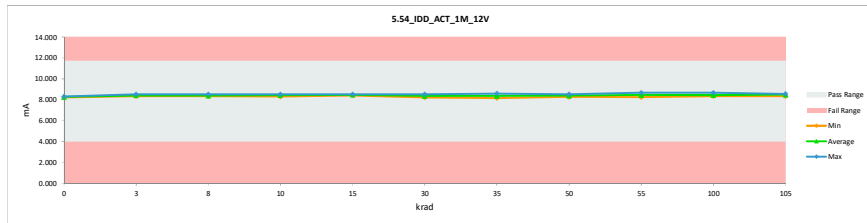
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.54_IDD_ACT_1M_12V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | mA       | mA      |          |        |
| Max Limit           | 11.7     | 11.7    |          |        |
| Min Limit           | 4        | 4       |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 8.280   | 8.271    | -0.009 |
| 0                   | 726      | 8.314   | 8.307    | -0.007 |
| 0                   | 791      | 8.242   | 8.237    | -0.005 |
| 3                   | 689      | 8.404   | 8.406    | 0.002  |
| 3                   | 688      | 8.380   | 8.378    | -0.002 |
| 3                   | 700      | 8.458   | 8.461    | 0.003  |
| 3                   | 482      | 8.529   | 8.518    | -0.011 |
| 3                   | 1033     | 8.335   | 8.342    | 0.007  |
| 8                   | 442      | 8.374   | 8.369    | -0.005 |
| 8                   | 699      | 8.370   | 8.364    | -0.006 |
| 8                   | 344      | 8.528   | 8.520    | -0.008 |
| 8                   | 355      | 8.336   | 8.356    | 0.020  |
| 8                   | 750      | 8.367   | 8.362    | -0.005 |
| 10                  | 537      | 8.281   | 8.307    | 0.026  |
| 10                  | 396      | 8.467   | 8.452    | -0.015 |
| 10                  | 521      | 8.429   | 8.433    | 0.004  |
| 10                  | 535      | 8.501   | 8.489    | -0.012 |
| 10                  | 526      | 8.492   | 8.516    | 0.024  |
| 15                  | 540      | 8.437   | 8.414    | -0.023 |
| 15                  | 387      | 8.514   | 8.509    | -0.005 |
| 15                  | 787      | 8.535   | 8.522    | -0.013 |
| 15                  | 1042     | 8.544   | 8.522    | -0.022 |
| 15                  | 483      | 8.383   | 8.403    | 0.020  |
| 30                  | 597      | 8.263   | 8.234    | -0.029 |
| 30                  | 853      | 8.531   | 8.527    | -0.004 |
| 30                  | 416      | 8.278   | 8.303    | 0.025  |
| 30                  | 949      | 8.268   | 8.275    | 0.007  |
| 30                  | 221      | 8.417   | 8.461    | 0.044  |
| 35                  | 538      | 8.379   | 8.399    | 0.020  |
| 35                  | 164      | 8.144   | 8.164    | 0.020  |
| 35                  | 1018     | 8.561   | 8.603    | 0.042  |
| 35                  | 462      | 8.243   | 8.232    | -0.011 |
| 35                  | 1032     | 8.532   | 8.488    | -0.044 |
| 50                  | 566      | 8.444   | 8.397    | -0.047 |
| 50                  | 197      | 8.399   | 8.398    | -0.001 |
| 50                  | 793      | 8.318   | 8.377    | 0.059  |
| 50                  | 802      | 8.250   | 8.276    | 0.026  |
| 50                  | 61       | 8.472   | 8.528    | 0.056  |
| 55                  | 795      | 8.226   | 8.247    | 0.021  |
| 55                  | 921      | 8.605   | 8.627    | 0.022  |
| 55                  | 741      | 8.289   | 8.315    | 0.026  |
| 55                  | 809      | 8.625   | 8.671    | 0.046  |
| 55                  | 804      | 8.424   | 8.487    | 0.063  |
| 100                 | 449      | 8.287   | 8.417    | 0.130  |
| 100                 | 541      | 8.217   | 8.343    | 0.126  |
| 100                 | 476      | 8.320   | 8.397    | 0.077  |
| 100                 | 45       | 8.434   | 8.423    | -0.011 |
| 100                 | 642      | 8.515   | 8.666    | 0.151  |
| 105                 | 1036     | 8.408   | 8.569    | 0.161  |
| 105                 | 1038     | 8.473   | 8.434    | -0.039 |
| 105                 | 203      | 8.478   | 8.567    | 0.089  |
| 105                 | 1029     | 8.325   | 8.348    | 0.023  |
| 105                 | 1027     | 8.470   | 8.543    | 0.073  |
| 105                 | Max      | 8.625   | 8.671    | 0.161  |
| 105                 | Average  | 8.398   | 8.418    | 0.020  |
| 105                 | Min      | 8.144   | 8.164    | -0.047 |
| 105                 | Std Dev  | 0.112   | 0.117    | 0.046  |



| 5.54_IDD_ACT_1M_12V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site           |        |        |        |        |        |        |        |        |        |        |        |
| Tester              |        |        |        |        |        |        |        |        |        |        |        |
| Test Number         |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit           | 11.7   | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit           | 4      |        |        |        |        |        |        |        |        |        |        |
| krad                | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                 | 8.237  | 8.342  | 8.356  | 8.307  | 8.403  | 8.234  | 8.164  | 8.276  | 8.247  | 8.343  | 8.348  |
| Average             | 8.272  | 8.421  | 8.394  | 8.439  | 8.474  | 8.360  | 8.377  | 8.395  | 8.469  | 8.449  | 8.492  |
| Max                 | 8.307  | 8.518  | 8.520  | 8.516  | 8.522  | 8.527  | 8.603  | 8.528  | 8.671  | 8.666  | 8.569  |
| UL                  | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 |

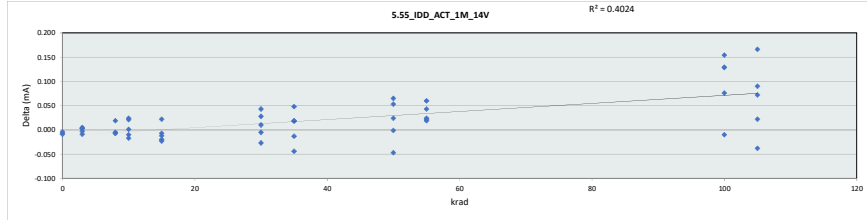


# HDR TID Report

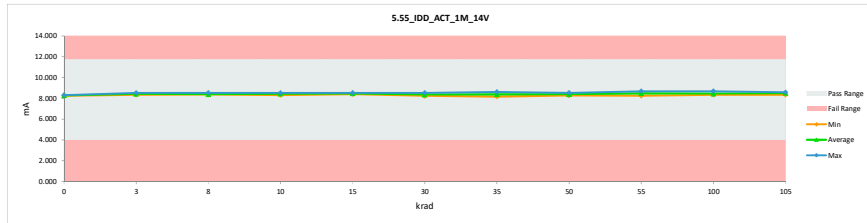
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.55_IDD_ACT_1M_14V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | mA       | mA      |          |        |
| Max Limit           | 11.7     | 11.7    |          |        |
| Min Limit           | 4        | 4       |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 8.285   | 8.278    | -0.007 |
| 0                   | 726      | 8.320   | 8.311    | -0.009 |
| 0                   | 791      | 8.245   | 8.241    | -0.004 |
| 3                   | 689      | 8.407   | 8.410    | 0.003  |
| 3                   | 688      | 8.384   | 8.381    | -0.003 |
| 3                   | 700      | 8.462   | 8.465    | 0.003  |
| 3                   | 482      | 8.532   | 8.523    | -0.009 |
| 3                   | 1033     | 8.342   | 8.347    | 0.005  |
| 8                   | 442      | 8.378   | 8.373    | -0.005 |
| 8                   | 699      | 8.377   | 8.370    | -0.007 |
| 8                   | 344      | 8.531   | 8.525    | -0.006 |
| 8                   | 355      | 8.342   | 8.361    | 0.019  |
| 8                   | 750      | 8.372   | 8.365    | -0.007 |
| 10                  | 537      | 8.297   | 8.311    | 0.024  |
| 10                  | 396      | 8.473   | 8.456    | -0.017 |
| 10                  | 521      | 8.434   | 8.435    | 0.001  |
| 10                  | 535      | 8.506   | 8.496    | -0.010 |
| 10                  | 526      | 8.498   | 8.519    | 0.021  |
| 15                  | 540      | 8.441   | 8.418    | -0.023 |
| 15                  | 387      | 8.520   | 8.513    | -0.007 |
| 15                  | 787      | 8.539   | 8.527    | -0.012 |
| 15                  | 1042     | 8.547   | 8.527    | -0.020 |
| 15                  | 483      | 8.385   | 8.407    | 0.022  |
| 30                  | 597      | 8.266   | 8.239    | -0.027 |
| 30                  | 853      | 8.536   | 8.531    | -0.005 |
| 30                  | 416      | 8.282   | 8.310    | 0.028  |
| 30                  | 949      | 8.271   | 8.281    | 0.010  |
| 30                  | 221      | 8.423   | 8.466    | 0.043  |
| 35                  | 538      | 8.383   | 8.402    | 0.019  |
| 35                  | 164      | 8.151   | 8.169    | 0.018  |
| 35                  | 1018     | 8.564   | 8.612    | 0.048  |
| 35                  | 462      | 8.250   | 8.237    | -0.013 |
| 35                  | 1032     | 8.537   | 8.493    | -0.044 |
| 50                  | 566      | 8.449   | 8.402    | -0.047 |
| 50                  | 197      | 8.405   | 8.404    | -0.001 |
| 50                  | 793      | 8.320   | 8.385    | 0.065  |
| 50                  | 802      | 8.254   | 8.278    | 0.024  |
| 50                  | 61       | 8.476   | 8.529    | 0.053  |
| 55                  | 795      | 8.230   | 8.249    | 0.019  |
| 55                  | 921      | 8.609   | 8.631    | 0.022  |
| 55                  | 741      | 8.294   | 8.318    | 0.024  |
| 55                  | 809      | 8.631   | 8.674    | 0.043  |
| 55                  | 804      | 8.427   | 8.487    | 0.060  |
| 100                 | 449      | 8.292   | 8.421    | 0.129  |
| 100                 | 541      | 8.219   | 8.348    | 0.129  |
| 100                 | 476      | 8.325   | 8.401    | 0.076  |
| 100                 | 45       | 8.438   | 8.428    | -0.010 |
| 100                 | 642      | 8.520   | 8.674    | 0.154  |
| 105                 | 1036     | 8.411   | 8.577    | 0.166  |
| 105                 | 1038     | 8.477   | 8.439    | -0.038 |
| 105                 | 203      | 8.481   | 8.571    | 0.090  |
| 105                 | 1029     | 8.328   | 8.350    | 0.022  |
| 105                 | 1027     | 8.478   | 8.550    | 0.072  |
| 105                 |          | 8.631   | 8.674    | 0.043  |
|                     | Max      | 8.631   | 8.674    | 0.043  |
|                     | Average  | 8.403   | 8.423    | 0.020  |
|                     | Min      | 8.151   | 8.169    | -0.047 |
|                     | Std Dev  | 0.112   | 0.117    | 0.047  |



| 5.55_IDD_ACT_1M_14V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site           |        |        |        |        |        |        |        |        |        |        |        |
| Tester              |        |        |        |        |        |        |        |        |        |        |        |
| Test Number         |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit           | 11.7   | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit           | 4      | mA     |        |        |        |        |        |        |        |        |        |
| krad                | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                 | 8.241  | 8.347  | 8.361  | 8.311  | 8.407  | 8.239  | 8.169  | 8.278  | 8.249  | 8.348  | 8.350  |
| Average             | 8.277  | 8.425  | 8.399  | 8.443  | 8.478  | 8.365  | 8.383  | 8.400  | 8.472  | 8.454  | 8.497  |
| Max                 | 8.311  | 8.523  | 8.525  | 8.519  | 8.527  | 8.531  | 8.612  | 8.529  | 8.674  | 8.674  | 8.577  |
| UL                  | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 | 11.700 |

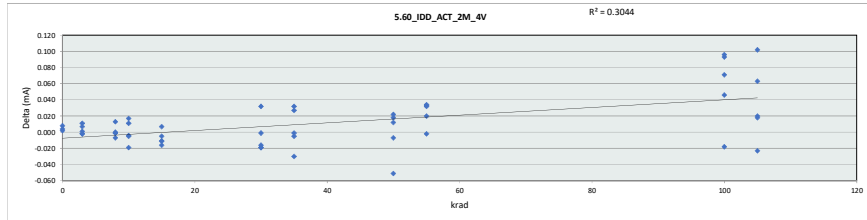


# HDR TID Report

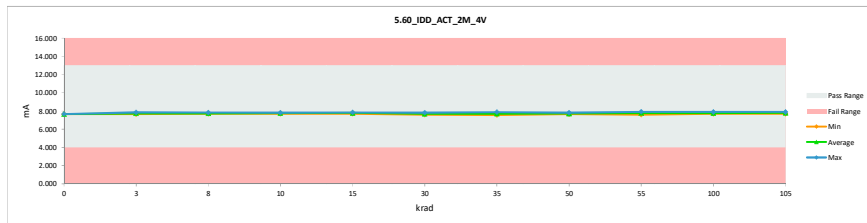
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.60_IDD_ACT_2M_4V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               | mA       | mA      |          |        |
| Max Limit          | 13       | 13      |          |        |
| Min Limit          | 4        | 4       |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 7.637   | 7.645    | 0.008  |
| 0                  | 726      | 7.666   | 7.668    | 0.002  |
| 0                  | 791      | 7.641   | 7.645    | 0.004  |
| 3                  | 689      | 7.719   | 7.730    | 0.011  |
| 3                  | 688      | 7.720   | 7.718    | -0.002 |
| 3                  | 700      | 7.702   | 7.709    | 0.007  |
| 3                  | 482      | 7.850   | 7.848    | -0.002 |
| 3                  | 1033     | 7.657   | 7.658    | 0.001  |
| 8                  | 442      | 7.695   | 7.695    | 0.000  |
| 8                  | 699      | 7.707   | 7.706    | -0.001 |
| 8                  | 344      | 7.837   | 7.830    | -0.007 |
| 8                  | 355      | 7.686   | 7.699    | 0.013  |
| 8                  | 750      | 7.780   | 7.779    | -0.001 |
| 10                 | 537      | 7.690   | 7.701    | 0.011  |
| 10                 | 396      | 7.813   | 7.794    | -0.019 |
| 10                 | 521      | 7.730   | 7.726    | -0.004 |
| 10                 | 535      | 7.814   | 7.809    | -0.005 |
| 10                 | 526      | 7.748   | 7.765    | 0.017  |
| 15                 | 540      | 7.725   | 7.709    | -0.016 |
| 15                 | 387      | 7.844   | 7.839    | -0.005 |
| 15                 | 787      | 7.837   | 7.826    | -0.011 |
| 15                 | 1042     | 7.853   | 7.842    | -0.011 |
| 15                 | 483      | 7.698   | 7.705    | 0.007  |
| 30                 | 597      | 7.620   | 7.601    | -0.019 |
| 30                 | 853      | 7.835   | 7.816    | -0.019 |
| 30                 | 416      | 7.666   | 7.665    | -0.001 |
| 30                 | 949      | 7.656   | 7.640    | -0.016 |
| 30                 | 221      | 7.702   | 7.734    | 0.032  |
| 35                 | 538      | 7.744   | 7.739    | -0.005 |
| 35                 | 164      | 7.541   | 7.568    | 0.027  |
| 35                 | 1018     | 7.845   | 7.877    | 0.032  |
| 35                 | 462      | 7.603   | 7.602    | -0.001 |
| 35                 | 1032     | 7.788   | 7.758    | -0.030 |
| 50                 | 566      | 7.773   | 7.722    | -0.051 |
| 50                 | 197      | 7.748   | 7.741    | -0.007 |
| 50                 | 793      | 7.674   | 7.692    | 0.018  |
| 50                 | 802      | 7.645   | 7.657    | 0.012  |
| 50                 | 61       | 7.787   | 7.809    | 0.022  |
| 55                 | 795      | 7.565   | 7.597    | 0.032  |
| 55                 | 921      | 7.894   | 7.914    | 0.020  |
| 55                 | 741      | 7.634   | 7.632    | -0.002 |
| 55                 | 809      | 7.867   | 7.901    | 0.034  |
| 55                 | 804      | 7.770   | 7.803    | 0.033  |
| 100                | 449      | 7.686   | 7.757    | 0.071  |
| 100                | 541      | 7.587   | 7.680    | 0.093  |
| 100                | 476      | 7.639   | 7.685    | 0.046  |
| 100                | 45       | 7.786   | 7.768    | -0.018 |
| 100                | 642      | 7.797   | 7.893    | 0.096  |
| 105                | 1036     | 7.791   | 7.893    | 0.102  |
| 105                | 1038     | 7.735   | 7.712    | -0.023 |
| 105                | 203      | 7.827   | 7.890    | 0.063  |
| 105                | 1029     | 7.671   | 7.691    | 0.020  |
| 105                | 1027     | 7.778   | 7.796    | 0.018  |
| 105                | Max      | 7.894   | 7.914    | 0.020  |
| 105                | Average  | 7.730   | 7.741    | 0.011  |
| 105                | Min      | 7.541   | 7.568    | -0.051 |
| 105                | Std Dev  | 0.085   | 0.087    | 0.031  |



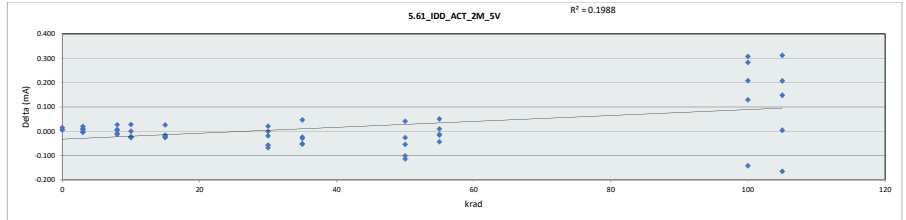
| 5.60_IDD_ACT_2M_4V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site          |        |        |        |        |        |        |        |        |        |        |        |
| Tester             |        |        |        |        |        |        |        |        |        |        |        |
| Test Number        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit          | 13     | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit          | 4      | mA     |        |        |        |        |        |        |        |        |        |
| krad               |        |        | 0      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                 | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                | 7.645  | 7.658  | 7.695  | 7.701  | 7.705  | 7.601  | 7.568  | 7.657  | 7.597  | 7.680  | 7.691  |
| Average            | 7.653  | 7.733  | 7.742  | 7.759  | 7.784  | 7.691  | 7.709  | 7.724  | 7.769  | 7.757  | 7.796  |
| Max                | 7.668  | 7.848  | 7.830  | 7.809  | 7.842  | 7.816  | 7.877  | 7.809  | 7.914  | 7.893  | 7.893  |
| UL                 | 13.000 | 13.000 | 13.000 | 13.000 | 13.000 | 13.000 | 13.000 | 13.000 | 13.000 | 13.000 | 13.000 |



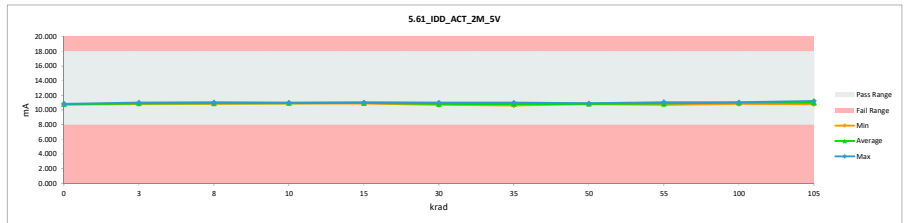
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.61_IDD_ACT_2M_5V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               |          |         |          |        |
| Max Limit          |          |         |          |        |
| Min Limit          |          |         |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 10.777  | 10.792   | 0.015  |
| 0                  | 726      | 10.841  | 10.847   | 0.006  |
| 0                  | 791      | 10.727  | 10.734   | 0.007  |
| 3                  | 689      | 10.854  | 10.874   | 0.020  |
| 3                  | 688      | 10.902  | 10.912   | 0.010  |
| 3                  | 700      | 10.825  | 10.823   | -0.002 |
| 3                  | 482      | 11.023  | 11.019   | -0.004 |
| 3                  | 1033     | 10.822  | 10.829   | 0.007  |
| 8                  | 442      | 10.919  | 10.906   | -0.013 |
| 8                  | 699      | 10.888  | 10.892   | 0.004  |
| 8                  | 344      | 11.048  | 11.039   | -0.009 |
| 8                  | 355      | 10.828  | 10.855   | 0.027  |
| 8                  | 790      | 10.845  | 10.852   | 0.007  |
| 10                 | 537      | 11.022  | 10.992   | -0.029 |
| 10                 | 396      | 11.037  | 11.011   | -0.026 |
| 10                 | 521      | 10.914  | 10.892   | -0.022 |
| 10                 | 535      | 10.998  | 10.974   | -0.024 |
| 10                 | 526      | 10.927  | 10.927   | 0.000  |
| 15                 | 540      | 10.898  | 10.872   | -0.026 |
| 15                 | 387      | 11.069  | 11.045   | -0.024 |
| 15                 | 787      | 11.041  | 11.025   | -0.016 |
| 15                 | 1042     | 10.959  | 10.939   | -0.020 |
| 15                 | 483      | 10.861  | 10.887   | 0.026  |
| 30                 | 597      | 10.760  | 10.703   | -0.057 |
| 30                 | 853      | 11.058  | 10.990   | -0.068 |
| 30                 | 416      | 10.777  | 10.798   | 0.021  |
| 30                 | 949      | 10.783  | 10.782   | -0.001 |
| 30                 | 221      | 10.908  | 10.889   | -0.019 |
| 35                 | 538      | 10.949  | 10.898   | -0.051 |
| 35                 | 164      | 10.564  | 10.611   | 0.047  |
| 35                 | 1018     | 11.021  | 10.992   | -0.029 |
| 35                 | 462      | 10.735  | 10.711   | -0.024 |
| 35                 | 1032     | 10.926  | 10.873   | -0.053 |
| 50                 | 566      | 10.982  | 10.868   | -0.114 |
| 50                 | 197      | 10.934  | 10.908   | -0.026 |
| 50                 | 793      | 10.845  | 10.886   | 0.041  |
| 50                 | 802      | 10.844  | 10.790   | -0.054 |
| 50                 | 61       | 10.972  | 10.871   | -0.101 |
| 55                 | 795      | 10.740  | 10.724   | -0.016 |
| 55                 | 921      | 11.056  | 11.066   | 0.010  |
| 55                 | 741      | 10.769  | 10.726   | -0.043 |
| 55                 | 809      | 10.948  | 10.935   | -0.013 |
| 55                 | 804      | 10.908  | 10.959   | 0.051  |
| 100                | 449      | 10.744  | 11.052   | 0.308  |
| 100                | 541      | 10.734  | 11.017   | 0.283  |
| 100                | 476      | 10.828  | 11.036   | 0.208  |
| 100                | 45       | 10.932  | 11.061   | 0.129  |
| 100                | 642      | 10.978  | 10.836   | -0.142 |
| 105                | 1036     | 10.921  | 11.233   | 0.312  |
| 105                | 1038     | 10.823  | 10.827   | 0.004  |
| 105                | 203      | 11.005  | 11.212   | 0.207  |
| 105                | 1029     | 10.793  | 10.941   | 0.148  |
| 105                | 1027     | 10.977  | 10.812   | -0.165 |
| 105                | Max      | 11.069  | 11.233   | 0.312  |
| 105                | Average  | 10.888  | 10.903   | 0.014  |
| 105                | Min      | 10.564  | 10.611   | -0.165 |
| 105                | Std Dev  | 0.108   | 0.121    | 0.097  |



| 5.61_IDD_ACT_2M_5V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site          |        |        |        |        |        |        |        |        |        |        |        |
| Tester             |        |        |        |        |        |        |        |        |        |        |        |
| Test Number        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit          | 18     | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit          | 8      | mA     |        |        |        |        |        |        |        |        |        |
| krad               | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                 | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  |
| Min                | 10.734 | 10.823 | 10.852 | 10.880 | 10.872 | 10.703 | 10.611 | 10.790 | 10.724 | 10.836 | 10.812 |
| Average            | 10.791 | 10.891 | 10.909 | 10.937 | 10.954 | 10.832 | 10.817 | 10.865 | 10.882 | 11.000 | 11.005 |
| Max                | 10.847 | 11.019 | 11.039 | 11.011 | 11.045 | 10.990 | 10.992 | 10.908 | 11.066 | 11.061 | 11.233 |
| UL                 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 |

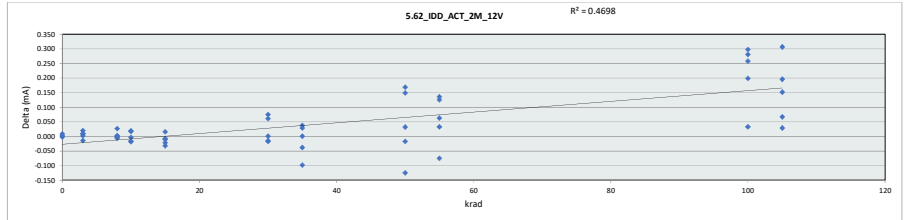


# HDR TID Report

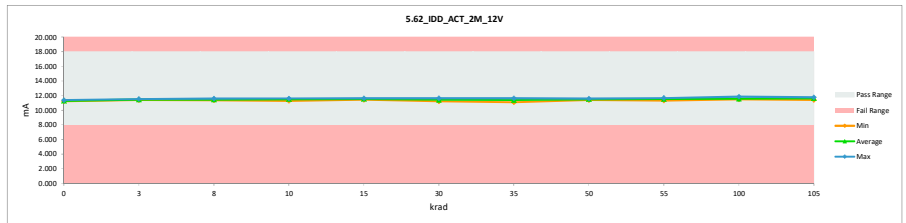
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.62_IDD_ACT_2M_12V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | mA       | mA      |          |        |
| Max Limit           | 18       | 18      |          |        |
| Min Limit           | 8        | 8       |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 11.235  | 11.244   | 0.009  |
| 0                   | 726      | 11.379  | 11.377   | -0.002 |
| 0                   | 791      | 11.233  | 11.236   | 0.003  |
| 3                   | 689      | 11.402  | 11.412   | 0.010  |
| 3                   | 688      | 11.426  | 11.435   | 0.009  |
| 3                   | 700      | 11.524  | 11.544   | 0.020  |
| 3                   | 482      | 11.556  | 11.542   | -0.014 |
| 3                   | 1033     | 11.377  | 11.379   | 0.002  |
| 8                   | 442      | 11.476  | 11.477   | 0.001  |
| 8                   | 699      | 11.404  | 11.398   | -0.006 |
| 8                   | 344      | 11.591  | 11.588   | -0.003 |
| 8                   | 355      | 11.408  | 11.435   | 0.027  |
| 8                   | 790      | 11.363  | 11.366   | 0.003  |
| 10                  | 537      | 11.266  | 11.283   | 0.017  |
| 10                  | 396      | 11.528  | 11.512   | -0.016 |
| 10                  | 521      | 11.521  | 11.518   | -0.003 |
| 10                  | 535      | 11.558  | 11.540   | -0.018 |
| 10                  | 526      | 11.592  | 11.611   | 0.019  |
| 15                  | 540      | 11.446  | 11.424   | -0.022 |
| 15                  | 387      | 11.604  | 11.597   | -0.007 |
| 15                  | 787      | 11.642  | 11.631   | -0.011 |
| 15                  | 1042     | 11.550  | 11.518   | -0.032 |
| 15                  | 483      | 11.473  | 11.489   | 0.016  |
| 30                  | 597      | 11.230  | 11.213   | -0.017 |
| 30                  | 853      | 11.656  | 11.641   | -0.015 |
| 30                  | 416      | 11.309  | 11.384   | 0.075  |
| 30                  | 949      | 11.303  | 11.364   | 0.061  |
| 30                  | 221      | 11.493  | 11.494   | 0.001  |
| 35                  | 538      | 11.367  | 11.368   | 0.001  |
| 35                  | 164      | 11.131  | 11.093   | -0.038 |
| 35                  | 1018     | 11.597  | 11.635   | 0.038  |
| 35                  | 462      | 11.287  | 11.316   | 0.029  |
| 35                  | 1032     | 11.573  | 11.475   | -0.098 |
| 50                  | 566      | 11.509  | 11.384   | -0.125 |
| 50                  | 197      | 11.532  | 11.564   | 0.032  |
| 50                  | 793      | 11.425  | 11.594   | 0.169  |
| 50                  | 802      | 11.260  | 11.409   | 0.149  |
| 50                  | 61       | 11.494  | 11.477   | -0.017 |
| 55                  | 795      | 11.265  | 11.328   | 0.063  |
| 55                  | 921      | 11.640  | 11.673   | 0.033  |
| 55                  | 741      | 11.329  | 11.455   | 0.126  |
| 55                  | 809      | 11.653  | 11.578   | -0.075 |
| 55                  | 804      | 11.419  | 11.555   | 0.136  |
| 100                 | 449      | 11.204  | 11.485   | 0.281  |
| 100                 | 541      | 11.224  | 11.482   | 0.258  |
| 100                 | 476      | 11.369  | 11.568   | 0.199  |
| 100                 | 45       | 11.458  | 11.491   | 0.033  |
| 100                 | 642      | 11.557  | 11.855   | 0.298  |
| 105                 | 1036     | 11.410  | 11.717   | 0.307  |
| 105                 | 1038     | 11.495  | 11.562   | 0.067  |
| 105                 | 203      | 11.582  | 11.734   | 0.152  |
| 105                 | 1029     | 11.361  | 11.390   | 0.029  |
| 105                 | 1027     | 11.567  | 11.763   | 0.196  |
| 105                 | Max      | 11.656  | 11.855   | 0.307  |
|                     | Average  | 11.439  | 11.483   | 0.044  |
|                     | Min      | 11.131  | 11.093   | -0.125 |
|                     | Std Dev  | 0.135   | 0.145    | 0.095  |



| 5.62_IDD_ACT_2M_12V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site           |        |        |        |        |        |        |        |        |        |        |        |
| Tester              |        |        |        |        |        |        |        |        |        |        |        |
| Test Number         |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit           | 18     | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit           | 8      | mA     |        |        |        |        |        |        |        |        |        |
| krad                | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  |
| Min                 | 11.236 | 11.379 | 11.366 | 11.283 | 11.424 | 11.213 | 11.093 | 11.384 | 11.328 | 11.482 | 11.390 |
| Average             | 11.286 | 11.462 | 11.453 | 11.493 | 11.532 | 11.419 | 11.377 | 11.486 | 11.518 | 11.576 | 11.633 |
| Max                 | 11.377 | 11.544 | 11.588 | 11.611 | 11.631 | 11.641 | 11.635 | 11.594 | 11.673 | 11.855 | 11.763 |
| UL                  | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 |

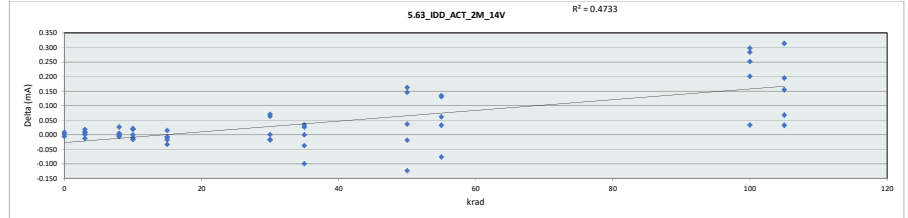


# HDR TID Report

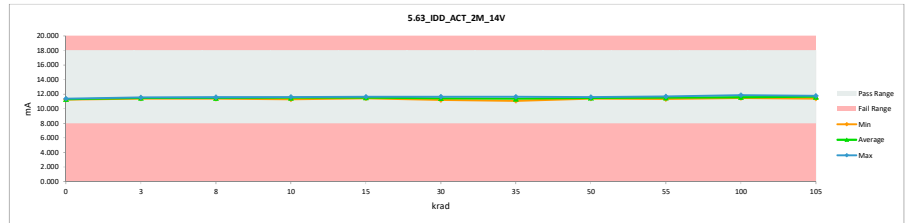
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.63_IDD_ACT_2M_14V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                |          |         |          |        |
| Max Limit           |          |         |          |        |
| Min Limit           |          |         |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 11.238  | 11.247   | 0.009  |
| 0                   | 726      | 11.385  | 11.380   | -0.005 |
| 0                   | 791      | 11.239  | 11.242   | 0.003  |
| 3                   | 689      | 11.407  | 11.417   | 0.010  |
| 3                   | 688      | 11.430  | 11.437   | 0.007  |
| 3                   | 700      | 11.531  | 11.550   | 0.019  |
| 3                   | 482      | 11.558  | 11.546   | -0.012 |
| 3                   | 1033     | 11.381  | 11.382   | 0.001  |
| 8                   | 442      | 11.481  | 11.484   | 0.003  |
| 8                   | 699      | 11.406  | 11.404   | -0.002 |
| 8                   | 344      | 11.597  | 11.591   | -0.006 |
| 8                   | 355      | 11.413  | 11.440   | 0.027  |
| 8                   | 790      | 11.366  | 11.371   | 0.005  |
| 10                  | 537      | 11.271  | 11.290   | 0.019  |
| 10                  | 396      | 11.529  | 11.519   | -0.010 |
| 10                  | 521      | 11.525  | 11.525   | 0.000  |
| 10                  | 535      | 11.561  | 11.545   | -0.016 |
| 10                  | 526      | 11.594  | 11.616   | 0.022  |
| 15                  | 540      | 11.447  | 11.430   | -0.017 |
| 15                  | 387      | 11.606  | 11.599   | -0.007 |
| 15                  | 787      | 11.645  | 11.636   | -0.009 |
| 15                  | 1042     | 11.553  | 11.520   | -0.033 |
| 15                  | 483      | 11.478  | 11.493   | 0.015  |
| 30                  | 597      | 11.233  | 11.216   | -0.017 |
| 30                  | 853      | 11.660  | 11.643   | -0.017 |
| 30                  | 416      | 11.315  | 11.386   | 0.071  |
| 30                  | 949      | 11.305  | 11.369   | 0.064  |
| 30                  | 221      | 11.497  | 11.498   | 0.001  |
| 35                  | 538      | 11.372  | 11.372   | 0.000  |
| 35                  | 164      | 11.133  | 11.096   | -0.037 |
| 35                  | 1018     | 11.602  | 11.637   | 0.035  |
| 35                  | 462      | 11.293  | 11.320   | 0.027  |
| 35                  | 1032     | 11.576  | 11.477   | -0.099 |
| 50                  | 566      | 11.514  | 11.391   | -0.123 |
| 50                  | 197      | 11.533  | 11.570   | 0.037  |
| 50                  | 793      | 11.431  | 11.594   | 0.163  |
| 50                  | 802      | 11.266  | 11.412   | 0.146  |
| 50                  | 61       | 11.499  | 11.481   | -0.018 |
| 55                  | 795      | 11.270  | 11.332   | 0.062  |
| 55                  | 921      | 11.642  | 11.675   | 0.033  |
| 55                  | 741      | 11.328  | 11.459   | 0.131  |
| 55                  | 809      | 11.656  | 11.580   | -0.076 |
| 55                  | 804      | 11.424  | 11.559   | 0.135  |
| 100                 | 449      | 11.206  | 11.490   | 0.284  |
| 100                 | 541      | 11.232  | 11.484   | 0.252  |
| 100                 | 476      | 11.372  | 11.573   | 0.201  |
| 100                 | 45       | 11.462  | 11.496   | 0.034  |
| 100                 | 642      | 11.562  | 11.860   | 0.298  |
| 105                 | 1036     | 11.413  | 11.727   | 0.314  |
| 105                 | 1038     | 11.497  | 11.565   | 0.068  |
| 105                 | 203      | 11.585  | 11.740   | 0.155  |
| 105                 | 1029     | 11.368  | 11.401   | 0.033  |
| 105                 | 1027     | 11.572  | 11.767   | 0.195  |
| 105                 | Max      | 11.660  | 11.860   | 0.314  |
|                     | Average  | 11.443  | 11.487   | 0.045  |
|                     | Min      | 11.133  | 11.096   | -0.123 |
|                     | Std Dev  | 0.135   | 0.145    | 0.095  |



| 5.63_IDD_ACT_2M_14V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site           |        |        |        |        |        |        |        |        |        |        |        |
| Tester              |        |        |        |        |        |        |        |        |        |        |        |
| Test Number         |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit           | 18     | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit           | 8      | mA     |        |        |        |        |        |        |        |        |        |
| krad                | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  | 8.000  |
| Min                 | 11.242 | 11.382 | 11.371 | 11.290 | 11.430 | 11.216 | 11.096 | 11.391 | 11.332 | 11.484 | 11.401 |
| Average             | 11.290 | 11.466 | 11.458 | 11.499 | 11.536 | 11.422 | 11.380 | 11.490 | 11.521 | 11.581 | 11.640 |
| Max                 | 11.380 | 11.550 | 11.591 | 11.616 | 11.636 | 11.643 | 11.637 | 11.594 | 11.675 | 11.860 | 11.767 |
| UL                  | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 | 18.000 |

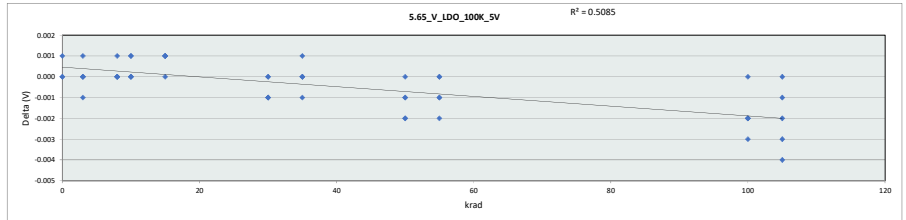


# HDR TID Report

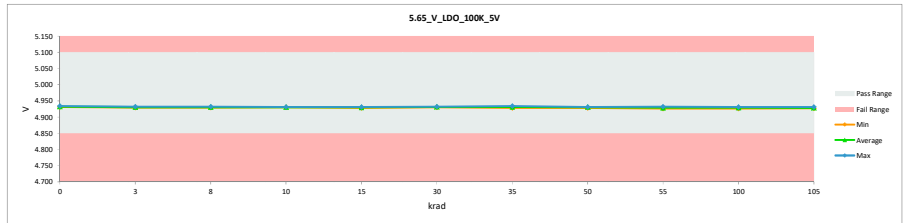
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.65_V_LDO_100K_5V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               | V        | V       |          |        |
| Max Limit          | 5.1      | 5.1     |          |        |
| Min Limit          | 4.85     | 4.85    |          |        |
| krad               | Serial # | PRE HDR | POST HDR | Delta  |
| 0                  | 552      | 4.931   | 4.931    | 0.000  |
| 0                  | 726      | 4.932   | 4.932    | 0.000  |
| 0                  | 791      | 4.933   | 4.934    | 0.001  |
| 3                  | 689      | 4.931   | 4.931    | 0.000  |
| 3                  | 688      | 4.931   | 4.932    | 0.001  |
| 3                  | 700      | 4.930   | 4.930    | 0.000  |
| 3                  | 482      | 4.929   | 4.929    | 0.000  |
| 3                  | 1033     | 4.929   | 4.931    | -0.001 |
| 8                  | 442      | 4.932   | 4.932    | 0.000  |
| 8                  | 699      | 4.931   | 4.931    | 0.000  |
| 8                  | 344      | 4.929   | 4.929    | 0.000  |
| 8                  | 355      | 4.931   | 4.931    | 0.000  |
| 8                  | 750      | 4.930   | 4.931    | 0.001  |
| 10                 | 537      | 4.931   | 4.931    | 0.000  |
| 10                 | 396      | 4.930   | 4.931    | 0.001  |
| 10                 | 521      | 4.931   | 4.931    | 0.000  |
| 10                 | 535      | 4.929   | 4.930    | 0.001  |
| 10                 | 526      | 4.930   | 4.930    | 0.000  |
| 15                 | 540      | 4.929   | 4.930    | 0.001  |
| 15                 | 387      | 4.929   | 4.930    | 0.001  |
| 15                 | 787      | 4.929   | 4.930    | 0.001  |
| 15                 | 1042     | 4.927   | 4.928    | 0.001  |
| 15                 | 483      | 4.931   | 4.931    | 0.000  |
| 30                 | 597      | 4.932   | 4.932    | 0.000  |
| 30                 | 853      | 4.930   | 4.930    | 0.000  |
| 30                 | 416      | 4.933   | 4.932    | -0.001 |
| 30                 | 949      | 4.933   | 4.932    | -0.001 |
| 30                 | 221      | 4.931   | 4.930    | -0.001 |
| 35                 | 538      | 4.930   | 4.930    | 0.000  |
| 35                 | 164      | 4.934   | 4.934    | 0.000  |
| 35                 | 1018     | 4.929   | 4.928    | -0.001 |
| 35                 | 462      | 4.933   | 4.933    | 0.000  |
| 35                 | 1032     | 4.929   | 4.930    | 0.001  |
| 50                 | 566      | 4.930   | 4.930    | 0.000  |
| 50                 | 197      | 4.932   | 4.931    | -0.001 |
| 50                 | 793      | 4.933   | 4.931    | -0.002 |
| 50                 | 802      | 4.933   | 4.931    | -0.002 |
| 50                 | 61       | 4.929   | 4.928    | -0.001 |
| 55                 | 795      | 4.933   | 4.932    | -0.001 |
| 55                 | 921      | 4.927   | 4.927    | 0.000  |
| 55                 | 741      | 4.932   | 4.932    | 0.000  |
| 55                 | 809      | 4.927   | 4.926    | -0.001 |
| 55                 | 804      | 4.930   | 4.928    | -0.002 |
| 100                | 449      | 4.931   | 4.929    | -0.002 |
| 100                | 541      | 4.933   | 4.931    | -0.002 |
| 100                | 476      | 4.932   | 4.930    | -0.002 |
| 100                | 45       | 4.930   | 4.930    | 0.000  |
| 100                | 642      | 4.929   | 4.926    | -0.003 |
| 105                | 1036     | 4.931   | 4.927    | -0.004 |
| 105                | 1038     | 4.929   | 4.929    | 0.000  |
| 105                | 203      | 4.930   | 4.928    | -0.002 |
| 105                | 1029     | 4.932   | 4.931    | -0.001 |
| 105                | 1027     | 4.930   | 4.927    | -0.003 |
| 105                |          | 4.934   | 4.934    | 0.001  |
|                    | Max      | 4.934   | 4.934    | 0.001  |
|                    | Average  | 4.931   | 4.930    | 0.000  |
|                    | Min      | 4.927   | 4.926    | -0.004 |
|                    | Std Dev  | 0.002   | 0.002    | 0.001  |



| 5.65_V_LDO_100K_5V |       |       |       |       |       |       |       |       |       |       |       |  |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Test Site          |       |       |       |       |       |       |       |       |       |       |       |  |
| Tester             |       |       |       |       |       |       |       |       |       |       |       |  |
| Test Number        |       |       |       |       |       |       |       |       |       |       |       |  |
| Max Limit          | 5.1   |       | V     |       |       |       |       |       |       |       |       |  |
| Min Limit          | 4.85  |       | V     |       |       |       |       |       |       |       |       |  |
| krad               | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |  |
| LL                 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 |  |
| Min                | 4.931 | 4.929 | 4.929 | 4.930 | 4.928 | 4.930 | 4.928 | 4.928 | 4.926 | 4.926 | 4.927 |  |
| Average            | 4.932 | 4.931 | 4.931 | 4.931 | 4.930 | 4.931 | 4.931 | 4.930 | 4.929 | 4.929 | 4.928 |  |
| Max                | 4.934 | 4.932 | 4.932 | 4.931 | 4.931 | 4.932 | 4.934 | 4.931 | 4.932 | 4.931 | 4.931 |  |
| UL                 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 |  |

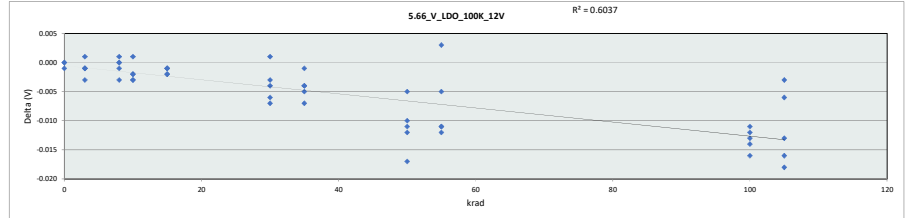


# HDR TID Report

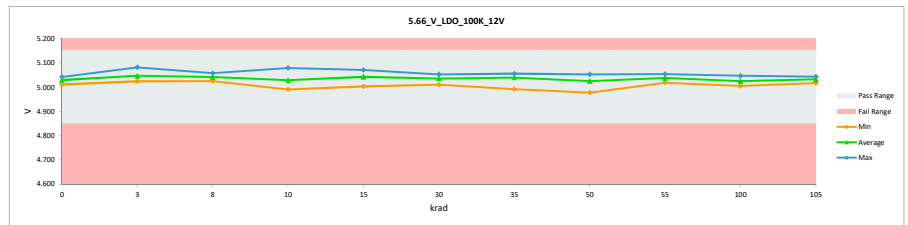
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.66_V_LDO_100K_12V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | V        | V       |          |        |
| Max Limit           | 5.15     | 5.15    |          |        |
| Min Limit           | 4.85     | 4.85    |          |        |
| krad                | Serial # | PRE HDR | POST HDR | Delta  |
| 0                   | 552      | 5.010   | 5.010    | 0.000  |
| 0                   | 726      | 5.042   | 5.041    | -0.001 |
| 0                   | 791      | 5.035   | 5.035    | 0.000  |
| 3                   | 689      | 5.024   | 5.023    | -0.001 |
| 3                   | 688      | 5.037   | 5.038    | 0.001  |
| 3                   | 700      | 5.082   | 5.081    | -0.001 |
| 3                   | 482      | 5.040   | 5.037    | -0.003 |
| 3                   | 1033     | 5.050   | 5.050    | -0.001 |
| 8                   | 442      | 5.046   | 5.043    | -0.003 |
| 8                   | 699      | 5.025   | 5.024    | -0.001 |
| 8                   | 344      | 5.045   | 5.046    | 0.001  |
| 8                   | 355      | 5.057   | 5.057    | 0.000  |
| 8                   | 790      | 5.034   | 5.034    | 0.000  |
| 10                  | 437      | 4.992   | 4.990    | -0.002 |
| 10                  | 396      | 5.015   | 5.016    | 0.001  |
| 10                  | 521      | 5.040   | 5.037    | -0.003 |
| 10                  | 535      | 5.019   | 5.016    | -0.003 |
| 10                  | 526      | 5.080   | 5.078    | -0.002 |
| 15                  | 540      | 5.046   | 5.045    | -0.001 |
| 15                  | 387      | 5.027   | 5.025    | -0.002 |
| 15                  | 787      | 5.067   | 5.066    | -0.001 |
| 15                  | 1042     | 5.004   | 5.002    | -0.002 |
| 15                  | 483      | 5.071   | 5.070    | -0.001 |
| 30                  | 597      | 5.016   | 5.009    | -0.007 |
| 30                  | 853      | 5.045   | 5.042    | -0.003 |
| 30                  | 416      | 5.040   | 5.034    | -0.006 |
| 30                  | 949      | 5.036   | 5.037    | 0.001  |
| 30                  | 221      | 5.056   | 5.052    | -0.004 |
| 35                  | 538      | 4.992   | 4.991    | -0.001 |
| 35                  | 164      | 5.061   | 5.054    | -0.007 |
| 35                  | 1018     | 5.050   | 5.046    | -0.004 |
| 35                  | 462      | 5.051   | 5.047    | -0.004 |
| 35                  | 1032     | 5.060   | 5.055    | -0.005 |
| 50                  | 566      | 5.024   | 5.012    | -0.012 |
| 50                  | 197      | 5.063   | 5.052    | -0.011 |
| 50                  | 793      | 5.057   | 5.052    | -0.005 |
| 50                  | 802      | 4.994   | 4.977    | -0.017 |
| 50                  | 61       | 5.035   | 5.025    | -0.010 |
| 55                  | 795      | 5.041   | 5.030    | -0.011 |
| 55                  | 921      | 5.061   | 5.050    | -0.011 |
| 55                  | 741      | 5.050   | 5.053    | 0.003  |
| 55                  | 809      | 5.038   | 5.033    | -0.005 |
| 55                  | 804      | 5.030   | 5.018    | -0.012 |
| 100                 | 449      | 5.015   | 5.004    | -0.011 |
| 100                 | 541      | 5.027   | 5.014    | -0.013 |
| 100                 | 476      | 5.045   | 5.029    | -0.016 |
| 100                 | 45       | 5.037   | 5.025    | -0.012 |
| 100                 | 642      | 5.060   | 5.046    | -0.014 |
| 105                 | 1036     | 5.022   | 5.016    | -0.006 |
| 105                 | 1038     | 5.038   | 5.022    | -0.016 |
| 105                 | 203      | 5.053   | 5.035    | -0.018 |
| 105                 | 1029     | 5.055   | 5.042    | -0.013 |
| 105                 | 1027     | 5.045   | 5.042    | -0.003 |
| 105                 | Max      | 5.082   | 5.081    | 0.003  |
| 105                 | Average  | 5.039   | 5.034    | -0.005 |
| 105                 | Min      | 4.992   | 4.977    | -0.018 |
| 105                 | Std Dev  | 0.021   | 0.021    | 0.006  |



| 5.66_V_LDO_100K_12V |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site           |       |       |       |       |       |       |       |       |       |       |       |       |
| Tester              |       |       |       |       |       |       |       |       |       |       |       |       |
| Test Number         |       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit           | 5.15  | V     |       |       |       |       |       |       |       |       |       |       |
| Min Limit           | 4.85  | V     |       |       |       |       |       |       |       |       |       |       |
| krad                |       | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                  | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 |
| Min                 | 5.010 | 5.023 | 5.024 | 5.024 | 4.990 | 5.002 | 5.009 | 4.991 | 4.977 | 5.018 | 5.004 | 5.016 |
| Average             | 5.029 | 5.046 | 5.041 | 5.027 | 5.042 | 5.042 | 5.035 | 5.039 | 5.024 | 5.037 | 5.024 | 5.031 |
| Max                 | 5.041 | 5.081 | 5.057 | 5.078 | 5.070 | 5.070 | 5.052 | 5.055 | 5.052 | 5.053 | 5.046 | 5.042 |
| UL                  | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 |

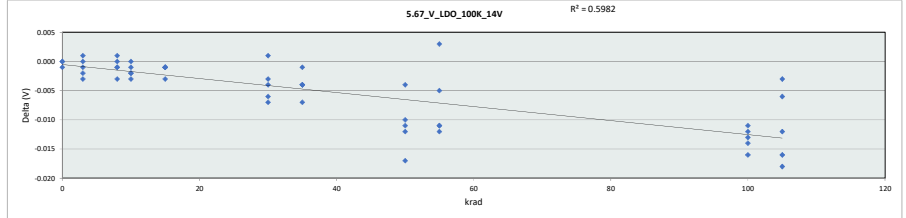


# HDR TID Report

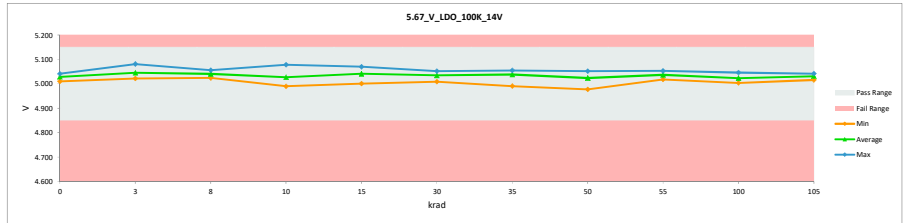
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.67_V_LDO_100K_14V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                |          |         |          |        |
| Max Limit           |          |         |          |        |
| Min Limit           |          |         |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 5.010   | 5.010    | 0.000  |
| 0                   | 726      | 5.042   | 5.041    | -0.001 |
| 0                   | 791      | 5.035   | 5.035    | 0.000  |
| 3                   | 689      | 5.024   | 5.022    | -0.002 |
| 3                   | 688      | 5.037   | 5.038    | 0.001  |
| 3                   | 700      | 5.081   | 5.081    | 0.000  |
| 3                   | 482      | 5.040   | 5.037    | -0.003 |
| 3                   | 1033     | 5.050   | 5.050    | -0.001 |
| 8                   | 442      | 5.046   | 5.043    | -0.003 |
| 8                   | 699      | 5.025   | 5.024    | -0.001 |
| 8                   | 344      | 5.045   | 5.046    | 0.001  |
| 8                   | 355      | 5.057   | 5.056    | -0.001 |
| 8                   | 750      | 5.034   | 5.034    | 0.000  |
| 10                  | 437      | 4.992   | 4.990    | -0.002 |
| 10                  | 396      | 5.015   | 5.015    | 0.000  |
| 10                  | 521      | 5.039   | 5.037    | -0.002 |
| 10                  | 535      | 5.019   | 5.016    | -0.003 |
| 10                  | 526      | 5.079   | 5.078    | -0.001 |
| 15                  | 540      | 5.046   | 5.045    | -0.001 |
| 15                  | 387      | 5.026   | 5.025    | -0.001 |
| 15                  | 787      | 5.067   | 5.066    | -0.001 |
| 15                  | 1042     | 5.004   | 5.001    | -0.003 |
| 15                  | 483      | 5.071   | 5.070    | -0.001 |
| 30                  | 597      | 5.016   | 5.009    | -0.007 |
| 30                  | 853      | 5.045   | 5.041    | -0.004 |
| 30                  | 416      | 5.040   | 5.034    | -0.006 |
| 30                  | 949      | 5.036   | 5.037    | 0.001  |
| 30                  | 221      | 5.055   | 5.052    | -0.003 |
| 35                  | 538      | 4.992   | 4.991    | -0.001 |
| 35                  | 164      | 5.061   | 5.054    | -0.007 |
| 35                  | 1018     | 5.050   | 5.046    | -0.004 |
| 35                  | 462      | 5.051   | 5.047    | -0.004 |
| 35                  | 1032     | 5.059   | 5.055    | -0.004 |
| 50                  | 566      | 5.024   | 5.012    | -0.012 |
| 50                  | 197      | 5.063   | 5.052    | -0.011 |
| 50                  | 793      | 5.056   | 5.052    | -0.004 |
| 50                  | 802      | 4.994   | 4.977    | -0.017 |
| 50                  | 61       | 5.035   | 5.025    | -0.010 |
| 55                  | 795      | 5.041   | 5.030    | -0.011 |
| 55                  | 921      | 5.061   | 5.050    | -0.011 |
| 55                  | 741      | 5.050   | 5.053    | 0.003  |
| 55                  | 809      | 5.038   | 5.033    | -0.005 |
| 55                  | 804      | 5.030   | 5.018    | -0.012 |
| 100                 | 449      | 5.015   | 5.004    | -0.011 |
| 100                 | 541      | 5.026   | 5.013    | -0.013 |
| 100                 | 476      | 5.045   | 5.029    | -0.016 |
| 100                 | 45       | 5.037   | 5.025    | -0.012 |
| 100                 | 642      | 5.060   | 5.046    | -0.014 |
| 105                 | 1036     | 5.022   | 5.016    | -0.006 |
| 105                 | 1038     | 5.038   | 5.022    | -0.016 |
| 105                 | 203      | 5.053   | 5.035    | -0.018 |
| 105                 | 1029     | 5.054   | 5.042    | -0.012 |
| 105                 | 1027     | 5.045   | 5.042    | -0.003 |
| 105                 | Max      | 5.081   | 5.081    | 0.003  |
| 105                 | Average  | 5.039   | 5.034    | -0.005 |
| 105                 | Min      | 4.992   | 4.977    | -0.018 |
| 105                 | Std Dev  | 0.020   | 0.021    | 0.006  |



| 5.67_V_LDO_100K_14V                                          |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |       |       |       |       |       |       |       |       |       |       |       |
|                                                              | 5.15  | V     |       |       |       |       |       |       |       |       |       |
|                                                              | 4.85  | V     |       |       |       |       |       |       |       |       |       |
|                                                              |       |       |       |       |       |       |       |       |       |       |       |
|                                                              |       |       |       |       |       |       |       |       |       |       |       |
| krad                                                         | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                                                           | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 |
| Min                                                          | 5.010 | 5.022 | 5.024 | 4.990 | 5.001 | 5.009 | 4.991 | 4.977 | 5.018 | 5.004 | 5.016 |
| Average                                                      | 5.029 | 5.046 | 5.041 | 5.027 | 5.041 | 5.035 | 5.039 | 5.024 | 5.037 | 5.023 | 5.031 |
| Max                                                          | 5.041 | 5.081 | 5.056 | 5.078 | 5.070 | 5.052 | 5.055 | 5.052 | 5.053 | 5.046 | 5.042 |
| UL                                                           | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 |

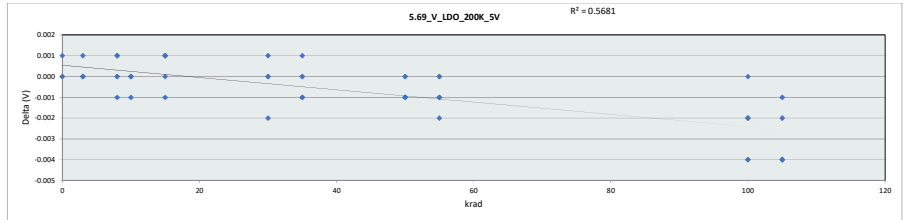


# HDR TID Report

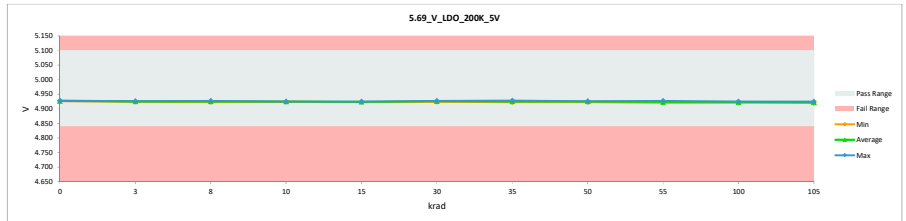
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.69_V_LDO_200K_5V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               |          |         |          |        |
| Max Limit          |          |         |          |        |
| Min Limit          |          |         |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 4.925   | 4.926    | 0.001  |
| 0                  | 726      | 4.926   | 4.926    | 0.000  |
| 0                  | 791      | 4.928   | 4.928    | 0.000  |
| 3                  | 689      | 4.925   | 4.925    | 0.000  |
| 3                  | 688      | 4.926   | 4.926    | 0.000  |
| 3                  | 700      | 4.925   | 4.925    | 0.000  |
| 3                  | 482      | 4.923   | 4.924    | 0.001  |
| 3                  | 1033     | 4.926   | 4.926    | 0.000  |
| 8                  | 442      | 4.926   | 4.927    | 0.001  |
| 8                  | 699      | 4.926   | 4.926    | 0.000  |
| 8                  | 344      | 4.923   | 4.923    | 0.000  |
| 8                  | 355      | 4.926   | 4.925    | -0.001 |
| 8                  | 750      | 4.924   | 4.925    | 0.001  |
| 10                 | 537      | 4.926   | 4.925    | -0.001 |
| 10                 | 396      | 4.925   | 4.925    | 0.000  |
| 10                 | 521      | 4.925   | 4.925    | 0.000  |
| 10                 | 535      | 4.924   | 4.924    | 0.000  |
| 10                 | 526      | 4.924   | 4.924    | 0.000  |
| 15                 | 540      | 4.923   | 4.924    | 0.001  |
| 15                 | 387      | 4.924   | 4.924    | 0.000  |
| 15                 | 787      | 4.923   | 4.924    | 0.001  |
| 15                 | 1042     | 4.921   | 4.922    | 0.001  |
| 15                 | 483      | 4.926   | 4.925    | -0.001 |
| 30                 | 597      | 4.926   | 4.927    | 0.001  |
| 30                 | 853      | 4.924   | 4.924    | 0.000  |
| 30                 | 416      | 4.927   | 4.927    | 0.000  |
| 30                 | 949      | 4.927   | 4.927    | 0.000  |
| 30                 | 221      | 4.926   | 4.924    | -0.002 |
| 35                 | 538      | 4.924   | 4.924    | 0.000  |
| 35                 | 164      | 4.929   | 4.928    | -0.001 |
| 35                 | 1018     | 4.923   | 4.922    | -0.001 |
| 35                 | 462      | 4.928   | 4.928    | 0.000  |
| 35                 | 1032     | 4.924   | 4.925    | 0.001  |
| 50                 | 566      | 4.924   | 4.924    | 0.000  |
| 50                 | 197      | 4.926   | 4.926    | 0.000  |
| 50                 | 793      | 4.927   | 4.926    | -0.001 |
| 50                 | 802      | 4.927   | 4.926    | -0.001 |
| 50                 | 61       | 4.923   | 4.922    | -0.001 |
| 55                 | 795      | 4.927   | 4.927    | 0.000  |
| 55                 | 921      | 4.922   | 4.921    | -0.001 |
| 55                 | 741      | 4.927   | 4.927    | 0.000  |
| 55                 | 809      | 4.921   | 4.920    | -0.001 |
| 55                 | 804      | 4.924   | 4.922    | -0.002 |
| 100                | 449      | 4.925   | 4.923    | -0.002 |
| 100                | 541      | 4.928   | 4.924    | -0.004 |
| 100                | 476      | 4.927   | 4.925    | -0.002 |
| 100                | 45       | 4.924   | 4.924    | 0.000  |
| 100                | 642      | 4.924   | 4.920    | -0.004 |
| 105                | 1036     | 4.925   | 4.921    | -0.004 |
| 105                | 1038     | 4.924   | 4.923    | -0.001 |
| 105                | 203      | 4.925   | 4.921    | -0.004 |
| 105                | 1029     | 4.927   | 4.925    | -0.002 |
| 105                | 1027     | 4.924   | 4.920    | -0.004 |
| 105                | Max      | 4.929   | 4.928    | 0.001  |
| Average            |          | 4.925   | 4.924    | -0.001 |
| Min                |          | 4.921   | 4.920    | -0.004 |
| Std Dev            |          | 0.002   | 0.002    | 0.001  |



| 5.69_V_LDO_200K_5V |       |       |       |       |       |       |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site          |       |       |       |       |       |       |       |       |       |       |       |
| Tester             |       |       |       |       |       |       |       |       |       |       |       |
| Test Number        |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit          |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit          |       |       |       |       |       |       |       |       |       |       |       |
| krad               | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 |
| Min                | 4.926 | 4.924 | 4.923 | 4.924 | 4.922 | 4.924 | 4.922 | 4.922 | 4.920 | 4.920 | 4.920 |
| Average            | 4.927 | 4.925 | 4.925 | 4.925 | 4.924 | 4.926 | 4.925 | 4.925 | 4.923 | 4.923 | 4.922 |
| Max                | 4.928 | 4.926 | 4.927 | 4.925 | 4.925 | 4.927 | 4.928 | 4.926 | 4.927 | 4.925 | 4.925 |
| UL                 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 |

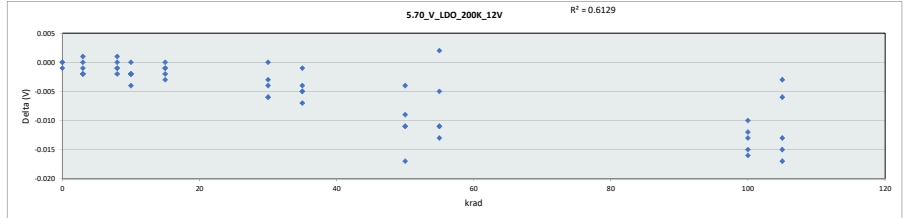


# HDR TID Report

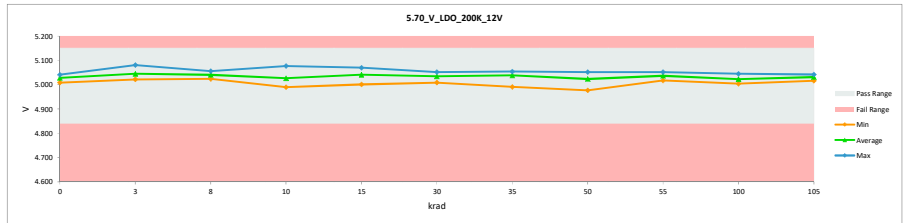
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.70_V_LDO_200K_12V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | V        | V       |          |        |
| Max Limit           | 5.15     | 5.15    |          |        |
| Min Limit           | 4.84     | 4.84    |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 5.010   | 5.009    | -0.001 |
| 0                   | 726      | 5.041   | 5.041    | 0.000  |
| 0                   | 791      | 5.035   | 5.035    | 0.000  |
| 3                   | 689      | 5.024   | 5.022    | -0.002 |
| 3                   | 688      | 5.037   | 5.038    | 0.001  |
| 3                   | 700      | 5.081   | 5.081    | 0.000  |
| 3                   | 482      | 5.039   | 5.037    | -0.002 |
| 3                   | 1033     | 5.050   | 5.050    | -0.001 |
| 8                   | 442      | 5.045   | 5.043    | -0.002 |
| 8                   | 699      | 5.025   | 5.024    | -0.001 |
| 8                   | 344      | 5.045   | 5.046    | 0.001  |
| 8                   | 355      | 5.056   | 5.056    | 0.000  |
| 8                   | 790      | 5.034   | 5.033    | -0.001 |
| 10                  | 437      | 4.992   | 4.990    | -0.002 |
| 10                  | 396      | 5.015   | 5.015    | 0.000  |
| 10                  | 521      | 5.039   | 5.037    | -0.002 |
| 10                  | 535      | 5.019   | 5.015    | -0.004 |
| 10                  | 526      | 5.079   | 5.077    | -0.002 |
| 15                  | 540      | 5.046   | 5.045    | -0.001 |
| 15                  | 387      | 5.026   | 5.024    | -0.002 |
| 15                  | 787      | 5.066   | 5.066    | 0.000  |
| 15                  | 1042     | 5.004   | 5.001    | -0.003 |
| 15                  | 483      | 5.071   | 5.070    | -0.001 |
| 30                  | 597      | 5.015   | 5.009    | -0.006 |
| 30                  | 853      | 5.045   | 5.041    | -0.004 |
| 30                  | 416      | 5.040   | 5.034    | -0.006 |
| 30                  | 949      | 5.036   | 5.036    | 0.000  |
| 30                  | 221      | 5.055   | 5.052    | -0.003 |
| 35                  | 538      | 4.992   | 4.991    | -0.001 |
| 35                  | 164      | 5.061   | 5.054    | -0.007 |
| 35                  | 1018     | 5.050   | 5.045    | -0.005 |
| 35                  | 462      | 5.051   | 5.047    | -0.004 |
| 35                  | 1032     | 5.059   | 5.054    | -0.005 |
| 50                  | 566      | 5.023   | 5.012    | -0.011 |
| 50                  | 197      | 5.063   | 5.052    | -0.011 |
| 50                  | 793      | 5.056   | 5.052    | -0.004 |
| 50                  | 802      | 4.994   | 4.977    | -0.017 |
| 50                  | 61       | 5.034   | 5.025    | -0.009 |
| 55                  | 795      | 5.041   | 5.030    | -0.011 |
| 55                  | 921      | 5.061   | 5.050    | -0.011 |
| 55                  | 741      | 5.050   | 5.052    | 0.002  |
| 55                  | 809      | 5.038   | 5.033    | -0.005 |
| 55                  | 804      | 5.030   | 5.017    | -0.013 |
| 100                 | 449      | 5.014   | 5.004    | -0.010 |
| 100                 | 541      | 5.026   | 5.013    | -0.013 |
| 100                 | 476      | 5.045   | 5.029    | -0.016 |
| 100                 | 45       | 5.037   | 5.025    | -0.012 |
| 100                 | 642      | 5.060   | 5.045    | -0.015 |
| 105                 | 1036     | 5.022   | 5.016    | -0.006 |
| 105                 | 1038     | 5.037   | 5.022    | -0.015 |
| 105                 | 203      | 5.052   | 5.035    | -0.017 |
| 105                 | 1029     | 5.054   | 5.041    | -0.013 |
| 105                 | 1027     | 5.045   | 5.042    | -0.003 |
| 105                 |          | 5.081   | 5.081    | 0.002  |
|                     | Max      | 5.081   | 5.081    | 0.002  |
|                     | Average  | 5.039   | 5.034    | -0.005 |
|                     | Min      | 4.992   | 4.977    | -0.017 |
|                     | Std Dev  | 0.020   | 0.021    | 0.005  |



| 5.70_V_LDO_200K_12V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site           |       |       |       |       |       |       |       |       |       |       |       |
| Tester              |       |       |       |       |       |       |       |       |       |       |       |
| Test Number         |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit           | 5.15  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit           | 4.84  | V     |       |       |       |       |       |       |       |       |       |
| krad                | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                  | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 |
| Min                 | 5.009 | 5.022 | 5.024 | 4.990 | 5.001 | 5.009 | 4.991 | 4.977 | 5.017 | 5.004 | 5.016 |
| Average             | 5.028 | 5.046 | 5.040 | 5.027 | 5.041 | 5.034 | 5.038 | 5.024 | 5.036 | 5.023 | 5.031 |
| Max                 | 5.041 | 5.081 | 5.056 | 5.077 | 5.070 | 5.052 | 5.054 | 5.052 | 5.052 | 5.045 | 5.042 |
| UL                  | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 |

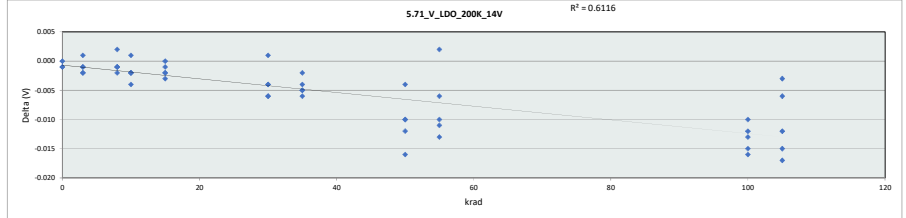


# HDR TID Report

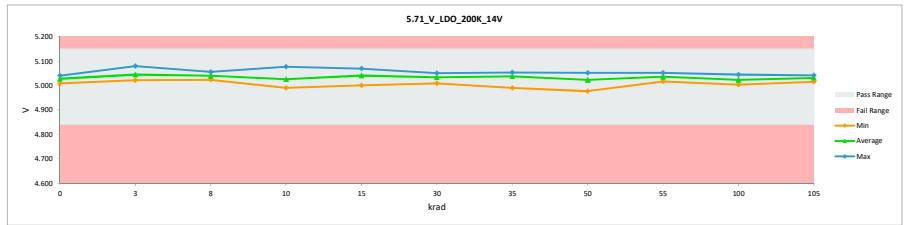
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.71_V_LDO_200K_14V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                |          |         |          |        |
| Max Limit           |          |         |          |        |
| Min Limit           |          |         |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 5.010   | 5.009    | -0.001 |
| 0                   | 726      | 5.041   | 5.041    | 0.000  |
| 0                   | 791      | 5.035   | 5.034    | -0.001 |
| 3                   | 689      | 5.023   | 5.022    | -0.001 |
| 3                   | 688      | 5.037   | 5.038    | 0.001  |
| 3                   | 700      | 5.081   | 5.080    | -0.001 |
| 3                   | 482      | 5.039   | 5.037    | -0.002 |
| 3                   | 1033     | 5.049   | 5.049    | -0.002 |
| 8                   | 442      | 5.045   | 5.043    | -0.002 |
| 8                   | 699      | 5.025   | 5.024    | -0.001 |
| 8                   | 344      | 5.044   | 5.046    | 0.002  |
| 8                   | 355      | 5.057   | 5.056    | -0.001 |
| 8                   | 790      | 5.034   | 5.033    | -0.001 |
| 10                  | 437      | 4.992   | 4.990    | -0.002 |
| 10                  | 396      | 5.014   | 5.015    | 0.001  |
| 10                  | 521      | 5.039   | 5.037    | -0.002 |
| 10                  | 535      | 5.019   | 5.015    | -0.004 |
| 10                  | 526      | 5.079   | 5.077    | -0.002 |
| 15                  | 540      | 5.046   | 5.044    | -0.002 |
| 15                  | 387      | 5.026   | 5.024    | -0.002 |
| 15                  | 787      | 5.066   | 5.066    | 0.000  |
| 15                  | 1042     | 5.004   | 5.001    | -0.003 |
| 15                  | 483      | 5.071   | 5.070    | -0.001 |
| 30                  | 597      | 5.015   | 5.009    | -0.006 |
| 30                  | 853      | 5.045   | 5.041    | -0.004 |
| 30                  | 416      | 5.039   | 5.033    | -0.006 |
| 30                  | 949      | 5.035   | 5.036    | 0.001  |
| 30                  | 221      | 5.055   | 5.051    | -0.004 |
| 35                  | 538      | 4.992   | 4.990    | -0.002 |
| 35                  | 164      | 5.060   | 5.054    | -0.006 |
| 35                  | 1018     | 5.050   | 5.045    | -0.005 |
| 35                  | 462      | 5.051   | 5.047    | -0.004 |
| 35                  | 1032     | 5.059   | 5.054    | -0.005 |
| 50                  | 566      | 5.023   | 5.011    | -0.012 |
| 50                  | 197      | 5.062   | 5.052    | -0.010 |
| 50                  | 793      | 5.056   | 5.052    | -0.004 |
| 50                  | 802      | 4.993   | 4.977    | -0.016 |
| 50                  | 61       | 5.034   | 5.024    | -0.010 |
| 55                  | 795      | 5.041   | 5.030    | -0.011 |
| 55                  | 921      | 5.060   | 5.050    | -0.010 |
| 55                  | 741      | 5.050   | 5.052    | 0.002  |
| 55                  | 809      | 5.038   | 5.032    | -0.006 |
| 55                  | 804      | 5.030   | 5.017    | -0.013 |
| 100                 | 449      | 5.014   | 5.004    | -0.010 |
| 100                 | 541      | 5.026   | 5.013    | -0.013 |
| 100                 | 476      | 5.045   | 5.029    | -0.016 |
| 100                 | 45       | 5.037   | 5.025    | -0.012 |
| 100                 | 642      | 5.060   | 5.045    | -0.015 |
| 105                 | 1036     | 5.022   | 5.016    | -0.006 |
| 105                 | 1038     | 5.037   | 5.022    | -0.015 |
| 105                 | 203      | 5.052   | 5.035    | -0.017 |
| 105                 | 1029     | 5.054   | 5.042    | -0.012 |
| 105                 | 1027     | 5.045   | 5.042    | -0.003 |
| 105                 | Max      | 5.081   | 5.080    | 0.002  |
| 105                 | Average  | 5.039   | 5.034    | -0.005 |
| 105                 | Min      | 4.992   | 4.977    | -0.017 |
| 105                 | Std Dev  | 0.020   | 0.021    | 0.005  |



| 5.71_V_LDO_200K_14V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site           |       |       |       |       |       |       |       |       |       |       |       |
| Tester              |       |       |       |       |       |       |       |       |       |       |       |
| Test Number         |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit           | 5.15  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit           | 4.84  | V     |       |       |       |       |       |       |       |       |       |
| krad                | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                  | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 | 4.840 |
| Min                 | 5.009 | 5.022 | 5.024 | 4.990 | 5.001 | 5.009 | 4.990 | 4.977 | 5.017 | 5.004 | 5.016 |
| Average             | 5.028 | 5.045 | 5.040 | 5.027 | 5.041 | 5.034 | 5.038 | 5.023 | 5.036 | 5.023 | 5.031 |
| Max                 | 5.041 | 5.080 | 5.056 | 5.077 | 5.070 | 5.051 | 5.054 | 5.052 | 5.052 | 5.045 | 5.042 |
| UL                  | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 |

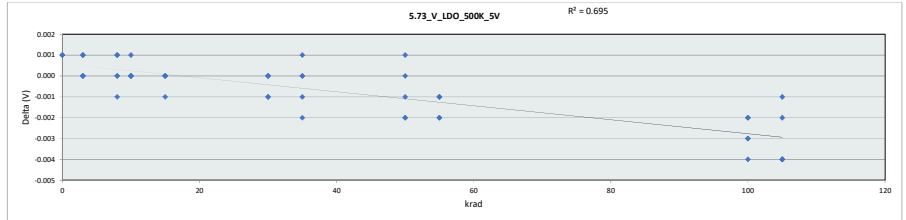


# HDR TID Report

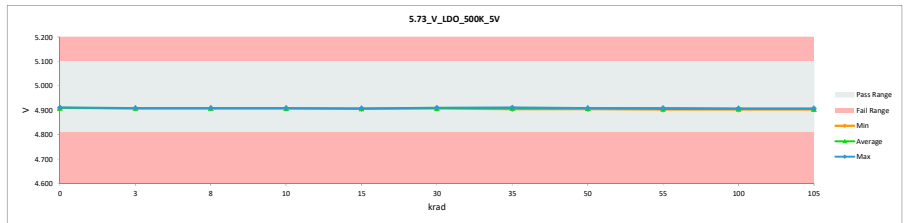
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.73_V_LDO_500K_5V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               |          |         |          |        |
| Max Limit          |          |         |          |        |
| Min Limit          |          |         |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 4.908   | 4.909    | 0.001  |
| 0                  | 726      | 4.909   | 4.910    | 0.001  |
| 0                  | 791      | 4.910   | 4.911    | 0.001  |
| 3                  | 689      | 4.908   | 4.909    | 0.001  |
| 3                  | 688      | 4.909   | 4.909    | 0.000  |
| 3                  | 700      | 4.908   | 4.908    | 0.000  |
| 3                  | 482      | 4.906   | 4.907    | 0.001  |
| 3                  | 1033     | 4.909   | 4.909    | 0.000  |
| 8                  | 442      | 4.909   | 4.909    | 0.000  |
| 8                  | 699      | 4.908   | 4.909    | 0.001  |
| 8                  | 344      | 4.906   | 4.907    | 0.001  |
| 8                  | 355      | 4.909   | 4.908    | -0.001 |
| 8                  | 750      | 4.908   | 4.908    | 0.000  |
| 10                 | 537      | 4.909   | 4.909    | 0.000  |
| 10                 | 396      | 4.908   | 4.908    | 0.000  |
| 10                 | 521      | 4.908   | 4.908    | 0.000  |
| 10                 | 535      | 4.906   | 4.907    | 0.001  |
| 10                 | 526      | 4.907   | 4.907    | 0.000  |
| 15                 | 540      | 4.907   | 4.907    | 0.000  |
| 15                 | 387      | 4.907   | 4.907    | 0.000  |
| 15                 | 787      | 4.907   | 4.907    | 0.000  |
| 15                 | 1042     | 4.905   | 4.905    | 0.000  |
| 15                 | 483      | 4.909   | 4.908    | -0.001 |
| 30                 | 597      | 4.909   | 4.909    | 0.000  |
| 30                 | 853      | 4.907   | 4.907    | 0.000  |
| 30                 | 416      | 4.910   | 4.909    | -0.001 |
| 30                 | 949      | 4.910   | 4.910    | 0.000  |
| 30                 | 221      | 4.909   | 4.908    | -0.001 |
| 35                 | 538      | 4.908   | 4.907    | -0.001 |
| 35                 | 164      | 4.911   | 4.911    | 0.000  |
| 35                 | 1018     | 4.906   | 4.904    | -0.002 |
| 35                 | 462      | 4.911   | 4.911    | 0.000  |
| 35                 | 1032     | 4.907   | 4.908    | 0.001  |
| 50                 | 566      | 4.907   | 4.908    | 0.001  |
| 50                 | 197      | 4.909   | 4.909    | 0.000  |
| 50                 | 793      | 4.910   | 4.908    | -0.002 |
| 50                 | 802      | 4.910   | 4.909    | -0.001 |
| 50                 | 61       | 4.906   | 4.904    | -0.002 |
| 55                 | 795      | 4.910   | 4.909    | -0.001 |
| 55                 | 921      | 4.905   | 4.904    | -0.001 |
| 55                 | 741      | 4.910   | 4.909    | -0.001 |
| 55                 | 809      | 4.904   | 4.902    | -0.002 |
| 55                 | 804      | 4.907   | 4.905    | -0.002 |
| 100                | 449      | 4.908   | 4.905    | -0.003 |
| 100                | 541      | 4.910   | 4.908    | -0.002 |
| 100                | 476      | 4.909   | 4.907    | -0.002 |
| 100                | 45       | 4.908   | 4.905    | -0.003 |
| 100                | 642      | 4.906   | 4.902    | -0.004 |
| 105                | 1036     | 4.908   | 4.904    | -0.004 |
| 105                | 1038     | 4.907   | 4.905    | -0.002 |
| 105                | 203      | 4.908   | 4.904    | -0.004 |
| 105                | 1029     | 4.909   | 4.908    | -0.001 |
| 105                | 1027     | 4.907   | 4.903    | -0.004 |
| 105                |          | 4.911   | 4.911    | 0.001  |
| Max                |          | 4.908   | 4.907    | -0.001 |
| Average            |          | 4.904   | 4.902    | -0.004 |
| Std Dev            |          | 0.002   | 0.002    | 0.001  |



| 5.73_V_LDO_500K_5V |       |       |       |       |       |       |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site          |       |       |       |       |       |       |       |       |       |       |       |
| Tester             |       |       |       |       |       |       |       |       |       |       |       |
| Test Number        |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit          |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit          |       |       |       |       |       |       |       |       |       |       |       |
| krad               | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 |
| Min                | 4.909 | 4.907 | 4.907 | 4.907 | 4.905 | 4.907 | 4.904 | 4.904 | 4.902 | 4.902 | 4.903 |
| Average            | 4.910 | 4.908 | 4.908 | 4.908 | 4.907 | 4.909 | 4.908 | 4.908 | 4.906 | 4.905 | 4.905 |
| Max                | 4.911 | 4.909 | 4.909 | 4.909 | 4.908 | 4.910 | 4.911 | 4.909 | 4.909 | 4.908 | 4.908 |
| UL                 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 |

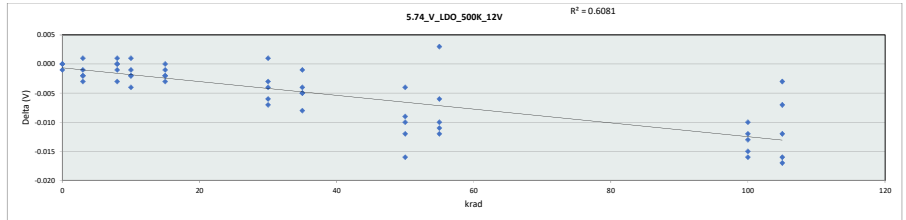


# HDR TID Report

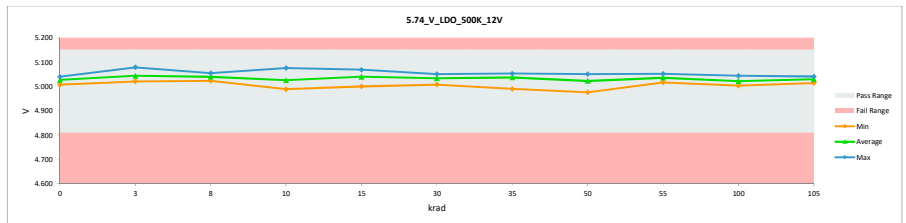
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.74_V_LDO_500K_12V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | V        | V       |          |        |
| Max Limit           | 5.15     | 5.15    |          |        |
| Min Limit           | 4.81     | 4.81    |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 5.009   | 5.008    | -0.001 |
| 0                   | 726      | 5.040   | 5.040    | 0.000  |
| 0                   | 791      | 5.033   | 5.033    | 0.000  |
| 3                   | 689      | 5.023   | 5.021    | -0.002 |
| 3                   | 688      | 5.036   | 5.037    | 0.001  |
| 3                   | 700      | 5.080   | 5.079    | -0.001 |
| 3                   | 482      | 5.038   | 5.035    | -0.003 |
| 3                   | 1033     | 5.050   | 5.048    | -0.002 |
| 8                   | 442      | 5.044   | 5.041    | -0.003 |
| 8                   | 699      | 5.024   | 5.023    | -0.001 |
| 8                   | 344      | 5.044   | 5.045    | 0.001  |
| 8                   | 355      | 5.055   | 5.055    | 0.000  |
| 8                   | 790      | 5.033   | 5.033    | 0.000  |
| 10                  | 537      | 4.990   | 4.989    | -0.001 |
| 10                  | 396      | 5.013   | 5.014    | 0.001  |
| 10                  | 521      | 5.038   | 5.036    | -0.002 |
| 10                  | 535      | 5.018   | 5.014    | -0.004 |
| 10                  | 526      | 5.078   | 5.076    | -0.002 |
| 15                  | 940      | 5.045   | 5.043    | -0.002 |
| 15                  | 387      | 5.025   | 5.023    | -0.002 |
| 15                  | 787      | 5.065   | 5.065    | 0.000  |
| 15                  | 1042     | 5.003   | 5.000    | -0.003 |
| 15                  | 483      | 5.070   | 5.069    | -0.001 |
| 30                  | 597      | 5.015   | 5.008    | -0.007 |
| 30                  | 853      | 5.044   | 5.040    | -0.004 |
| 30                  | 416      | 5.039   | 5.033    | -0.006 |
| 30                  | 949      | 5.034   | 5.035    | 0.001  |
| 30                  | 221      | 5.054   | 5.051    | -0.003 |
| 35                  | 538      | 4.991   | 4.990    | -0.001 |
| 35                  | 164      | 5.060   | 5.052    | -0.008 |
| 35                  | 1018     | 5.049   | 5.044    | -0.005 |
| 35                  | 462      | 5.050   | 5.046    | -0.004 |
| 35                  | 1032     | 5.058   | 5.053    | -0.005 |
| 50                  | 566      | 5.023   | 5.011    | -0.012 |
| 50                  | 197      | 5.061   | 5.051    | -0.010 |
| 50                  | 793      | 5.055   | 5.051    | -0.004 |
| 50                  | 802      | 4.992   | 4.976    | -0.016 |
| 50                  | 61       | 5.033   | 5.024    | -0.009 |
| 55                  | 795      | 5.040   | 5.029    | -0.011 |
| 55                  | 921      | 5.059   | 5.049    | -0.010 |
| 55                  | 741      | 5.049   | 5.052    | 0.003  |
| 55                  | 809      | 5.037   | 5.031    | -0.006 |
| 55                  | 804      | 5.029   | 5.017    | -0.012 |
| 100                 | 449      | 5.013   | 5.003    | -0.010 |
| 100                 | 541      | 5.025   | 5.012    | -0.013 |
| 100                 | 476      | 5.044   | 5.028    | -0.016 |
| 100                 | 45       | 5.036   | 5.024    | -0.012 |
| 100                 | 642      | 5.059   | 5.044    | -0.015 |
| 105                 | 1036     | 5.021   | 5.014    | -0.007 |
| 105                 | 1038     | 5.036   | 5.020    | -0.016 |
| 105                 | 203      | 5.051   | 5.034    | -0.017 |
| 105                 | 1029     | 5.053   | 5.041    | -0.012 |
| 105                 | 1027     | 5.048   | 5.041    | -0.003 |
| 105                 |          | 5.080   | 5.079    | 0.003  |
|                     | Max      | 5.080   | 5.079    | 0.003  |
|                     | Average  | 5.038   | 5.033    | -0.005 |
|                     | Min      | 4.990   | 4.976    | -0.017 |
|                     | Std Dev  | 0.020   | 0.021    | 0.005  |



| 5.74_V_LDO_500K_12V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site           |       |       |       |       |       |       |       |       |       |       |       |
| Tester              |       |       |       |       |       |       |       |       |       |       |       |
| Test Number         |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit           | 5.15  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit           | 4.81  | V     |       |       |       |       |       |       |       |       |       |
| krad                | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                  | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 |
| Min                 | 5.008 | 5.021 | 5.023 | 4.989 | 5.000 | 5.008 | 4.990 | 4.976 | 5.017 | 5.003 | 5.014 |
| Average             | 5.027 | 5.044 | 5.039 | 5.026 | 5.040 | 5.033 | 5.037 | 5.023 | 5.036 | 5.022 | 5.030 |
| Max                 | 5.040 | 5.079 | 5.055 | 5.076 | 5.069 | 5.051 | 5.053 | 5.051 | 5.052 | 5.044 | 5.041 |
| UL                  | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 |

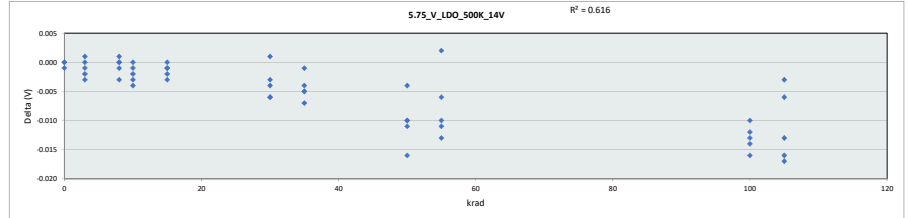


# HDR TID Report

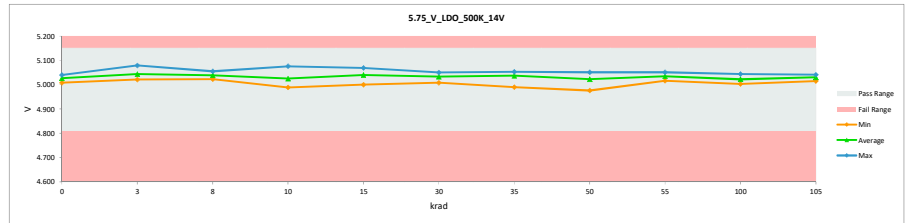
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.75_V_LDO_500K_14V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | V        | V       |          |        |
| Max Limit           | 5.15     | 5.15    |          |        |
| Min Limit           | 4.81     | 4.81    |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 5.009   | 5.008    | -0.001 |
| 0                   | 726      | 5.040   | 5.040    | 0.000  |
| 0                   | 791      | 5.033   | 5.033    | 0.000  |
| 3                   | 689      | 5.022   | 5.021    | -0.001 |
| 3                   | 688      | 5.036   | 5.037    | 0.001  |
| 3                   | 700      | 5.079   | 5.079    | 0.000  |
| 3                   | 482      | 5.038   | 5.035    | -0.003 |
| 3                   | 1033     | 5.050   | 5.048    | -0.002 |
| 8                   | 442      | 5.044   | 5.041    | -0.003 |
| 8                   | 699      | 5.024   | 5.023    | -0.001 |
| 8                   | 344      | 5.043   | 5.044    | 0.001  |
| 8                   | 355      | 5.055   | 5.055    | 0.000  |
| 8                   | 790      | 5.033   | 5.033    | 0.000  |
| 10                  | 537      | 4.990   | 4.989    | -0.001 |
| 10                  | 396      | 5.013   | 5.013    | 0.000  |
| 10                  | 521      | 5.038   | 5.035    | -0.003 |
| 10                  | 535      | 5.018   | 5.014    | -0.004 |
| 10                  | 526      | 5.078   | 5.076    | -0.002 |
| 15                  | 540      | 5.044   | 5.043    | -0.001 |
| 15                  | 387      | 5.025   | 5.023    | -0.002 |
| 15                  | 787      | 5.065   | 5.065    | 0.000  |
| 15                  | 1042     | 5.003   | 5.000    | -0.003 |
| 15                  | 483      | 5.070   | 5.069    | -0.001 |
| 30                  | 597      | 5.014   | 5.008    | -0.006 |
| 30                  | 853      | 5.043   | 5.040    | -0.003 |
| 30                  | 416      | 5.039   | 5.033    | -0.006 |
| 30                  | 949      | 5.034   | 5.035    | 0.001  |
| 30                  | 221      | 5.054   | 5.050    | -0.004 |
| 35                  | 538      | 4.991   | 4.990    | -0.001 |
| 35                  | 164      | 5.059   | 5.052    | -0.007 |
| 35                  | 1018     | 5.049   | 5.044    | -0.005 |
| 35                  | 462      | 5.050   | 5.046    | -0.004 |
| 35                  | 1032     | 5.058   | 5.053    | -0.005 |
| 50                  | 566      | 5.022   | 5.011    | -0.011 |
| 50                  | 197      | 5.061   | 5.051    | -0.010 |
| 50                  | 793      | 5.055   | 5.051    | -0.004 |
| 50                  | 802      | 4.992   | 4.976    | -0.016 |
| 50                  | 61       | 5.033   | 5.023    | -0.010 |
| 55                  | 795      | 5.040   | 5.029    | -0.011 |
| 55                  | 921      | 5.059   | 5.049    | -0.010 |
| 55                  | 741      | 5.049   | 5.051    | 0.002  |
| 55                  | 809      | 5.037   | 5.031    | -0.006 |
| 55                  | 804      | 5.029   | 5.016    | -0.013 |
| 100                 | 449      | 5.013   | 5.003    | -0.010 |
| 100                 | 541      | 5.025   | 5.012    | -0.013 |
| 100                 | 476      | 5.044   | 5.028    | -0.016 |
| 100                 | 45       | 5.036   | 5.024    | -0.012 |
| 100                 | 642      | 5.058   | 5.044    | -0.014 |
| 105                 | 1036     | 5.021   | 5.015    | -0.006 |
| 105                 | 1038     | 5.036   | 5.020    | -0.016 |
| 105                 | 203      | 5.051   | 5.034    | -0.017 |
| 105                 | 1029     | 5.053   | 5.040    | -0.013 |
| 105                 | 1027     | 5.044   | 5.041    | -0.003 |
| 105                 | Max      | 5.079   | 5.079    | 0.002  |
| 105                 | Average  | 5.038   | 5.033    | -0.005 |
| 105                 | Min      | 4.990   | 4.976    | -0.017 |
| 105                 | Std Dev  | 0.020   | 0.021    | 0.005  |



| 5.75_V_LDO_500K_14V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site           |       |       |       |       |       |       |       |       |       |       |       |
| Tester              |       |       |       |       |       |       |       |       |       |       |       |
| Test Number         |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit           | 5.15  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit           | 4.81  | V     |       |       |       |       |       |       |       |       |       |
| krad                | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                  | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 | 4.810 |
| Min                 | 5.008 | 5.021 | 5.023 | 4.989 | 5.000 | 5.008 | 4.990 | 4.976 | 5.016 | 5.003 | 5.015 |
| Average             | 5.027 | 5.044 | 5.039 | 5.025 | 5.040 | 5.033 | 5.037 | 5.022 | 5.035 | 5.022 | 5.030 |
| Max                 | 5.040 | 5.079 | 5.055 | 5.076 | 5.069 | 5.050 | 5.053 | 5.051 | 5.051 | 5.044 | 5.041 |
| UL                  | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 |

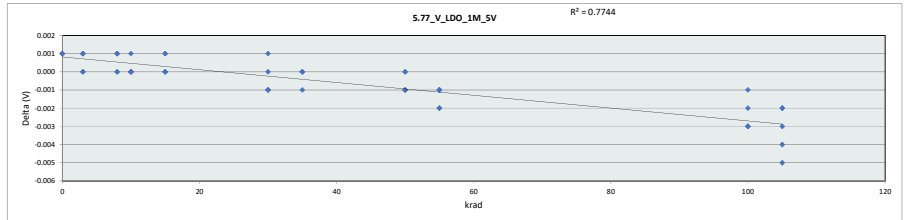


# HDR TID Report

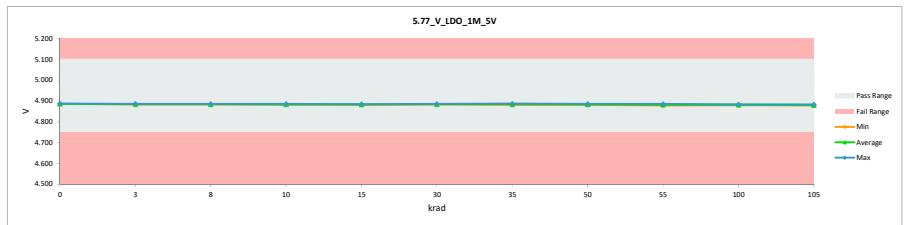
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.77_V_LDO_1M_5V |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             |          |         |          |        |
| Max Limit        |          |         |          |        |
| Min Limit        |          |         |          |        |
| krad             | Serial # | PRE HDR | POST HDR | Delta  |
| 0                | 552      | 4.884   | 4.885    | 0.001  |
| 0                | 726      | 4.885   | 4.886    | 0.001  |
| 0                | 791      | 4.886   | 4.887    | 0.001  |
| 3                | 689      | 4.884   | 4.885    | 0.001  |
| 3                | 688      | 4.885   | 4.886    | 0.001  |
| 3                | 700      | 4.884   | 4.885    | 0.001  |
| 3                | 482      | 4.882   | 4.882    | 0.000  |
| 3                | 1033     | 4.885   | 4.885    | 0.000  |
| 8                | 442      | 4.884   | 4.885    | 0.001  |
| 8                | 699      | 4.884   | 4.885    | 0.001  |
| 8                | 344      | 4.882   | 4.883    | 0.001  |
| 8                | 355      | 4.884   | 4.884    | 0.000  |
| 8                | 750      | 4.884   | 4.884    | 0.000  |
| 10               | 537      | 4.885   | 4.885    | 0.000  |
| 10               | 396      | 4.883   | 4.884    | 0.001  |
| 10               | 521      | 4.883   | 4.883    | 0.000  |
| 10               | 535      | 4.882   | 4.882    | 0.000  |
| 10               | 526      | 4.883   | 4.883    | 0.000  |
| 15               | 540      | 4.882   | 4.883    | 0.001  |
| 15               | 387      | 4.883   | 4.883    | 0.000  |
| 15               | 787      | 4.882   | 4.883    | 0.001  |
| 15               | 1042     | 4.881   | 4.881    | 0.000  |
| 15               | 483      | 4.884   | 4.884    | 0.000  |
| 30               | 597      | 4.885   | 4.885    | 0.000  |
| 30               | 853      | 4.882   | 4.883    | 0.001  |
| 30               | 416      | 4.886   | 4.885    | -0.001 |
| 30               | 949      | 4.886   | 4.885    | -0.001 |
| 30               | 221      | 4.884   | 4.883    | -0.001 |
| 35               | 538      | 4.883   | 4.883    | 0.000  |
| 35               | 164      | 4.887   | 4.887    | 0.000  |
| 35               | 1018     | 4.882   | 4.881    | -0.001 |
| 35               | 462      | 4.887   | 4.887    | 0.000  |
| 35               | 1032     | 4.883   | 4.883    | 0.000  |
| 50               | 566      | 4.883   | 4.883    | 0.000  |
| 50               | 197      | 4.885   | 4.885    | 0.000  |
| 50               | 793      | 4.885   | 4.884    | -0.001 |
| 50               | 802      | 4.885   | 4.884    | -0.001 |
| 50               | 61       | 4.882   | 4.881    | -0.001 |
| 55               | 795      | 4.886   | 4.885    | -0.001 |
| 55               | 921      | 4.881   | 4.880    | -0.001 |
| 55               | 741      | 4.886   | 4.885    | -0.001 |
| 55               | 809      | 4.880   | 4.878    | -0.002 |
| 55               | 804      | 4.883   | 4.881    | -0.002 |
| 100              | 449      | 4.884   | 4.882    | -0.002 |
| 100              | 541      | 4.886   | 4.883    | -0.003 |
| 100              | 476      | 4.885   | 4.882    | -0.003 |
| 100              | 45       | 4.883   | 4.882    | -0.001 |
| 100              | 642      | 4.882   | 4.879    | -0.003 |
| 105              | 1036     | 4.883   | 4.879    | -0.004 |
| 105              | 1038     | 4.883   | 4.881    | -0.002 |
| 105              | 203      | 4.883   | 4.880    | -0.003 |
| 105              | 1029     | 4.885   | 4.883    | -0.002 |
| 105              | 1027     | 4.883   | 4.878    | -0.005 |
| 105              | Max      | 4.887   | 4.887    | 0.001  |
| Average          |          | 4.884   | 4.883    | -0.001 |
| Min              |          | 4.880   | 4.878    | -0.005 |
| Std Dev          |          | 0.002   | 0.002    | 0.001  |



| 5.77_V_LDO_1M_5V |       |       |       |       |       |       |       |       |       |       |       |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site        |       |       |       |       |       |       |       |       |       |       |       |
| Tester           |       |       |       |       |       |       |       |       |       |       |       |
| Test Number      |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit        | 5.1   | V     |       |       |       |       |       |       |       |       |       |
| Min Limit        | 4.75  | V     |       |       |       |       |       |       |       |       |       |
| krad             | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL               | 4.750 | 4.750 | 4.750 | 4.750 | 4.750 | 4.750 | 4.750 | 4.750 | 4.750 | 4.750 | 4.750 |
| Min              | 4.885 | 4.882 | 4.883 | 4.882 | 4.881 | 4.883 | 4.881 | 4.881 | 4.878 | 4.879 | 4.878 |
| Average          | 4.886 | 4.885 | 4.884 | 4.883 | 4.883 | 4.884 | 4.884 | 4.883 | 4.882 | 4.882 | 4.880 |
| Max              | 4.887 | 4.886 | 4.885 | 4.885 | 4.884 | 4.885 | 4.887 | 4.885 | 4.885 | 4.883 | 4.883 |
| UL               | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 |

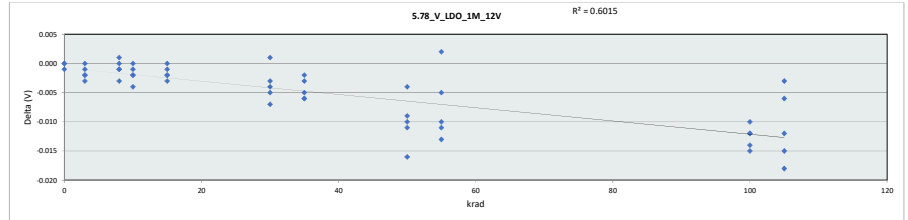


# HDR TID Report

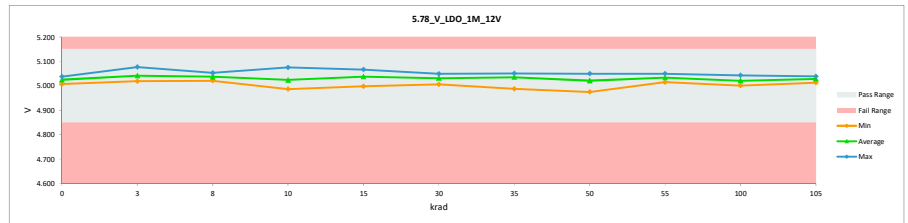
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.78_V_LDO_1M_12V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              | V        | V       |          |        |
| Max Limit         | 5.15     | 5.15    |          |        |
| Min Limit         | 4.85     | 4.85    |          |        |
| krad              | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                 | 552      | 5.007   | 5.007    | 0.000  |
| 0                 | 726      | 5.038   | 5.038    | 0.000  |
| 0                 | 791      | 5.032   | 5.031    | -0.001 |
| 3                 | 689      | 5.021   | 5.019    | -0.002 |
| 3                 | 688      | 5.035   | 5.035    | 0.000  |
| 3                 | 700      | 5.078   | 5.077    | -0.001 |
| 3                 | 482      | 5.036   | 5.033    | -0.003 |
| 3                 | 1033     | 5.049   | 5.046    | -0.002 |
| 8                 | 442      | 5.042   | 5.039    | -0.003 |
| 8                 | 699      | 5.022   | 5.021    | -0.001 |
| 8                 | 344      | 5.041   | 5.042    | 0.001  |
| 8                 | 355      | 5.054   | 5.053    | -0.001 |
| 8                 | 790      | 5.031   | 5.031    | 0.000  |
| 10                | 537      | 4.989   | 4.987    | -0.002 |
| 10                | 396      | 5.012   | 5.012    | 0.000  |
| 10                | 521      | 5.036   | 5.034    | -0.002 |
| 10                | 535      | 5.016   | 5.012    | -0.004 |
| 10                | 526      | 5.076   | 5.075    | -0.001 |
| 15                | 940      | 5.043   | 5.041    | -0.002 |
| 15                | 387      | 5.023   | 5.021    | -0.002 |
| 15                | 787      | 5.063   | 5.063    | 0.000  |
| 15                | 1042     | 5.001   | 4.998    | -0.003 |
| 15                | 483      | 5.068   | 5.067    | -0.001 |
| 30                | 597      | 5.013   | 5.006    | -0.007 |
| 30                | 853      | 5.041   | 5.038    | -0.003 |
| 30                | 416      | 5.037   | 5.032    | -0.005 |
| 30                | 949      | 5.032   | 5.033    | 0.001  |
| 30                | 221      | 5.053   | 5.049    | -0.004 |
| 35                | 538      | 4.990   | 4.988    | -0.002 |
| 35                | 164      | 5.057   | 5.051    | -0.006 |
| 35                | 1018     | 5.047   | 5.042    | -0.005 |
| 35                | 462      | 5.048   | 5.045    | -0.003 |
| 35                | 1032     | 5.057   | 5.051    | -0.006 |
| 50                | 566      | 5.021   | 5.010    | -0.011 |
| 50                | 197      | 5.060   | 5.050    | -0.010 |
| 50                | 793      | 5.053   | 5.049    | -0.004 |
| 50                | 802      | 4.991   | 4.975    | -0.016 |
| 50                | 61       | 5.031   | 5.022    | -0.009 |
| 55                | 795      | 5.038   | 5.027    | -0.011 |
| 55                | 921      | 5.057   | 5.047    | -0.010 |
| 55                | 741      | 5.048   | 5.050    | 0.002  |
| 55                | 809      | 5.035   | 5.030    | -0.005 |
| 55                | 804      | 5.028   | 5.015    | -0.013 |
| 100               | 449      | 5.011   | 5.001    | -0.010 |
| 100               | 541      | 5.023   | 5.011    | -0.012 |
| 100               | 476      | 5.042   | 5.027    | -0.015 |
| 100               | 45       | 5.034   | 5.022    | -0.012 |
| 100               | 642      | 5.057   | 5.043    | -0.014 |
| 105               | 1036     | 5.019   | 5.013    | -0.006 |
| 105               | 1038     | 5.034   | 5.019    | -0.015 |
| 105               | 203      | 5.050   | 5.032    | -0.018 |
| 105               | 1029     | 5.051   | 5.039    | -0.012 |
| 105               | 1027     | 5.042   | 5.039    | -0.003 |
| 105               | Max      | 5.078   | 5.077    | 0.002  |
| 105               | Average  | 5.036   | 5.031    | -0.005 |
| 105               | Min      | 4.989   | 4.975    | -0.018 |
| 105               | Std Dev  | 0.020   | 0.021    | 0.005  |



| 5.78_V_LDO_1M_12V |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site         |       |       |       |       |       |       |       |       |       |       |       |
| Tester            |       |       |       |       |       |       |       |       |       |       |       |
| Test Number       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit         | 5.15  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit         | 4.85  | V     |       |       |       |       |       |       |       |       |       |
| krad              | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 |
| Min               | 5.007 | 5.019 | 5.021 | 4.987 | 4.998 | 5.006 | 4.988 | 4.975 | 5.015 | 5.001 | 5.013 |
| Average           | 5.025 | 5.042 | 5.037 | 5.024 | 5.038 | 5.032 | 5.035 | 5.021 | 5.034 | 5.021 | 5.028 |
| Max               | 5.038 | 5.077 | 5.053 | 5.075 | 5.067 | 5.049 | 5.051 | 5.050 | 5.050 | 5.043 | 5.039 |
| UL                | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 |

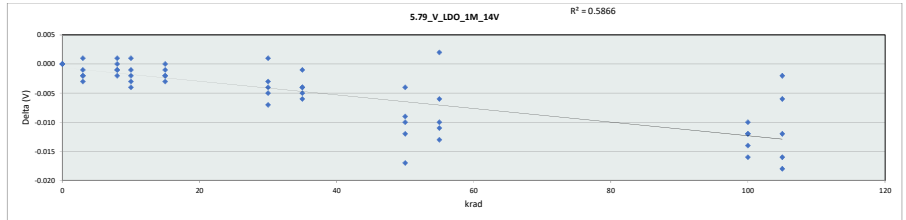


# HDR TID Report

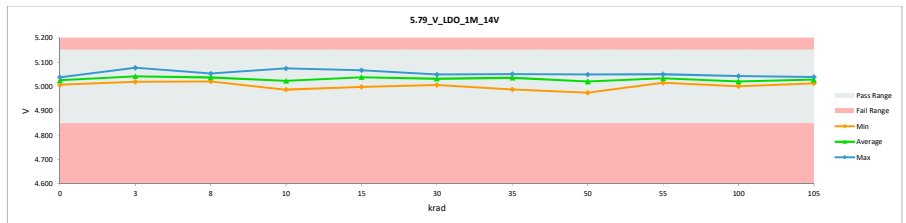
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.79_V_LDO_1M_14V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              | V        | V       |          |        |
| Max Limit         | 5.15     | 5.15    |          |        |
| Min Limit         | 4.85     | 4.85    |          |        |
| krad              | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                 | 552      | 5.007   | 5.007    | 0.000  |
| 0                 | 726      | 5.038   | 5.038    | 0.000  |
| 0                 | 791      | 5.031   | 5.031    | 0.000  |
| 3                 | 689      | 5.021   | 5.019    | -0.002 |
| 3                 | 688      | 5.034   | 5.035    | 0.001  |
| 3                 | 700      | 5.078   | 5.077    | -0.001 |
| 3                 | 482      | 5.036   | 5.033    | -0.003 |
| 3                 | 1033     | 5.046   | 5.046    | -0.002 |
| 8                 | 442      | 5.041   | 5.039    | -0.002 |
| 8                 | 699      | 5.022   | 5.021    | -0.001 |
| 8                 | 344      | 5.041   | 5.042    | 0.001  |
| 8                 | 355      | 5.054   | 5.053    | -0.001 |
| 8                 | 790      | 5.031   | 5.031    | 0.000  |
| 10                | 537      | 4.988   | 4.987    | -0.001 |
| 10                | 396      | 5.011   | 5.012    | 0.001  |
| 10                | 521      | 5.036   | 5.033    | -0.003 |
| 10                | 535      | 5.016   | 5.012    | -0.004 |
| 10                | 526      | 5.076   | 5.074    | -0.002 |
| 15                | 940      | 5.043   | 5.041    | -0.002 |
| 15                | 387      | 5.023   | 5.021    | -0.002 |
| 15                | 787      | 5.063   | 5.063    | 0.000  |
| 15                | 1042     | 5.001   | 4.998    | -0.003 |
| 15                | 483      | 5.068   | 5.067    | -0.001 |
| 30                | 597      | 5.013   | 5.006    | -0.007 |
| 30                | 853      | 5.041   | 5.038    | -0.003 |
| 30                | 416      | 5.037   | 5.032    | -0.005 |
| 30                | 949      | 5.032   | 5.033    | 0.001  |
| 30                | 221      | 5.053   | 5.049    | -0.004 |
| 35                | 538      | 4.989   | 4.988    | -0.001 |
| 35                | 164      | 5.057   | 5.051    | -0.006 |
| 35                | 1018     | 5.046   | 5.042    | -0.004 |
| 35                | 462      | 5.049   | 5.045    | -0.004 |
| 35                | 1032     | 5.056   | 5.051    | -0.005 |
| 50                | 566      | 5.021   | 5.009    | -0.012 |
| 50                | 197      | 5.059   | 5.049    | -0.010 |
| 50                | 793      | 5.053   | 5.049    | -0.004 |
| 50                | 802      | 4.991   | 4.974    | -0.017 |
| 50                | 61       | 5.031   | 5.022    | -0.009 |
| 55                | 795      | 5.038   | 5.027    | -0.011 |
| 55                | 921      | 5.057   | 5.047    | -0.010 |
| 55                | 741      | 5.048   | 5.050    | 0.002  |
| 55                | 809      | 5.035   | 5.029    | -0.006 |
| 55                | 804      | 5.028   | 5.015    | -0.013 |
| 100               | 449      | 5.011   | 5.001    | -0.010 |
| 100               | 541      | 5.023   | 5.011    | -0.012 |
| 100               | 476      | 5.042   | 5.026    | -0.016 |
| 100               | 45       | 5.034   | 5.022    | -0.012 |
| 100               | 642      | 5.057   | 5.043    | -0.014 |
| 105               | 1036     | 5.019   | 5.013    | -0.006 |
| 105               | 1038     | 5.034   | 5.018    | -0.016 |
| 105               | 203      | 5.050   | 5.032    | -0.018 |
| 105               | 1029     | 5.051   | 5.039    | -0.012 |
| 105               | 1027     | 5.041   | 5.039    | -0.002 |
| 105               | Max      | 5.078   | 5.077    | 0.002  |
| 105               | Average  | 5.036   | 5.031    | -0.005 |
| 105               | Min      | 4.988   | 4.974    | -0.018 |
| 105               | Std Dev  | 0.020   | 0.021    | 0.005  |



| 5.79_V_LDO_1M_14V |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site         |       |       |       |       |       |       |       |       |       |       |       |
| Tester            |       |       |       |       |       |       |       |       |       |       |       |
| Test Number       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit         | 5.15  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit         | 4.85  | V     |       |       |       |       |       |       |       |       |       |
| krad              | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 | 4.850 |
| Min               | 5.007 | 5.019 | 5.021 | 4.987 | 4.998 | 5.006 | 4.988 | 4.974 | 5.015 | 5.001 | 5.013 |
| Average           | 5.025 | 5.042 | 5.037 | 5.024 | 5.038 | 5.032 | 5.035 | 5.021 | 5.034 | 5.021 | 5.028 |
| Max               | 5.038 | 5.077 | 5.053 | 5.074 | 5.067 | 5.049 | 5.051 | 5.049 | 5.050 | 5.043 | 5.039 |
| UL                | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 |

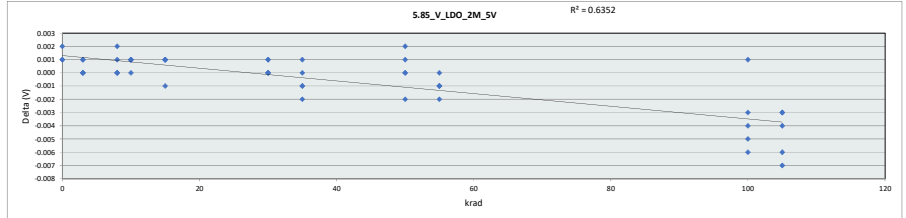


# HDR TID Report

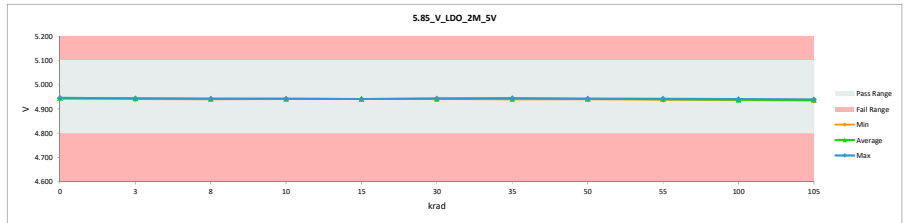
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.85_V_LDO_2M_5V |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             | V        | V       |          |        |
| Max Limit        | 5.1      | 5.1     |          |        |
| Min Limit        | 4.8      | 4.8     |          |        |
| krad             | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                | 552      | 4.942   | 4.943    | 0.001  |
| 0                | 726      | 4.942   | 4.944    | 0.002  |
| 0                | 791      | 4.945   | 4.946    | 0.001  |
| 3                | 689      | 4.944   | 4.944    | 0.000  |
| 3                | 688      | 4.943   | 4.944    | 0.001  |
| 3                | 700      | 4.944   | 4.944    | 0.000  |
| 3                | 482      | 4.940   | 4.941    | 0.001  |
| 3                | 1033     | 4.943   | 4.943    | 0.000  |
| 8                | 442      | 4.941   | 4.942    | 0.001  |
| 8                | 699      | 4.943   | 4.943    | 0.000  |
| 8                | 344      | 4.940   | 4.940    | 0.000  |
| 8                | 355      | 4.942   | 4.942    | 0.000  |
| 8                | 750      | 4.941   | 4.943    | 0.002  |
| 10               | 537      | 4.942   | 4.942    | 0.000  |
| 10               | 396      | 4.941   | 4.942    | 0.001  |
| 10               | 521      | 4.941   | 4.942    | 0.001  |
| 10               | 535      | 4.940   | 4.941    | 0.001  |
| 10               | 526      | 4.941   | 4.942    | 0.001  |
| 15               | 540      | 4.940   | 4.941    | 0.001  |
| 15               | 387      | 4.940   | 4.941    | 0.001  |
| 15               | 787      | 4.940   | 4.941    | 0.001  |
| 15               | 1042     | 4.940   | 4.941    | 0.001  |
| 15               | 483      | 4.942   | 4.941    | -0.001 |
| 30               | 597      | 4.943   | 4.944    | 0.001  |
| 30               | 853      | 4.940   | 4.941    | 0.001  |
| 30               | 416      | 4.943   | 4.943    | 0.000  |
| 30               | 949      | 4.943   | 4.943    | 0.000  |
| 30               | 221      | 4.942   | 4.942    | 0.000  |
| 35               | 538      | 4.941   | 4.941    | 0.000  |
| 35               | 164      | 4.946   | 4.945    | -0.001 |
| 35               | 1018     | 4.941   | 4.940    | -0.001 |
| 35               | 462      | 4.946   | 4.944    | -0.002 |
| 35               | 1032     | 4.942   | 4.943    | 0.001  |
| 50               | 566      | 4.940   | 4.942    | 0.002  |
| 50               | 197      | 4.943   | 4.943    | 0.000  |
| 50               | 793      | 4.943   | 4.941    | -0.002 |
| 50               | 802      | 4.943   | 4.943    | 0.000  |
| 50               | 61       | 4.939   | 4.940    | 0.001  |
| 55               | 795      | 4.944   | 4.943    | -0.001 |
| 55               | 921      | 4.939   | 4.938    | -0.001 |
| 55               | 741      | 4.943   | 4.943    | 0.000  |
| 55               | 809      | 4.940   | 4.939    | -0.001 |
| 55               | 804      | 4.941   | 4.939    | -0.002 |
| 100              | 449      | 4.943   | 4.937    | -0.006 |
| 100              | 541      | 4.944   | 4.939    | -0.005 |
| 100              | 476      | 4.942   | 4.938    | -0.004 |
| 100              | 45       | 4.941   | 4.938    | -0.003 |
| 100              | 642      | 4.940   | 4.941    | 0.001  |
| 105              | 1036     | 4.942   | 4.935    | -0.007 |
| 105              | 1038     | 4.943   | 4.940    | -0.003 |
| 105              | 203      | 4.941   | 4.935    | -0.006 |
| 105              | 1029     | 4.943   | 4.939    | -0.004 |
| 105              | 1027     | 4.941   | 4.938    | -0.003 |
| 105              |          | 4.946   | 4.946    | 0.002  |
|                  | Max      | 4.946   | 4.946    | 0.002  |
|                  | Average  | 4.942   | 4.941    | -0.001 |
|                  | Min      | 4.939   | 4.935    | -0.007 |
|                  | Std Dev  | 0.002   | 0.002    | 0.002  |



| 5.85_V_LDO_2M_5V |       |       |       |       |       |       |       |       |       |       |       |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site        |       |       |       |       |       |       |       |       |       |       |       |
| Tester           |       |       |       |       |       |       |       |       |       |       |       |
| Test Number      |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit        | 5.1   | V     |       |       |       |       |       |       |       |       |       |
| Min Limit        | 4.8   | V     |       |       |       |       |       |       |       |       |       |
| krad             | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL               | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 |
| Min              | 4.943 | 4.941 | 4.940 | 4.941 | 4.941 | 4.941 | 4.940 | 4.940 | 4.938 | 4.937 | 4.935 |
| Average          | 4.944 | 4.943 | 4.942 | 4.942 | 4.941 | 4.943 | 4.943 | 4.942 | 4.940 | 4.939 | 4.937 |
| Max              | 4.946 | 4.944 | 4.943 | 4.942 | 4.941 | 4.944 | 4.945 | 4.943 | 4.943 | 4.941 | 4.940 |
| UL               | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 | 5.100 |

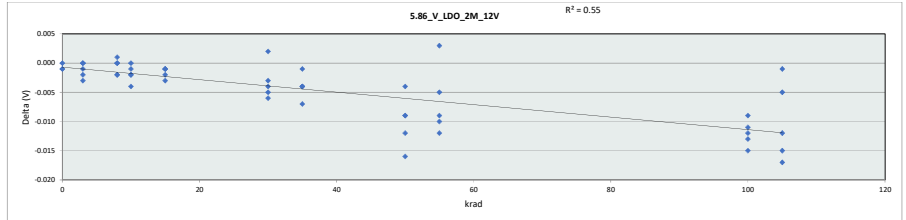


# HDR TID Report

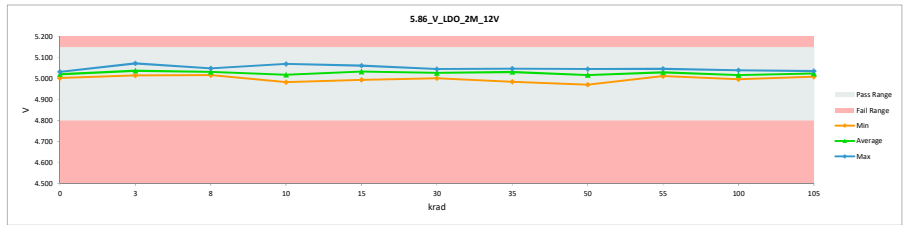
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.86_V_LDO_2M_12V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              | V        | V       |          |        |
| Max Limit         | 5.15     | 5.15    |          |        |
| Min Limit         | 4.8      | 4.8     |          |        |
| krad              | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                 | 552      | 5.003   | 5.003    | 0.000  |
| 0                 | 726      | 5.034   | 5.033    | -0.001 |
| 0                 | 791      | 5.027   | 5.026    | -0.001 |
| 3                 | 689      | 5.016   | 5.015    | -0.001 |
| 3                 | 688      | 5.031   | 5.031    | 0.000  |
| 3                 | 700      | 5.073   | 5.073    | 0.000  |
| 3                 | 482      | 5.031   | 5.028    | -0.003 |
| 3                 | 1033     | 5.044   | 5.042    | -0.002 |
| 8                 | 442      | 5.037   | 5.035    | -0.002 |
| 8                 | 699      | 5.019   | 5.017    | -0.002 |
| 8                 | 344      | 5.036   | 5.037    | 0.001  |
| 8                 | 355      | 5.049   | 5.049    | 0.000  |
| 8                 | 790      | 5.027   | 5.027    | 0.000  |
| 10                | 537      | 4.984   | 4.983    | -0.001 |
| 10                | 396      | 5.007   | 5.007    | 0.000  |
| 10                | 521      | 5.031   | 5.029    | -0.002 |
| 10                | 535      | 5.011   | 5.007    | -0.004 |
| 10                | 526      | 5.072   | 5.070    | -0.002 |
| 15                | 540      | 5.038   | 5.037    | -0.001 |
| 15                | 387      | 5.018   | 5.016    | -0.002 |
| 15                | 787      | 5.059   | 5.058    | -0.001 |
| 15                | 1042     | 4.997   | 4.994    | -0.003 |
| 15                | 483      | 5.063   | 5.062    | -0.001 |
| 30                | 597      | 5.008   | 5.002    | -0.006 |
| 30                | 853      | 5.037   | 5.033    | -0.004 |
| 30                | 416      | 5.034   | 5.029    | -0.005 |
| 30                | 949      | 5.027   | 5.029    | 0.002  |
| 30                | 221      | 5.049   | 5.046    | -0.003 |
| 35                | 538      | 4.986   | 4.985    | -0.001 |
| 35                | 164      | 5.053   | 5.046    | -0.007 |
| 35                | 1018     | 5.041   | 5.037    | -0.004 |
| 35                | 462      | 5.045   | 5.041    | -0.004 |
| 35                | 1032     | 5.052   | 5.048    | -0.004 |
| 50                | 566      | 5.018   | 5.006    | -0.012 |
| 50                | 197      | 5.055   | 5.046    | -0.009 |
| 50                | 793      | 5.049   | 5.045    | -0.004 |
| 50                | 802      | 4.987   | 4.971    | -0.016 |
| 50                | 61       | 5.027   | 5.018    | -0.009 |
| 55                | 795      | 5.033   | 5.023    | -0.010 |
| 55                | 921      | 5.053   | 5.044    | -0.009 |
| 55                | 741      | 5.044   | 5.047    | 0.003  |
| 55                | 809      | 5.030   | 5.025    | -0.005 |
| 55                | 804      | 5.024   | 5.012    | -0.012 |
| 100               | 449      | 5.006   | 4.997    | -0.009 |
| 100               | 541      | 5.019   | 5.007    | -0.012 |
| 100               | 476      | 5.038   | 5.023    | -0.015 |
| 100               | 45       | 5.030   | 5.019    | -0.011 |
| 100               | 642      | 5.053   | 5.040    | -0.013 |
| 105               | 1036     | 5.014   | 5.009    | -0.005 |
| 105               | 1038     | 5.029   | 5.014    | -0.015 |
| 105               | 203      | 5.046   | 5.029    | -0.017 |
| 105               | 1029     | 5.047   | 5.035    | -0.012 |
| 105               | 1027     | 5.077   | 5.036    | -0.041 |
| 105               |          | 5.073   | 5.073    | 0.003  |
|                   | Max      | 5.073   | 5.073    | 0.003  |
|                   | Average  | 5.032   | 5.027    | -0.005 |
|                   | Min      | 4.984   | 4.971    | -0.017 |
|                   | Std Dev  | 0.020   | 0.021    | 0.005  |



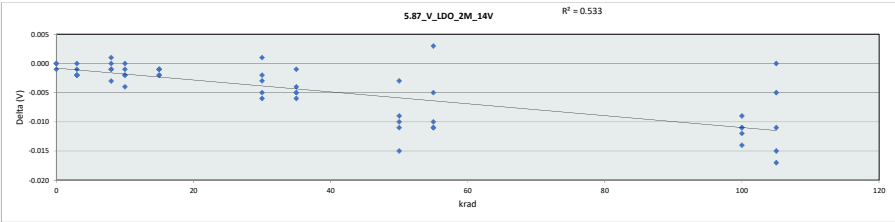
| 5.86_V_LDO_2M_12V |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site         |       |       |       |       |       |       |       |       |       |       |       |
| Tester            |       |       |       |       |       |       |       |       |       |       |       |
| Test Number       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit         | 5.15  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit         | 4.8   | V     |       |       |       |       |       |       |       |       |       |
| krad              | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 |
| Min               | 5.003 | 5.015 | 5.017 | 4.983 | 4.994 | 5.002 | 4.985 | 4.971 | 5.012 | 4.997 | 5.009 |
| Average           | 5.021 | 5.038 | 5.033 | 5.019 | 5.033 | 5.028 | 5.031 | 5.017 | 5.030 | 5.017 | 5.025 |
| Max               | 5.033 | 5.073 | 5.049 | 5.070 | 5.062 | 5.046 | 5.048 | 5.046 | 5.047 | 5.040 | 5.036 |
| UL                | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 |



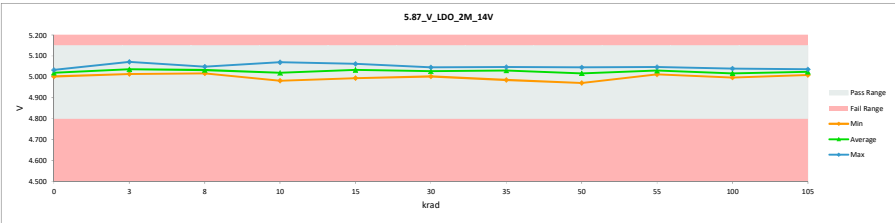
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.87_V_LDO_2M_14V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              | V        | V       |          |        |
| Max Limit         | 5.15     | 5.15    |          |        |
| Min Limit         | 4.8      | 4.8     |          |        |
| krad              | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                 | 552      | 5.003   | 5.002    | -0.001 |
| 0                 | 726      | 5.033   | 5.033    | 0.000  |
| 0                 | 791      | 5.026   | 5.026    | 0.000  |
| 3                 | 689      | 5.016   | 5.014    | -0.002 |
| 3                 | 688      | 5.030   | 5.030    | 0.000  |
| 3                 | 700      | 5.073   | 5.072    | -0.001 |
| 3                 | 482      | 5.030   | 5.028    | -0.002 |
| 3                 | 1033     | 5.041   | 5.041    | -0.002 |
| 8                 | 442      | 5.037   | 5.034    | -0.003 |
| 8                 | 699      | 5.018   | 5.017    | -0.001 |
| 8                 | 344      | 5.036   | 5.037    | 0.001  |
| 8                 | 355      | 5.049   | 5.049    | 0.000  |
| 8                 | 790      | 5.027   | 5.026    | -0.001 |
| 10                | 537      | 4.984   | 4.982    | -0.002 |
| 10                | 396      | 5.007   | 5.007    | 0.000  |
| 10                | 521      | 5.031   | 5.029    | -0.002 |
| 10                | 535      | 5.011   | 5.007    | -0.004 |
| 10                | 526      | 5.071   | 5.070    | -0.001 |
| 15                | 540      | 5.038   | 5.037    | -0.001 |
| 15                | 387      | 5.018   | 5.016    | -0.002 |
| 15                | 787      | 5.059   | 5.058    | -0.001 |
| 15                | 1042     | 4.996   | 4.994    | -0.002 |
| 15                | 483      | 5.063   | 5.062    | -0.001 |
| 30                | 597      | 5.008   | 5.002    | -0.006 |
| 30                | 853      | 5.036   | 5.033    | -0.003 |
| 30                | 416      | 5.033   | 5.028    | -0.005 |
| 30                | 949      | 5.027   | 5.028    | 0.001  |
| 30                | 221      | 5.048   | 5.046    | -0.002 |
| 35                | 538      | 4.986   | 4.985    | -0.001 |
| 35                | 164      | 5.052   | 5.046    | -0.006 |
| 35                | 1018     | 5.041   | 5.036    | -0.005 |
| 35                | 462      | 5.045   | 5.041    | -0.004 |
| 35                | 1032     | 5.052   | 5.047    | -0.005 |
| 50                | 566      | 5.017   | 5.006    | -0.011 |
| 50                | 197      | 5.055   | 5.045    | -0.010 |
| 50                | 793      | 5.048   | 5.045    | -0.003 |
| 50                | 802      | 4.986   | 4.971    | -0.015 |
| 50                | 61       | 5.027   | 5.018    | -0.009 |
| 55                | 795      | 5.033   | 5.022    | -0.011 |
| 55                | 921      | 5.053   | 5.043    | -0.010 |
| 55                | 741      | 5.044   | 5.047    | 0.003  |
| 55                | 809      | 5.030   | 5.025    | -0.005 |
| 55                | 804      | 5.023   | 5.012    | -0.011 |
| 100               | 449      | 5.006   | 4.997    | -0.009 |
| 100               | 541      | 5.018   | 5.007    | -0.011 |
| 100               | 476      | 5.037   | 5.023    | -0.014 |
| 100               | 45       | 5.030   | 5.019    | -0.011 |
| 100               | 642      | 5.052   | 5.040    | -0.012 |
| 105               | 1036     | 5.014   | 5.009    | -0.005 |
| 105               | 1038     | 5.029   | 5.014    | -0.015 |
| 105               | 203      | 5.046   | 5.029    | -0.017 |
| 105               | 1029     | 5.046   | 5.035    | -0.011 |
| 105               | 1027     | 5.036   | 5.036    | 0.000  |
| 105               | Max      | 5.073   | 5.072    | 0.003  |
| 105               | Average  | 5.031   | 5.027    | -0.005 |
| 105               | Min      | 4.984   | 4.971    | -0.017 |
| 105               | Std Dev  | 0.020   | 0.021    | 0.005  |



| 5.87_V_LDO_2M_14V |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site         |       |       |       |       |       |       |       |       |       |       |       |
| Tester            |       |       |       |       |       |       |       |       |       |       |       |
| Test Number       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit         | 5.15  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit         | 4.8   | V     |       |       |       |       |       |       |       |       |       |
| krad              | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 | 4.800 |
| Min               | 5.002 | 5.014 | 5.017 | 4.982 | 4.994 | 5.002 | 4.985 | 4.971 | 5.012 | 4.997 | 5.009 |
| Average           | 5.020 | 5.037 | 5.033 | 5.019 | 5.033 | 5.027 | 5.031 | 5.017 | 5.030 | 5.017 | 5.025 |
| Max               | 5.033 | 5.072 | 5.049 | 5.070 | 5.062 | 5.046 | 5.047 | 5.045 | 5.047 | 5.040 | 5.036 |
| UL                | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 | 5.150 |

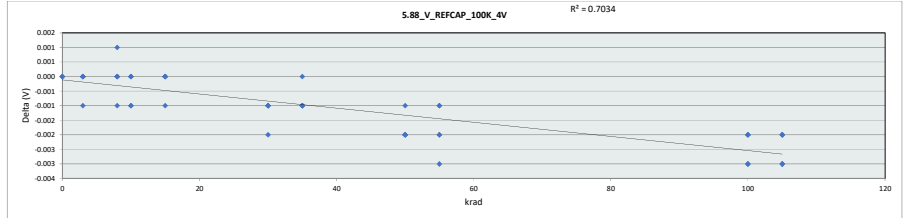


# HDR TID Report

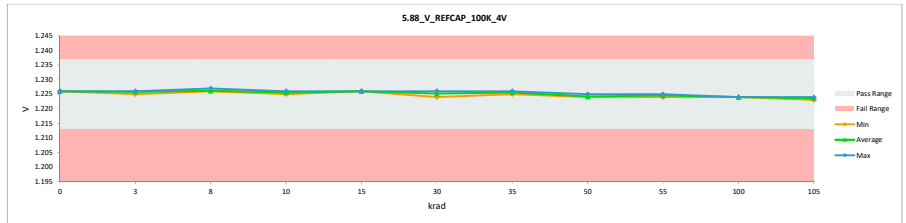
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.88_V_REFCAP_100K_4V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 1.226   | 1.226    | 0.000  |
| 0                     | 726      | 1.226   | 1.226    | 0.000  |
| 0                     | 791      | 1.226   | 1.226    | 0.000  |
| 3                     | 689      | 1.226   | 1.226    | 0.000  |
| 3                     | 688      | 1.226   | 1.226    | 0.000  |
| 3                     | 700      | 1.226   | 1.226    | 0.000  |
| 3                     | 482      | 1.226   | 1.225    | -0.001 |
| 3                     | 1033     | 1.226   | 1.226    | 0.000  |
| 8                     | 442      | 1.227   | 1.226    | -0.001 |
| 8                     | 699      | 1.226   | 1.226    | 0.000  |
| 8                     | 344      | 1.226   | 1.226    | 0.000  |
| 8                     | 355      | 1.226   | 1.227    | 0.001  |
| 8                     | 750      | 1.226   | 1.226    | 0.000  |
| 10                    | 537      | 1.226   | 1.226    | 0.000  |
| 10                    | 396      | 1.226   | 1.226    | 0.000  |
| 10                    | 521      | 1.226   | 1.225    | -0.001 |
| 10                    | 535      | 1.226   | 1.225    | -0.001 |
| 10                    | 526      | 1.226   | 1.226    | 0.000  |
| 15                    | 540      | 1.227   | 1.226    | -0.001 |
| 15                    | 387      | 1.226   | 1.226    | 0.000  |
| 15                    | 787      | 1.226   | 1.226    | 0.000  |
| 15                    | 1042     | 1.226   | 1.226    | 0.000  |
| 15                    | 483      | 1.226   | 1.226    | 0.000  |
| 30                    | 597      | 1.227   | 1.226    | -0.001 |
| 30                    | 853      | 1.226   | 1.225    | -0.001 |
| 30                    | 416      | 1.226   | 1.225    | -0.001 |
| 30                    | 949      | 1.227   | 1.226    | -0.001 |
| 30                    | 221      | 1.226   | 1.224    | -0.002 |
| 35                    | 538      | 1.226   | 1.225    | -0.001 |
| 35                    | 164      | 1.227   | 1.226    | -0.001 |
| 35                    | 1018     | 1.226   | 1.225    | -0.001 |
| 35                    | 462      | 1.226   | 1.226    | 0.000  |
| 35                    | 1032     | 1.227   | 1.226    | -0.001 |
| 50                    | 566      | 1.226   | 1.224    | -0.002 |
| 50                    | 197      | 1.226   | 1.224    | -0.002 |
| 50                    | 793      | 1.226   | 1.225    | -0.001 |
| 50                    | 802      | 1.226   | 1.224    | -0.002 |
| 50                    | 61       | 1.226   | 1.224    | -0.002 |
| 55                    | 795      | 1.227   | 1.225    | -0.002 |
| 55                    | 921      | 1.227   | 1.224    | -0.003 |
| 55                    | 741      | 1.226   | 1.225    | -0.001 |
| 55                    | 809      | 1.226   | 1.225    | -0.001 |
| 55                    | 804      | 1.226   | 1.224    | -0.002 |
| 100                   | 449      | 1.226   | 1.224    | -0.002 |
| 100                   | 541      | 1.226   | 1.224    | -0.002 |
| 100                   | 476      | 1.227   | 1.224    | -0.003 |
| 100                   | 45       | 1.227   | 1.224    | -0.003 |
| 100                   | 642      | 1.226   | 1.224    | -0.002 |
| 105                   | 1036     | 1.226   | 1.224    | -0.002 |
| 105                   | 1038     | 1.226   | 1.223    | -0.003 |
| 105                   | 203      | 1.226   | 1.224    | -0.002 |
| 105                   | 1029     | 1.226   | 1.223    | -0.003 |
| 105                   | 1027     | 1.226   | 1.224    | -0.002 |
| 105                   |          | Max     | 1.227    | 0.001  |
|                       |          | Average | 1.226    | -0.001 |
|                       |          | Min     | 1.226    | -0.003 |
|                       |          | Std Dev | 0.000    | 0.001  |



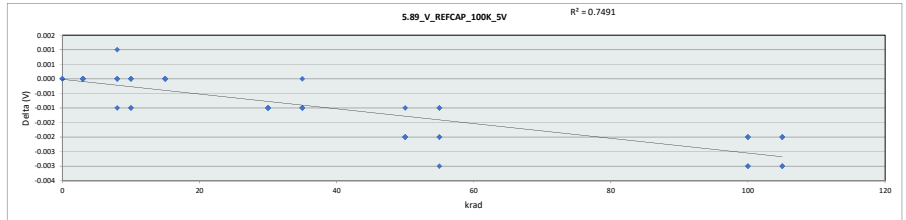
| 5.88_V_REFCAP_100K_4V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit             |       |       |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                   | 1.226 | 1.225 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average               | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                   | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                    | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



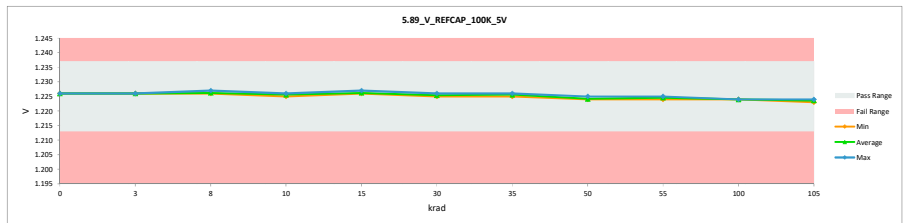
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.89_V_REFCAP_100K_5V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 1.226   | 1.226    | 0.000  |
| 0                     | 726      | 1.226   | 1.226    | 0.000  |
| 0                     | 791      | 1.226   | 1.226    | 0.000  |
| 3                     | 689      | 1.226   | 1.226    | 0.000  |
| 3                     | 688      | 1.226   | 1.226    | 0.000  |
| 3                     | 700      | 1.226   | 1.226    | 0.000  |
| 3                     | 482      | 1.226   | 1.226    | 0.000  |
| 3                     | 1033     | 1.226   | 1.226    | 0.000  |
| 8                     | 442      | 1.227   | 1.226    | -0.001 |
| 8                     | 699      | 1.226   | 1.226    | 0.000  |
| 8                     | 344      | 1.226   | 1.226    | 0.000  |
| 8                     | 355      | 1.226   | 1.227    | 0.001  |
| 8                     | 750      | 1.226   | 1.226    | 0.000  |
| 10                    | 537      | 1.226   | 1.226    | 0.000  |
| 10                    | 396      | 1.226   | 1.226    | 0.000  |
| 10                    | 521      | 1.226   | 1.225    | -0.001 |
| 10                    | 535      | 1.226   | 1.225    | -0.001 |
| 10                    | 526      | 1.226   | 1.226    | 0.000  |
| 15                    | 540      | 1.227   | 1.227    | 0.000  |
| 15                    | 387      | 1.226   | 1.226    | 0.000  |
| 15                    | 787      | 1.226   | 1.226    | 0.000  |
| 15                    | 1042     | 1.226   | 1.226    | 0.000  |
| 15                    | 483      | 1.226   | 1.226    | 0.000  |
| 30                    | 597      | 1.227   | 1.226    | -0.001 |
| 30                    | 853      | 1.226   | 1.225    | -0.001 |
| 30                    | 416      | 1.226   | 1.225    | -0.001 |
| 30                    | 949      | 1.227   | 1.226    | -0.001 |
| 30                    | 221      | 1.226   | 1.225    | -0.001 |
| 35                    | 538      | 1.226   | 1.225    | -0.001 |
| 35                    | 164      | 1.227   | 1.226    | -0.001 |
| 35                    | 1018     | 1.226   | 1.225    | -0.001 |
| 35                    | 462      | 1.226   | 1.226    | 0.000  |
| 35                    | 1032     | 1.227   | 1.226    | -0.001 |
| 50                    | 566      | 1.226   | 1.224    | -0.002 |
| 50                    | 197      | 1.226   | 1.224    | -0.002 |
| 50                    | 793      | 1.226   | 1.225    | -0.001 |
| 50                    | 802      | 1.226   | 1.224    | -0.002 |
| 50                    | 61       | 1.226   | 1.224    | -0.002 |
| 55                    | 795      | 1.227   | 1.225    | -0.002 |
| 55                    | 921      | 1.227   | 1.224    | -0.003 |
| 55                    | 741      | 1.226   | 1.225    | -0.001 |
| 55                    | 809      | 1.226   | 1.225    | -0.001 |
| 55                    | 804      | 1.226   | 1.224    | -0.002 |
| 100                   | 449      | 1.226   | 1.224    | -0.002 |
| 100                   | 541      | 1.226   | 1.224    | -0.002 |
| 100                   | 476      | 1.227   | 1.224    | -0.003 |
| 100                   | 45       | 1.227   | 1.224    | -0.003 |
| 100                   | 642      | 1.226   | 1.224    | -0.002 |
| 105                   | 1036     | 1.226   | 1.224    | -0.002 |
| 105                   | 1038     | 1.226   | 1.223    | -0.003 |
| 105                   | 203      | 1.226   | 1.224    | -0.002 |
| 105                   | 1029     | 1.226   | 1.223    | -0.003 |
| 105                   | 1027     | 1.226   | 1.224    | -0.002 |
| 105                   | Max      | 1.227   | 1.227    | 0.001  |
| Average               |          | 1.226   | 1.225    | -0.001 |
| Min                   |          | 1.226   | 1.223    | -0.003 |
| Std Dev               |          | 0.000   | 0.001    | 0.001  |



| 5.89_V_REFCAP_100K_5V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit             |       |       |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                   | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average               | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                   | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                    | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |

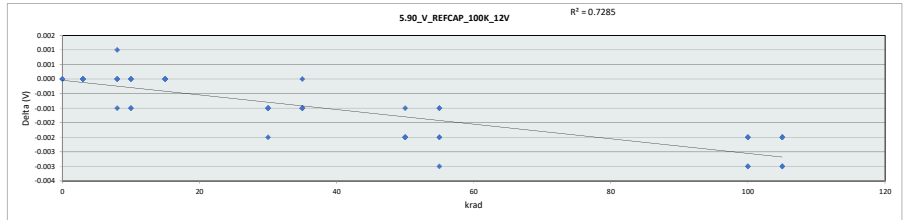


# HDR TID Report

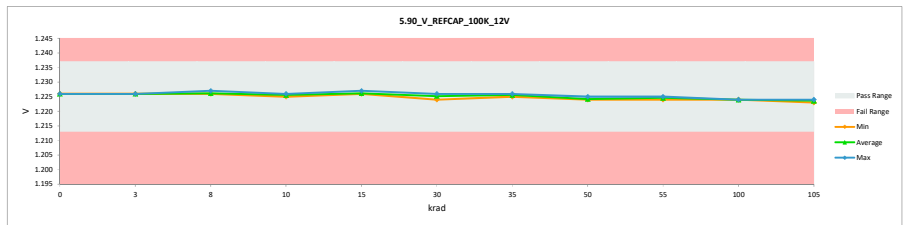
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.90_V_REFCAP_100K_12V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE HDR | POST HDR | Delta  |
| 0                      | 552      | 1.226   | 1.226    | 0.000  |
| 0                      | 726      | 1.226   | 1.226    | 0.000  |
| 0                      | 791      | 1.226   | 1.226    | 0.000  |
| 3                      | 689      | 1.226   | 1.226    | 0.000  |
| 3                      | 688      | 1.226   | 1.226    | 0.000  |
| 3                      | 700      | 1.226   | 1.226    | 0.000  |
| 3                      | 482      | 1.226   | 1.226    | 0.000  |
| 3                      | 1033     | 1.226   | 1.226    | 0.000  |
| 8                      | 442      | 1.227   | 1.226    | -0.001 |
| 8                      | 699      | 1.226   | 1.226    | 0.000  |
| 8                      | 344      | 1.226   | 1.226    | 0.000  |
| 8                      | 355      | 1.226   | 1.227    | 0.001  |
| 8                      | 750      | 1.226   | 1.226    | 0.000  |
| 10                     | 537      | 1.226   | 1.226    | 0.000  |
| 10                     | 396      | 1.226   | 1.226    | 0.000  |
| 10                     | 521      | 1.226   | 1.225    | -0.001 |
| 10                     | 535      | 1.226   | 1.225    | -0.001 |
| 10                     | 526      | 1.226   | 1.226    | 0.000  |
| 15                     | 540      | 1.227   | 1.227    | 0.000  |
| 15                     | 387      | 1.226   | 1.226    | 0.000  |
| 15                     | 787      | 1.226   | 1.226    | 0.000  |
| 15                     | 1042     | 1.226   | 1.226    | 0.000  |
| 15                     | 483      | 1.226   | 1.226    | 0.000  |
| 30                     | 597      | 1.227   | 1.226    | -0.001 |
| 30                     | 853      | 1.226   | 1.225    | -0.001 |
| 30                     | 416      | 1.226   | 1.225    | -0.001 |
| 30                     | 949      | 1.227   | 1.226    | -0.001 |
| 30                     | 221      | 1.226   | 1.224    | -0.002 |
| 35                     | 538      | 1.226   | 1.225    | -0.001 |
| 35                     | 164      | 1.227   | 1.226    | -0.001 |
| 35                     | 1018     | 1.226   | 1.225    | -0.001 |
| 35                     | 462      | 1.226   | 1.226    | 0.000  |
| 35                     | 1032     | 1.227   | 1.226    | -0.001 |
| 50                     | 566      | 1.226   | 1.224    | -0.002 |
| 50                     | 197      | 1.226   | 1.224    | -0.002 |
| 50                     | 793      | 1.226   | 1.225    | -0.001 |
| 50                     | 802      | 1.226   | 1.224    | -0.002 |
| 50                     | 61       | 1.226   | 1.224    | -0.002 |
| 55                     | 795      | 1.227   | 1.225    | -0.002 |
| 55                     | 921      | 1.227   | 1.224    | -0.003 |
| 55                     | 741      | 1.226   | 1.225    | -0.001 |
| 55                     | 809      | 1.226   | 1.225    | -0.001 |
| 55                     | 804      | 1.226   | 1.224    | -0.002 |
| 100                    | 449      | 1.226   | 1.224    | -0.002 |
| 100                    | 541      | 1.226   | 1.224    | -0.002 |
| 100                    | 476      | 1.227   | 1.224    | -0.003 |
| 100                    | 45       | 1.227   | 1.224    | -0.003 |
| 100                    | 642      | 1.226   | 1.224    | -0.002 |
| 105                    | 1036     | 1.226   | 1.224    | -0.002 |
| 105                    | 1038     | 1.226   | 1.223    | -0.003 |
| 105                    | 203      | 1.226   | 1.224    | -0.002 |
| 105                    | 1029     | 1.226   | 1.223    | -0.003 |
| 105                    | 1027     | 1.226   | 1.224    | -0.002 |
| 105                    | Max      | 1.227   | 1.227    | 0.001  |
| Average                |          | 1.226   | 1.225    | -0.001 |
| Min                    |          | 1.226   | 1.223    | -0.003 |
| Std Dev                |          | 0.000   | 0.001    | 0.001  |



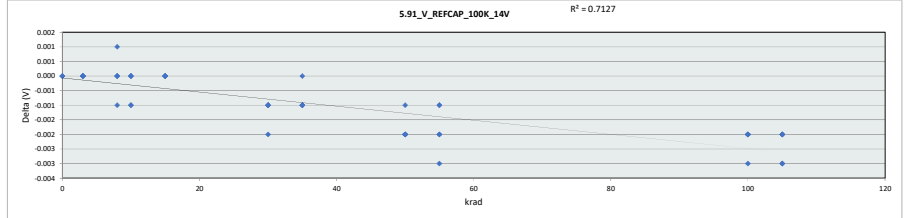
| 5.90_V_REFCAP_100K_12V |       |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site              |       |       |       |       |       |       |       |       |       |       |       |
| Tester                 |       |       |       |       |       |       |       |       |       |       |       |
| Test Number            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit              |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit              |       |       |       |       |       |       |       |       |       |       |       |
| krad                   | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                     | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                    | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average                | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                    | 1.226 | 1.226 | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                     | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



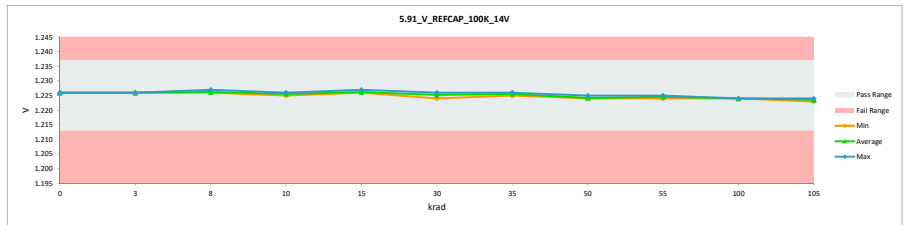
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.91_V_REFCAP_100K_14V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 1.226   | 1.226    | 0.000  |
| 0                      | 726      | 1.226   | 1.226    | 0.000  |
| 0                      | 791      | 1.226   | 1.226    | 0.000  |
| 3                      | 689      | 1.226   | 1.226    | 0.000  |
| 3                      | 688      | 1.226   | 1.226    | 0.000  |
| 3                      | 700      | 1.226   | 1.226    | 0.000  |
| 3                      | 482      | 1.226   | 1.226    | 0.000  |
| 3                      | 1033     | 1.226   | 1.226    | 0.000  |
| 8                      | 442      | 1.227   | 1.226    | -0.001 |
| 8                      | 699      | 1.226   | 1.226    | 0.000  |
| 8                      | 344      | 1.226   | 1.226    | 0.000  |
| 8                      | 355      | 1.226   | 1.227    | 0.001  |
| 8                      | 750      | 1.226   | 1.226    | 0.000  |
| 10                     | 537      | 1.226   | 1.226    | 0.000  |
| 10                     | 396      | 1.226   | 1.226    | 0.000  |
| 10                     | 521      | 1.226   | 1.225    | -0.001 |
| 10                     | 535      | 1.226   | 1.225    | -0.001 |
| 10                     | 526      | 1.226   | 1.226    | 0.000  |
| 15                     | 540      | 1.227   | 1.227    | 0.000  |
| 15                     | 387      | 1.226   | 1.226    | 0.000  |
| 15                     | 787      | 1.226   | 1.226    | 0.000  |
| 15                     | 1042     | 1.226   | 1.226    | 0.000  |
| 15                     | 483      | 1.226   | 1.226    | 0.000  |
| 30                     | 597      | 1.227   | 1.226    | -0.001 |
| 30                     | 853      | 1.226   | 1.225    | -0.001 |
| 30                     | 416      | 1.226   | 1.225    | -0.001 |
| 30                     | 949      | 1.227   | 1.226    | -0.001 |
| 30                     | 221      | 1.226   | 1.224    | -0.002 |
| 35                     | 538      | 1.226   | 1.225    | -0.001 |
| 35                     | 164      | 1.227   | 1.226    | -0.001 |
| 35                     | 1018     | 1.226   | 1.225    | -0.001 |
| 35                     | 462      | 1.226   | 1.226    | 0.000  |
| 35                     | 1032     | 1.227   | 1.226    | -0.001 |
| 50                     | 566      | 1.226   | 1.224    | -0.002 |
| 50                     | 197      | 1.226   | 1.224    | -0.002 |
| 50                     | 793      | 1.226   | 1.225    | -0.001 |
| 50                     | 802      | 1.226   | 1.224    | -0.002 |
| 50                     | 61       | 1.226   | 1.224    | -0.002 |
| 55                     | 795      | 1.227   | 1.225    | -0.002 |
| 55                     | 921      | 1.227   | 1.224    | -0.003 |
| 55                     | 741      | 1.226   | 1.225    | -0.001 |
| 55                     | 809      | 1.226   | 1.225    | -0.001 |
| 55                     | 804      | 1.226   | 1.224    | -0.002 |
| 100                    | 449      | 1.226   | 1.224    | -0.002 |
| 100                    | 541      | 1.226   | 1.224    | -0.002 |
| 100                    | 476      | 1.226   | 1.224    | -0.002 |
| 100                    | 45       | 1.227   | 1.224    | -0.003 |
| 100                    | 642      | 1.226   | 1.224    | -0.002 |
| 105                    | 1036     | 1.226   | 1.224    | -0.002 |
| 105                    | 1038     | 1.226   | 1.223    | -0.003 |
| 105                    | 203      | 1.226   | 1.224    | -0.002 |
| 105                    | 1029     | 1.226   | 1.223    | -0.003 |
| 105                    | 1027     | 1.226   | 1.224    | -0.002 |
| 105                    | Max      | 1.227   | 1.227    | 0.001  |
| Average                |          | 1.226   | 1.225    | -0.001 |
| Min                    |          | 1.226   | 1.223    | -0.003 |
| Std Dev                |          | 0.000   | 0.001    | 0.001  |



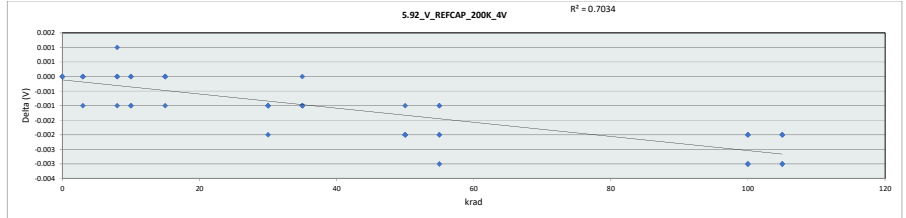
| 5.91_V_REFCAP_100K_14V |       |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site              |       |       |       |       |       |       |       |       |       |       |       |
| Tester                 |       |       |       |       |       |       |       |       |       |       |       |
| Test Number            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit              |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit              |       |       |       |       |       |       |       |       |       |       |       |
| krad                   | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                     | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                    | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average                | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                    | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                     | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



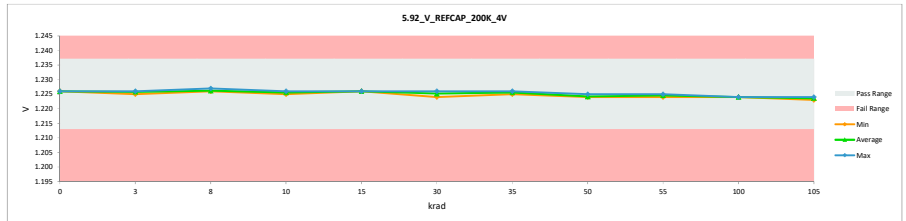
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.92_V_REFCAP_200K_4V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 1.226   | 1.226    | 0.000  |
| 0                     | 726      | 1.226   | 1.226    | 0.000  |
| 0                     | 791      | 1.226   | 1.226    | 0.000  |
| 3                     | 689      | 1.226   | 1.226    | 0.000  |
| 3                     | 688      | 1.226   | 1.226    | 0.000  |
| 3                     | 700      | 1.226   | 1.226    | 0.000  |
| 3                     | 482      | 1.226   | 1.225    | -0.001 |
| 3                     | 1033     | 1.226   | 1.226    | 0.000  |
| 8                     | 442      | 1.227   | 1.226    | -0.001 |
| 8                     | 699      | 1.226   | 1.226    | 0.000  |
| 8                     | 344      | 1.226   | 1.226    | 0.000  |
| 8                     | 355      | 1.226   | 1.227    | 0.001  |
| 8                     | 750      | 1.226   | 1.226    | 0.000  |
| 10                    | 537      | 1.226   | 1.226    | 0.000  |
| 10                    | 396      | 1.226   | 1.226    | 0.000  |
| 10                    | 521      | 1.226   | 1.225    | -0.001 |
| 10                    | 535      | 1.226   | 1.225    | -0.001 |
| 10                    | 526      | 1.226   | 1.226    | 0.000  |
| 15                    | 540      | 1.227   | 1.226    | -0.001 |
| 15                    | 387      | 1.226   | 1.226    | 0.000  |
| 15                    | 787      | 1.226   | 1.226    | 0.000  |
| 15                    | 1042     | 1.226   | 1.226    | 0.000  |
| 15                    | 483      | 1.226   | 1.226    | 0.000  |
| 30                    | 597      | 1.227   | 1.226    | -0.001 |
| 30                    | 853      | 1.226   | 1.225    | -0.001 |
| 30                    | 416      | 1.226   | 1.225    | -0.001 |
| 30                    | 949      | 1.227   | 1.226    | -0.001 |
| 30                    | 221      | 1.226   | 1.224    | -0.002 |
| 35                    | 538      | 1.226   | 1.225    | -0.001 |
| 35                    | 164      | 1.227   | 1.226    | -0.001 |
| 35                    | 1018     | 1.226   | 1.225    | -0.001 |
| 35                    | 462      | 1.226   | 1.226    | 0.000  |
| 35                    | 1032     | 1.227   | 1.226    | -0.001 |
| 50                    | 566      | 1.226   | 1.224    | -0.002 |
| 50                    | 197      | 1.226   | 1.224    | -0.002 |
| 50                    | 793      | 1.226   | 1.225    | -0.001 |
| 50                    | 802      | 1.226   | 1.224    | -0.002 |
| 50                    | 61       | 1.226   | 1.224    | -0.002 |
| 55                    | 795      | 1.227   | 1.225    | -0.002 |
| 55                    | 921      | 1.227   | 1.224    | -0.003 |
| 55                    | 741      | 1.226   | 1.225    | -0.001 |
| 55                    | 809      | 1.226   | 1.225    | -0.001 |
| 55                    | 804      | 1.226   | 1.224    | -0.002 |
| 100                   | 449      | 1.226   | 1.224    | -0.002 |
| 100                   | 541      | 1.226   | 1.224    | -0.002 |
| 100                   | 476      | 1.227   | 1.224    | -0.003 |
| 100                   | 45       | 1.227   | 1.224    | -0.003 |
| 100                   | 642      | 1.226   | 1.224    | -0.002 |
| 105                   | 1036     | 1.226   | 1.224    | -0.002 |
| 105                   | 1038     | 1.226   | 1.223    | -0.003 |
| 105                   | 203      | 1.226   | 1.224    | -0.002 |
| 105                   | 1029     | 1.226   | 1.223    | -0.003 |
| 105                   | 1027     | 1.226   | 1.224    | -0.002 |
| 105                   |          | 1.227   | 1.227    | 0.001  |
| Max                   |          | 1.226   | 1.225    | -0.001 |
| Average               |          | 1.226   | 1.223    | -0.003 |
| Min                   |          | 1.226   | 1.223    | -0.003 |
| Std Dev               |          | 0.000   | 0.001    | 0.001  |



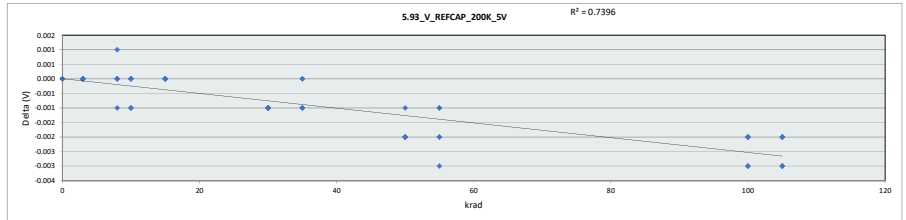
| 5.92_V_REFCAP_200K_4V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit             |       |       |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                   | 1.226 | 1.225 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average               | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                   | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                    | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



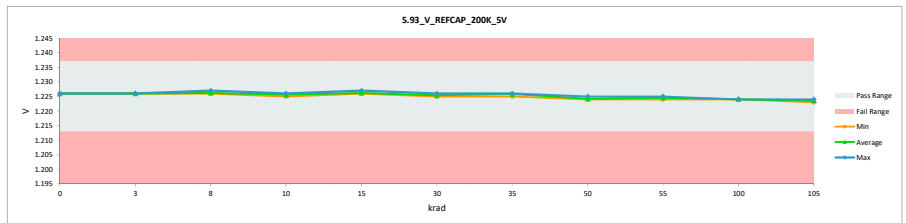
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.93_V_REFCAP_200K_5V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 1.226   | 1.226    | 0.000  |
| 0                     | 726      | 1.226   | 1.226    | 0.000  |
| 0                     | 791      | 1.226   | 1.226    | 0.000  |
| 3                     | 689      | 1.226   | 1.226    | 0.000  |
| 3                     | 688      | 1.226   | 1.226    | 0.000  |
| 3                     | 700      | 1.226   | 1.226    | 0.000  |
| 3                     | 482      | 1.226   | 1.226    | 0.000  |
| 3                     | 1033     | 1.226   | 1.226    | 0.000  |
| 8                     | 442      | 1.227   | 1.226    | -0.001 |
| 8                     | 699      | 1.226   | 1.226    | 0.000  |
| 8                     | 344      | 1.226   | 1.226    | 0.000  |
| 8                     | 355      | 1.226   | 1.227    | 0.001  |
| 8                     | 750      | 1.226   | 1.226    | 0.000  |
| 10                    | 537      | 1.226   | 1.226    | 0.000  |
| 10                    | 396      | 1.226   | 1.226    | 0.000  |
| 10                    | 521      | 1.226   | 1.225    | -0.001 |
| 10                    | 535      | 1.226   | 1.225    | -0.001 |
| 10                    | 526      | 1.226   | 1.226    | 0.000  |
| 15                    | 540      | 1.227   | 1.227    | 0.000  |
| 15                    | 387      | 1.226   | 1.226    | 0.000  |
| 15                    | 787      | 1.226   | 1.226    | 0.000  |
| 15                    | 1042     | 1.226   | 1.226    | 0.000  |
| 15                    | 483      | 1.226   | 1.226    | 0.000  |
| 30                    | 597      | 1.227   | 1.226    | -0.001 |
| 30                    | 853      | 1.226   | 1.225    | -0.001 |
| 30                    | 416      | 1.226   | 1.225    | -0.001 |
| 30                    | 949      | 1.227   | 1.226    | -0.001 |
| 30                    | 221      | 1.226   | 1.225    | -0.001 |
| 35                    | 538      | 1.226   | 1.225    | -0.001 |
| 35                    | 164      | 1.227   | 1.226    | -0.001 |
| 35                    | 1018     | 1.226   | 1.226    | 0.000  |
| 35                    | 462      | 1.226   | 1.226    | 0.000  |
| 35                    | 1032     | 1.227   | 1.226    | -0.001 |
| 50                    | 566      | 1.226   | 1.224    | -0.002 |
| 50                    | 197      | 1.226   | 1.224    | -0.002 |
| 50                    | 793      | 1.226   | 1.225    | -0.001 |
| 50                    | 802      | 1.226   | 1.224    | -0.002 |
| 50                    | 61       | 1.226   | 1.224    | -0.002 |
| 55                    | 795      | 1.227   | 1.225    | -0.002 |
| 55                    | 921      | 1.227   | 1.224    | -0.003 |
| 55                    | 741      | 1.226   | 1.225    | -0.001 |
| 55                    | 809      | 1.226   | 1.225    | -0.001 |
| 55                    | 804      | 1.226   | 1.224    | -0.002 |
| 100                   | 449      | 1.226   | 1.224    | -0.002 |
| 100                   | 541      | 1.226   | 1.224    | -0.002 |
| 100                   | 476      | 1.227   | 1.224    | -0.003 |
| 100                   | 45       | 1.227   | 1.224    | -0.003 |
| 100                   | 642      | 1.226   | 1.224    | -0.002 |
| 105                   | 1036     | 1.226   | 1.224    | -0.002 |
| 105                   | 1038     | 1.226   | 1.223    | -0.003 |
| 105                   | 203      | 1.226   | 1.224    | -0.002 |
| 105                   | 1029     | 1.226   | 1.223    | -0.003 |
| 105                   | 1027     | 1.226   | 1.224    | -0.002 |
| 105                   |          | 1.227   | 1.227    | 0.001  |
| Max                   |          | 1.226   | 1.225    | -0.001 |
| Average               |          | 1.226   | 1.223    | -0.003 |
| Std Dev               |          | 0.000   | 0.001    | 0.001  |



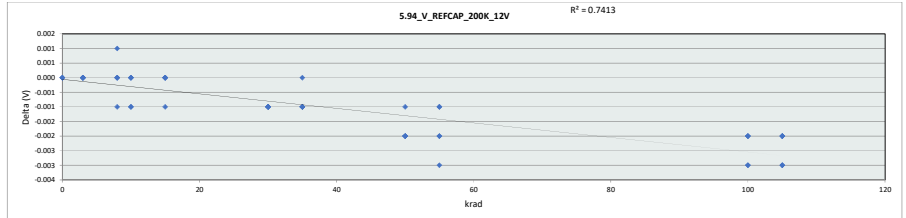
| 5.93_V_REFCAP_200K_5V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit             |       |       |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                   | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average               | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                   | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                    | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



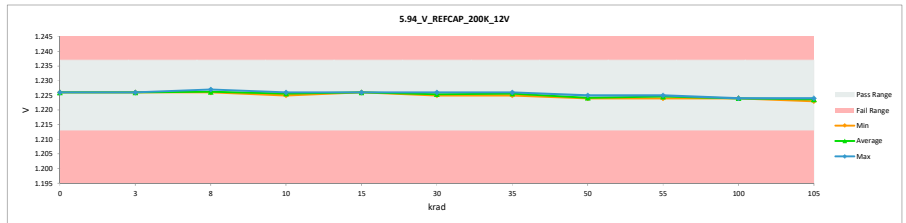
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.94_V_REFCAP_200K_12V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 1.226   | 1.226    | 0.000  |
| 0                      | 726      | 1.226   | 1.226    | 0.000  |
| 0                      | 791      | 1.226   | 1.226    | 0.000  |
| 3                      | 689      | 1.226   | 1.226    | 0.000  |
| 3                      | 688      | 1.226   | 1.226    | 0.000  |
| 3                      | 700      | 1.226   | 1.226    | 0.000  |
| 3                      | 482      | 1.226   | 1.226    | 0.000  |
| 3                      | 1033     | 1.226   | 1.226    | 0.000  |
| 8                      | 442      | 1.227   | 1.226    | -0.001 |
| 8                      | 699      | 1.226   | 1.226    | 0.000  |
| 8                      | 344      | 1.226   | 1.226    | 0.000  |
| 8                      | 355      | 1.226   | 1.227    | 0.001  |
| 8                      | 750      | 1.226   | 1.226    | 0.000  |
| 10                     | 537      | 1.226   | 1.226    | 0.000  |
| 10                     | 396      | 1.226   | 1.226    | 0.000  |
| 10                     | 521      | 1.226   | 1.225    | -0.001 |
| 10                     | 535      | 1.226   | 1.225    | -0.001 |
| 10                     | 526      | 1.226   | 1.226    | 0.000  |
| 15                     | 540      | 1.227   | 1.226    | -0.001 |
| 15                     | 387      | 1.226   | 1.226    | 0.000  |
| 15                     | 787      | 1.226   | 1.226    | 0.000  |
| 15                     | 1042     | 1.226   | 1.226    | 0.000  |
| 15                     | 483      | 1.226   | 1.226    | 0.000  |
| 30                     | 597      | 1.227   | 1.226    | -0.001 |
| 30                     | 853      | 1.226   | 1.225    | -0.001 |
| 30                     | 416      | 1.226   | 1.225    | -0.001 |
| 30                     | 949      | 1.227   | 1.226    | -0.001 |
| 30                     | 221      | 1.226   | 1.225    | -0.001 |
| 35                     | 538      | 1.226   | 1.225    | -0.001 |
| 35                     | 164      | 1.227   | 1.226    | -0.001 |
| 35                     | 1018     | 1.226   | 1.225    | -0.001 |
| 35                     | 462      | 1.226   | 1.226    | 0.000  |
| 35                     | 1032     | 1.227   | 1.226    | -0.001 |
| 50                     | 566      | 1.226   | 1.224    | -0.002 |
| 50                     | 197      | 1.226   | 1.224    | -0.002 |
| 50                     | 793      | 1.226   | 1.225    | -0.001 |
| 50                     | 802      | 1.226   | 1.224    | -0.002 |
| 50                     | 61       | 1.226   | 1.224    | -0.002 |
| 55                     | 795      | 1.227   | 1.225    | -0.002 |
| 55                     | 921      | 1.227   | 1.224    | -0.003 |
| 55                     | 741      | 1.226   | 1.225    | -0.001 |
| 55                     | 809      | 1.226   | 1.225    | -0.001 |
| 55                     | 804      | 1.226   | 1.224    | -0.002 |
| 100                    | 449      | 1.226   | 1.224    | -0.002 |
| 100                    | 541      | 1.226   | 1.224    | -0.002 |
| 100                    | 476      | 1.227   | 1.224    | -0.003 |
| 100                    | 45       | 1.227   | 1.224    | -0.003 |
| 100                    | 642      | 1.226   | 1.224    | -0.002 |
| 105                    | 1036     | 1.226   | 1.224    | -0.002 |
| 105                    | 1038     | 1.226   | 1.223    | -0.003 |
| 105                    | 203      | 1.226   | 1.224    | -0.002 |
| 105                    | 1029     | 1.226   | 1.223    | -0.003 |
| 105                    | 1027     | 1.226   | 1.224    | -0.002 |
| 105                    | Max      | 1.227   | 1.227    | 0.001  |
| 105                    | Average  | 1.226   | 1.225    | -0.001 |
| 105                    | Min      | 1.226   | 1.223    | -0.003 |
| 105                    | Std Dev  | 0.000   | 0.001    | 0.001  |



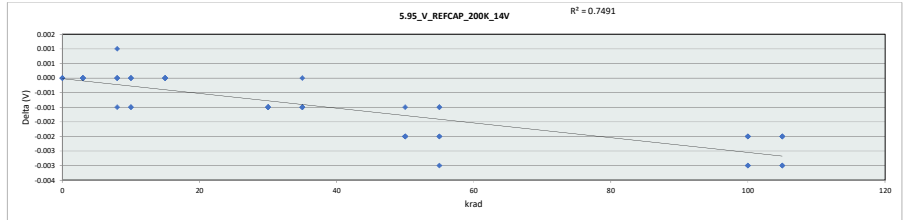
| 5.94_V_REFCAP_200K_12V |       |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site              |       |       |       |       |       |       |       |       |       |       |       |
| Tester                 |       |       |       |       |       |       |       |       |       |       |       |
| Test Number            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit              |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit              |       |       |       |       |       |       |       |       |       |       |       |
| krad                   | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                     | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                    | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average                | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                    | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                     | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



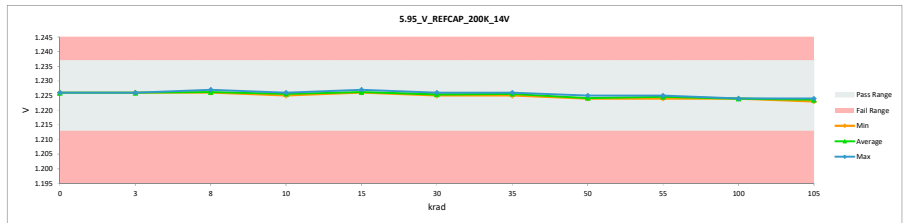
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.95_V_REFCAP_200K_14V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE HDR | POST HDR | Delta  |
| 0                      | 552      | 1.226   | 1.226    | 0.000  |
| 0                      | 726      | 1.226   | 1.226    | 0.000  |
| 0                      | 791      | 1.226   | 1.226    | 0.000  |
| 3                      | 689      | 1.226   | 1.226    | 0.000  |
| 3                      | 688      | 1.226   | 1.226    | 0.000  |
| 3                      | 700      | 1.226   | 1.226    | 0.000  |
| 3                      | 482      | 1.226   | 1.226    | 0.000  |
| 3                      | 1033     | 1.226   | 1.226    | 0.000  |
| 8                      | 442      | 1.227   | 1.226    | -0.001 |
| 8                      | 699      | 1.226   | 1.226    | 0.000  |
| 8                      | 344      | 1.226   | 1.226    | 0.000  |
| 8                      | 355      | 1.226   | 1.227    | 0.001  |
| 8                      | 750      | 1.226   | 1.226    | 0.000  |
| 10                     | 537      | 1.226   | 1.226    | 0.000  |
| 10                     | 396      | 1.226   | 1.226    | 0.000  |
| 10                     | 521      | 1.226   | 1.225    | -0.001 |
| 10                     | 535      | 1.226   | 1.225    | -0.001 |
| 10                     | 526      | 1.226   | 1.226    | 0.000  |
| 15                     | 540      | 1.227   | 1.227    | 0.000  |
| 15                     | 387      | 1.226   | 1.226    | 0.000  |
| 15                     | 787      | 1.226   | 1.226    | 0.000  |
| 15                     | 1042     | 1.226   | 1.226    | 0.000  |
| 15                     | 483      | 1.226   | 1.226    | 0.000  |
| 30                     | 597      | 1.227   | 1.226    | -0.001 |
| 30                     | 853      | 1.226   | 1.225    | -0.001 |
| 30                     | 416      | 1.226   | 1.225    | -0.001 |
| 30                     | 949      | 1.227   | 1.226    | -0.001 |
| 30                     | 221      | 1.226   | 1.225    | -0.001 |
| 35                     | 538      | 1.226   | 1.225    | -0.001 |
| 35                     | 164      | 1.227   | 1.226    | -0.001 |
| 35                     | 1018     | 1.226   | 1.225    | -0.001 |
| 35                     | 462      | 1.226   | 1.226    | 0.000  |
| 35                     | 1032     | 1.227   | 1.226    | -0.001 |
| 50                     | 566      | 1.226   | 1.224    | -0.002 |
| 50                     | 197      | 1.226   | 1.224    | -0.002 |
| 50                     | 793      | 1.226   | 1.225    | -0.001 |
| 50                     | 802      | 1.226   | 1.224    | -0.002 |
| 50                     | 61       | 1.226   | 1.224    | -0.002 |
| 55                     | 795      | 1.227   | 1.225    | -0.002 |
| 55                     | 921      | 1.227   | 1.224    | -0.003 |
| 55                     | 741      | 1.226   | 1.225    | -0.001 |
| 55                     | 809      | 1.226   | 1.225    | -0.001 |
| 55                     | 804      | 1.226   | 1.224    | -0.002 |
| 100                    | 449      | 1.226   | 1.224    | -0.002 |
| 100                    | 541      | 1.226   | 1.224    | -0.002 |
| 100                    | 476      | 1.227   | 1.224    | -0.003 |
| 100                    | 45       | 1.227   | 1.224    | -0.003 |
| 100                    | 642      | 1.226   | 1.224    | -0.002 |
| 105                    | 1036     | 1.226   | 1.224    | -0.002 |
| 105                    | 1038     | 1.226   | 1.223    | -0.003 |
| 105                    | 203      | 1.226   | 1.224    | -0.002 |
| 105                    | 1029     | 1.226   | 1.223    | -0.003 |
| 105                    | 1027     | 1.226   | 1.224    | -0.002 |
| 105                    |          | 1.227   | 1.227    | 0.001  |
| Max                    |          | 1.226   | 1.225    | -0.001 |
| Average                |          | 1.226   | 1.223    | -0.003 |
| Min                    |          | 1.226   | 1.223    | -0.003 |
| Std Dev                |          | 0.000   | 0.001    | 0.001  |



| 5.95_V_REFCAP_200K_14V |       |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site              |       |       |       |       |       |       |       |       |       |       |       |
| Tester                 |       |       |       |       |       |       |       |       |       |       |       |
| Test Number            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit              |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit              |       |       |       |       |       |       |       |       |       |       |       |
| krad                   | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                     | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                    | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average                | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                    | 1.226 | 1.226 | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                     | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |

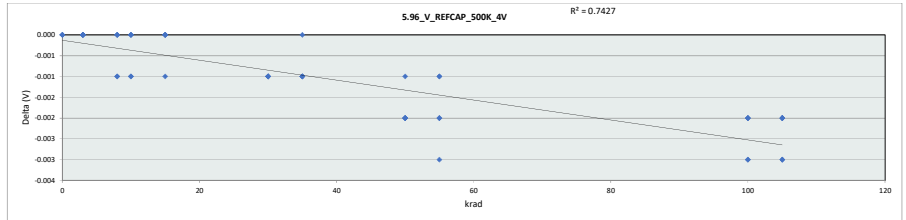


# HDR TID Report

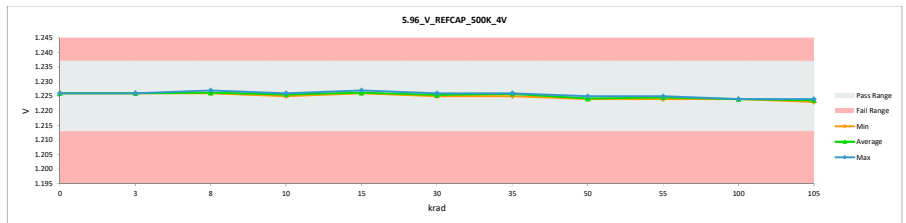
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.96_V_REFCAP_500K_4V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 1.226   | 1.226    | 0.000  |
| 0                     | 726      | 1.226   | 1.226    | 0.000  |
| 0                     | 791      | 1.226   | 1.226    | 0.000  |
| 3                     | 689      | 1.226   | 1.226    | 0.000  |
| 3                     | 688      | 1.226   | 1.226    | 0.000  |
| 3                     | 700      | 1.226   | 1.226    | 0.000  |
| 3                     | 482      | 1.226   | 1.226    | 0.000  |
| 3                     | 1033     | 1.226   | 1.226    | 0.000  |
| 8                     | 442      | 1.227   | 1.226    | -0.001 |
| 8                     | 699      | 1.227   | 1.226    | -0.001 |
| 8                     | 344      | 1.226   | 1.226    | 0.000  |
| 8                     | 355      | 1.227   | 1.227    | 0.000  |
| 8                     | 750      | 1.226   | 1.226    | 0.000  |
| 10                    | 537      | 1.226   | 1.226    | 0.000  |
| 10                    | 396      | 1.226   | 1.226    | 0.000  |
| 10                    | 521      | 1.226   | 1.225    | -0.001 |
| 10                    | 535      | 1.226   | 1.225    | -0.001 |
| 10                    | 526      | 1.226   | 1.226    | 0.000  |
| 15                    | 540      | 1.227   | 1.227    | 0.000  |
| 15                    | 387      | 1.226   | 1.226    | 0.000  |
| 15                    | 787      | 1.226   | 1.226    | 0.000  |
| 15                    | 1042     | 1.227   | 1.226    | -0.001 |
| 15                    | 483      | 1.226   | 1.226    | 0.000  |
| 30                    | 597      | 1.227   | 1.226    | -0.001 |
| 30                    | 853      | 1.226   | 1.225    | -0.001 |
| 30                    | 416      | 1.226   | 1.225    | -0.001 |
| 30                    | 949      | 1.227   | 1.226    | -0.001 |
| 30                    | 221      | 1.226   | 1.225    | -0.001 |
| 35                    | 538      | 1.226   | 1.225    | -0.001 |
| 35                    | 164      | 1.227   | 1.226    | -0.001 |
| 35                    | 1018     | 1.227   | 1.226    | -0.001 |
| 35                    | 462      | 1.226   | 1.226    | 0.000  |
| 35                    | 1032     | 1.227   | 1.226    | -0.001 |
| 50                    | 566      | 1.226   | 1.224    | -0.002 |
| 50                    | 197      | 1.226   | 1.224    | -0.002 |
| 50                    | 793      | 1.226   | 1.225    | -0.001 |
| 50                    | 802      | 1.226   | 1.224    | -0.002 |
| 50                    | 61       | 1.226   | 1.224    | -0.002 |
| 55                    | 795      | 1.227   | 1.225    | -0.002 |
| 55                    | 921      | 1.227   | 1.224    | -0.003 |
| 55                    | 741      | 1.226   | 1.225    | -0.001 |
| 55                    | 809      | 1.226   | 1.225    | -0.001 |
| 55                    | 804      | 1.226   | 1.224    | -0.002 |
| 100                   | 449      | 1.226   | 1.224    | -0.002 |
| 100                   | 541      | 1.226   | 1.224    | -0.002 |
| 100                   | 476      | 1.227   | 1.224    | -0.003 |
| 100                   | 45       | 1.227   | 1.224    | -0.003 |
| 100                   | 642      | 1.226   | 1.224    | -0.002 |
| 105                   | 1036     | 1.226   | 1.224    | -0.002 |
| 105                   | 1038     | 1.226   | 1.223    | -0.003 |
| 105                   | 203      | 1.226   | 1.224    | -0.002 |
| 105                   | 1029     | 1.226   | 1.223    | -0.003 |
| 105                   | 1027     | 1.226   | 1.224    | -0.002 |
| 105                   |          | 1.227   | 1.227    | 0.000  |
| Max                   |          | 1.226   | 1.225    | -0.001 |
| Average               |          | 1.226   | 1.223    | -0.003 |
| Min                   |          | 1.226   | 1.223    | -0.003 |
| Std Dev               |          | 0.000   | 0.001    | 0.001  |



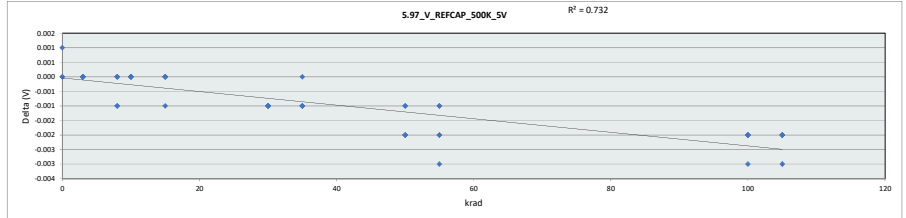
| 5.96_V_REFCAP_500K_4V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit             |       |       |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                   | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average               | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                   | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                    | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



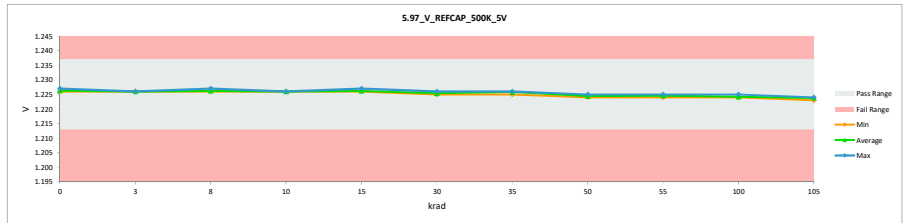
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.97_V_REFCAP_500K_5V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 1.226   | 1.226    | 0.000  |
| 0                     | 726      | 1.226   | 1.226    | 0.000  |
| 0                     | 791      | 1.226   | 1.227    | 0.001  |
| 3                     | 689      | 1.226   | 1.226    | 0.000  |
| 3                     | 688      | 1.226   | 1.226    | 0.000  |
| 3                     | 700      | 1.226   | 1.226    | 0.000  |
| 3                     | 482      | 1.226   | 1.226    | 0.000  |
| 3                     | 1033     | 1.226   | 1.226    | 0.000  |
| 8                     | 442      | 1.227   | 1.226    | -0.001 |
| 8                     | 699      | 1.227   | 1.226    | -0.001 |
| 8                     | 344      | 1.226   | 1.226    | 0.000  |
| 8                     | 355      | 1.227   | 1.227    | 0.000  |
| 8                     | 750      | 1.226   | 1.226    | 0.000  |
| 10                    | 537      | 1.226   | 1.226    | 0.000  |
| 10                    | 396      | 1.226   | 1.226    | 0.000  |
| 10                    | 521      | 1.226   | 1.226    | 0.000  |
| 10                    | 535      | 1.226   | 1.226    | 0.000  |
| 10                    | 526      | 1.226   | 1.226    | 0.000  |
| 15                    | 540      | 1.227   | 1.227    | 0.000  |
| 15                    | 387      | 1.226   | 1.226    | 0.000  |
| 15                    | 787      | 1.226   | 1.226    | 0.000  |
| 15                    | 1042     | 1.227   | 1.226    | -0.001 |
| 15                    | 483      | 1.226   | 1.226    | 0.000  |
| 30                    | 597      | 1.227   | 1.226    | -0.001 |
| 30                    | 853      | 1.226   | 1.225    | -0.001 |
| 30                    | 416      | 1.226   | 1.225    | -0.001 |
| 30                    | 949      | 1.227   | 1.226    | -0.001 |
| 30                    | 221      | 1.226   | 1.225    | -0.001 |
| 35                    | 538      | 1.226   | 1.225    | -0.001 |
| 35                    | 164      | 1.227   | 1.226    | -0.001 |
| 35                    | 1018     | 1.227   | 1.226    | -0.001 |
| 35                    | 462      | 1.226   | 1.226    | 0.000  |
| 35                    | 1032     | 1.227   | 1.226    | -0.001 |
| 50                    | 566      | 1.226   | 1.224    | -0.002 |
| 50                    | 197      | 1.226   | 1.224    | -0.002 |
| 50                    | 793      | 1.226   | 1.225    | -0.001 |
| 50                    | 802      | 1.226   | 1.224    | -0.002 |
| 50                    | 61       | 1.226   | 1.225    | -0.001 |
| 55                    | 795      | 1.227   | 1.225    | -0.002 |
| 55                    | 921      | 1.227   | 1.224    | -0.003 |
| 55                    | 741      | 1.226   | 1.225    | -0.001 |
| 55                    | 809      | 1.226   | 1.225    | -0.001 |
| 55                    | 804      | 1.226   | 1.224    | -0.002 |
| 100                   | 449      | 1.226   | 1.224    | -0.002 |
| 100                   | 541      | 1.226   | 1.224    | -0.002 |
| 100                   | 476      | 1.227   | 1.225    | -0.002 |
| 100                   | 45       | 1.227   | 1.224    | -0.003 |
| 100                   | 642      | 1.226   | 1.224    | -0.002 |
| 105                   | 1036     | 1.226   | 1.224    | -0.002 |
| 105                   | 1038     | 1.226   | 1.224    | -0.002 |
| 105                   | 203      | 1.226   | 1.224    | -0.002 |
| 105                   | 1029     | 1.226   | 1.223    | -0.003 |
| 105                   | 1027     | 1.226   | 1.224    | -0.002 |
| 105                   |          | 1.227   | 1.227    | 0.001  |
| Max                   |          | 1.226   | 1.225    | -0.001 |
| Average               |          | 1.226   | 1.223    | -0.003 |
| Std Dev               |          | 0.000   | 0.001    | 0.001  |



| 5.97_V_REFCAP_500K_5V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit             |       |       |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                   | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average               | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                   | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.225 | 1.224 |
| UL                    | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |

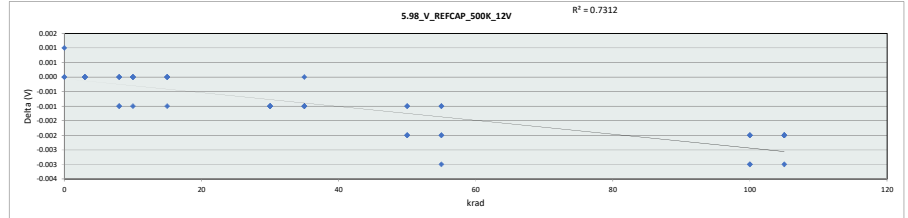


# HDR TID Report

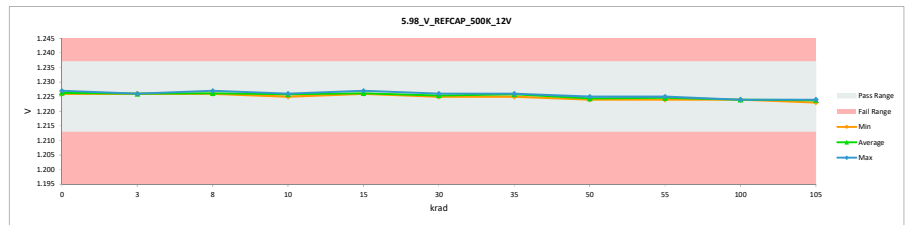
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.98_V_REFCAP_500K_12V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 1.226   | 1.226    | 0.000  |
| 0                      | 726      | 1.226   | 1.226    | 0.000  |
| 0                      | 791      | 1.226   | 1.227    | 0.001  |
| 3                      | 689      | 1.226   | 1.226    | 0.000  |
| 3                      | 688      | 1.226   | 1.226    | 0.000  |
| 3                      | 700      | 1.226   | 1.226    | 0.000  |
| 3                      | 482      | 1.226   | 1.226    | 0.000  |
| 3                      | 1033     | 1.226   | 1.226    | 0.000  |
| 8                      | 442      | 1.227   | 1.226    | -0.001 |
| 8                      | 699      | 1.227   | 1.226    | -0.001 |
| 8                      | 344      | 1.226   | 1.226    | 0.000  |
| 8                      | 355      | 1.227   | 1.227    | 0.000  |
| 8                      | 750      | 1.226   | 1.226    | 0.000  |
| 10                     | 537      | 1.226   | 1.226    | 0.000  |
| 10                     | 396      | 1.226   | 1.226    | 0.000  |
| 10                     | 521      | 1.226   | 1.226    | 0.000  |
| 10                     | 535      | 1.226   | 1.225    | -0.001 |
| 10                     | 526      | 1.226   | 1.226    | 0.000  |
| 15                     | 540      | 1.227   | 1.227    | 0.000  |
| 15                     | 387      | 1.226   | 1.226    | 0.000  |
| 15                     | 787      | 1.226   | 1.226    | 0.000  |
| 15                     | 1042     | 1.227   | 1.226    | -0.001 |
| 15                     | 483      | 1.226   | 1.226    | 0.000  |
| 30                     | 597      | 1.227   | 1.226    | -0.001 |
| 30                     | 853      | 1.226   | 1.225    | -0.001 |
| 30                     | 416      | 1.226   | 1.225    | -0.001 |
| 30                     | 949      | 1.227   | 1.226    | -0.001 |
| 30                     | 221      | 1.226   | 1.225    | -0.001 |
| 35                     | 538      | 1.226   | 1.225    | -0.001 |
| 35                     | 164      | 1.227   | 1.226    | -0.001 |
| 35                     | 1018     | 1.227   | 1.226    | -0.001 |
| 35                     | 462      | 1.226   | 1.226    | 0.000  |
| 35                     | 1032     | 1.227   | 1.226    | -0.001 |
| 50                     | 566      | 1.226   | 1.224    | -0.002 |
| 50                     | 197      | 1.226   | 1.224    | -0.002 |
| 50                     | 793      | 1.226   | 1.225    | -0.001 |
| 50                     | 802      | 1.226   | 1.224    | -0.002 |
| 50                     | 61       | 1.226   | 1.225    | -0.001 |
| 55                     | 795      | 1.227   | 1.225    | -0.002 |
| 55                     | 921      | 1.227   | 1.224    | -0.003 |
| 55                     | 741      | 1.226   | 1.225    | -0.001 |
| 55                     | 809      | 1.226   | 1.225    | -0.001 |
| 55                     | 804      | 1.226   | 1.224    | -0.002 |
| 100                    | 449      | 1.226   | 1.224    | -0.002 |
| 100                    | 541      | 1.226   | 1.224    | -0.002 |
| 100                    | 476      | 1.227   | 1.224    | -0.003 |
| 100                    | 45       | 1.227   | 1.224    | -0.003 |
| 100                    | 642      | 1.226   | 1.224    | -0.002 |
| 105                    | 1036     | 1.226   | 1.224    | -0.002 |
| 105                    | 1038     | 1.226   | 1.224    | -0.002 |
| 105                    | 203      | 1.226   | 1.224    | -0.002 |
| 105                    | 1029     | 1.226   | 1.223    | -0.003 |
| 105                    | 1027     | 1.226   | 1.224    | -0.002 |
| 105                    | Max      | 1.227   | 1.227    | 0.001  |
| Average                |          | 1.226   | 1.225    | -0.001 |
| Min                    |          | 1.226   | 1.223    | -0.003 |
| Std Dev                |          | 0.000   | 0.001    | 0.001  |



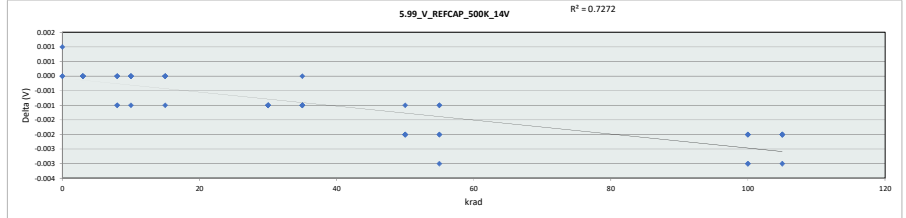
| 5.98_V_REFCAP_500K_12V |       |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site              |       |       |       |       |       |       |       |       |       |       |       |
| Tester                 |       |       |       |       |       |       |       |       |       |       |       |
| Test Number            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit              |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit              |       |       |       |       |       |       |       |       |       |       |       |
| krad                   | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                     | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                    | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average                | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                    | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                     | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



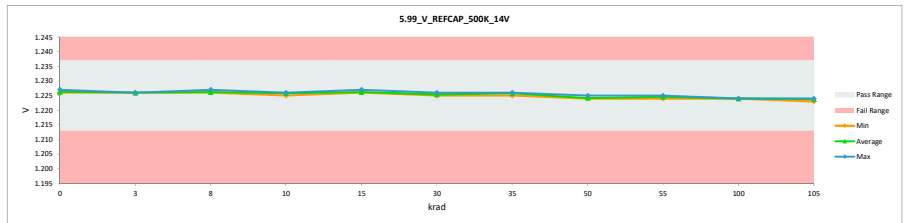
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.99_V_REFCAP_500K_14V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 1.226   | 1.226    | 0.000  |
| 0                      | 726      | 1.226   | 1.226    | 0.000  |
| 0                      | 791      | 1.226   | 1.227    | 0.001  |
| 3                      | 689      | 1.226   | 1.226    | 0.000  |
| 3                      | 688      | 1.226   | 1.226    | 0.000  |
| 3                      | 700      | 1.226   | 1.226    | 0.000  |
| 3                      | 482      | 1.226   | 1.226    | 0.000  |
| 3                      | 1033     | 1.226   | 1.226    | 0.000  |
| 8                      | 442      | 1.227   | 1.226    | -0.001 |
| 8                      | 699      | 1.227   | 1.226    | -0.001 |
| 8                      | 344      | 1.226   | 1.226    | 0.000  |
| 8                      | 355      | 1.227   | 1.227    | 0.000  |
| 8                      | 750      | 1.226   | 1.226    | 0.000  |
| 10                     | 537      | 1.226   | 1.226    | 0.000  |
| 10                     | 396      | 1.226   | 1.226    | 0.000  |
| 10                     | 521      | 1.226   | 1.226    | 0.000  |
| 10                     | 535      | 1.226   | 1.225    | -0.001 |
| 10                     | 526      | 1.226   | 1.226    | 0.000  |
| 15                     | 540      | 1.227   | 1.227    | 0.000  |
| 15                     | 387      | 1.226   | 1.226    | 0.000  |
| 15                     | 787      | 1.226   | 1.226    | 0.000  |
| 15                     | 1042     | 1.227   | 1.226    | -0.001 |
| 15                     | 483      | 1.226   | 1.226    | 0.000  |
| 30                     | 597      | 1.227   | 1.226    | -0.001 |
| 30                     | 853      | 1.226   | 1.225    | -0.001 |
| 30                     | 416      | 1.226   | 1.225    | -0.001 |
| 30                     | 949      | 1.227   | 1.226    | -0.001 |
| 30                     | 221      | 1.226   | 1.225    | -0.001 |
| 35                     | 538      | 1.226   | 1.225    | -0.001 |
| 35                     | 164      | 1.227   | 1.226    | -0.001 |
| 35                     | 1018     | 1.227   | 1.226    | -0.001 |
| 35                     | 462      | 1.226   | 1.226    | 0.000  |
| 35                     | 1032     | 1.227   | 1.226    | -0.001 |
| 50                     | 566      | 1.226   | 1.224    | -0.002 |
| 50                     | 197      | 1.226   | 1.224    | -0.002 |
| 50                     | 793      | 1.226   | 1.225    | -0.001 |
| 50                     | 802      | 1.226   | 1.224    | -0.002 |
| 50                     | 61       | 1.226   | 1.224    | -0.002 |
| 55                     | 795      | 1.227   | 1.225    | -0.002 |
| 55                     | 921      | 1.227   | 1.224    | -0.003 |
| 55                     | 741      | 1.226   | 1.225    | -0.001 |
| 55                     | 809      | 1.226   | 1.225    | -0.001 |
| 55                     | 804      | 1.226   | 1.224    | -0.002 |
| 100                    | 449      | 1.226   | 1.224    | -0.002 |
| 100                    | 541      | 1.226   | 1.224    | -0.002 |
| 100                    | 476      | 1.227   | 1.224    | -0.003 |
| 100                    | 45       | 1.227   | 1.224    | -0.003 |
| 100                    | 642      | 1.226   | 1.224    | -0.002 |
| 105                    | 1036     | 1.226   | 1.224    | -0.002 |
| 105                    | 1038     | 1.226   | 1.224    | -0.002 |
| 105                    | 203      | 1.226   | 1.224    | -0.002 |
| 105                    | 1029     | 1.226   | 1.223    | -0.003 |
| 105                    | 1027     | 1.226   | 1.224    | -0.002 |
| 105                    |          | 1.227   | 1.227    | 0.001  |
| Max                    |          | 1.226   | 1.225    | -0.001 |
| Average                |          | 1.226   | 1.223    | -0.003 |
| Min                    |          | 1.226   | 1.223    | -0.003 |
| Std Dev                |          | 0.000   | 0.001    | 0.001  |



| 5.99_V_REFCAP_500K_14V |       |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site              |       |       |       |       |       |       |       |       |       |       |       |
| Tester                 |       |       |       |       |       |       |       |       |       |       |       |
| Test Number            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit              |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit              |       |       |       |       |       |       |       |       |       |       |       |
| krad                   | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                     | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                    | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average                | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                    | 1.227 | 1.226 | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 |
| UL                     | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |

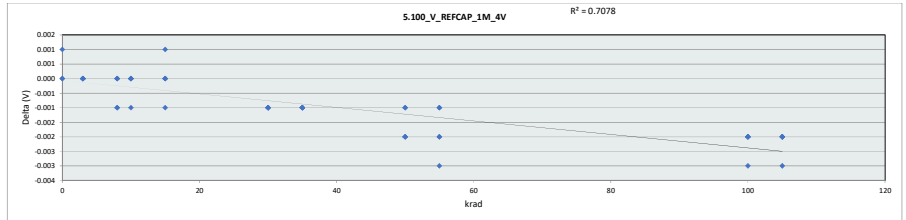


# HDR TID Report

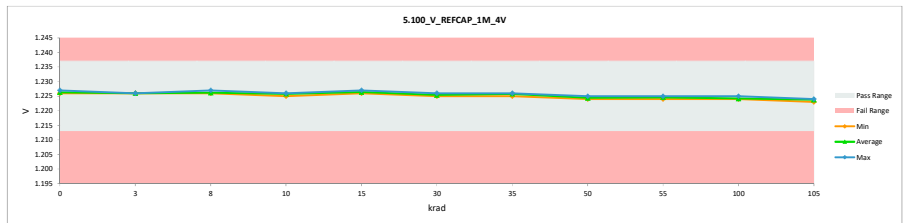
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.100_V_REFCAP_1M_4V |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 |          |         |          |        |
| Max Limit            |          |         |          |        |
| Min Limit            |          |         |          |        |
| krad                 | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                    | 552      | 1.226   | 1.226    | 0.000  |
| 0                    | 726      | 1.226   | 1.226    | 0.000  |
| 0                    | 791      | 1.226   | 1.227    | 0.001  |
| 3                    | 689      | 1.226   | 1.226    | 0.000  |
| 3                    | 688      | 1.226   | 1.226    | 0.000  |
| 3                    | 700      | 1.226   | 1.226    | 0.000  |
| 3                    | 482      | 1.226   | 1.226    | 0.000  |
| 3                    | 1033     | 1.226   | 1.226    | 0.000  |
| 8                    | 442      | 1.227   | 1.226    | -0.001 |
| 8                    | 699      | 1.227   | 1.226    | -0.001 |
| 8                    | 344      | 1.226   | 1.226    | 0.000  |
| 8                    | 355      | 1.227   | 1.227    | 0.000  |
| 8                    | 750      | 1.226   | 1.226    | 0.000  |
| 10                   | 537      | 1.226   | 1.226    | 0.000  |
| 10                   | 396      | 1.226   | 1.226    | 0.000  |
| 10                   | 521      | 1.226   | 1.226    | 0.000  |
| 10                   | 535      | 1.226   | 1.225    | -0.001 |
| 10                   | 526      | 1.226   | 1.226    | 0.000  |
| 15                   | 540      | 1.227   | 1.227    | 0.000  |
| 15                   | 387      | 1.226   | 1.226    | 0.000  |
| 15                   | 787      | 1.226   | 1.227    | 0.001  |
| 15                   | 1042     | 1.227   | 1.226    | -0.001 |
| 15                   | 483      | 1.226   | 1.226    | 0.000  |
| 30                   | 597      | 1.227   | 1.226    | -0.001 |
| 30                   | 853      | 1.226   | 1.225    | -0.001 |
| 30                   | 416      | 1.226   | 1.225    | -0.001 |
| 30                   | 949      | 1.227   | 1.226    | -0.001 |
| 30                   | 221      | 1.226   | 1.225    | -0.001 |
| 35                   | 538      | 1.226   | 1.225    | -0.001 |
| 35                   | 164      | 1.227   | 1.226    | -0.001 |
| 35                   | 1018     | 1.227   | 1.226    | -0.001 |
| 35                   | 462      | 1.227   | 1.226    | -0.001 |
| 35                   | 1032     | 1.227   | 1.226    | -0.001 |
| 50                   | 566      | 1.226   | 1.224    | -0.002 |
| 50                   | 197      | 1.226   | 1.224    | -0.002 |
| 50                   | 793      | 1.226   | 1.225    | -0.001 |
| 50                   | 802      | 1.226   | 1.224    | -0.002 |
| 50                   | 61       | 1.226   | 1.225    | -0.001 |
| 55                   | 795      | 1.227   | 1.225    | -0.002 |
| 55                   | 921      | 1.227   | 1.224    | -0.003 |
| 55                   | 741      | 1.226   | 1.225    | -0.001 |
| 55                   | 809      | 1.226   | 1.225    | -0.001 |
| 55                   | 804      | 1.226   | 1.224    | -0.002 |
| 100                  | 449      | 1.226   | 1.224    | -0.002 |
| 100                  | 541      | 1.226   | 1.224    | -0.002 |
| 100                  | 476      | 1.227   | 1.225    | -0.002 |
| 100                  | 45       | 1.227   | 1.224    | -0.003 |
| 100                  | 642      | 1.226   | 1.224    | -0.002 |
| 105                  | 1036     | 1.226   | 1.224    | -0.002 |
| 105                  | 1038     | 1.226   | 1.224    | -0.002 |
| 105                  | 203      | 1.226   | 1.224    | -0.002 |
| 105                  | 1029     | 1.226   | 1.223    | -0.003 |
| 105                  | 1027     | 1.226   | 1.224    | -0.002 |
| 105                  | Max      | 1.227   | 1.227    | 0.001  |
| 105                  | Average  | 1.226   | 1.225    | -0.001 |
| 105                  | Min      | 1.226   | 1.223    | -0.003 |
| 105                  | Std Dev  | 0.000   | 0.001    | 0.001  |



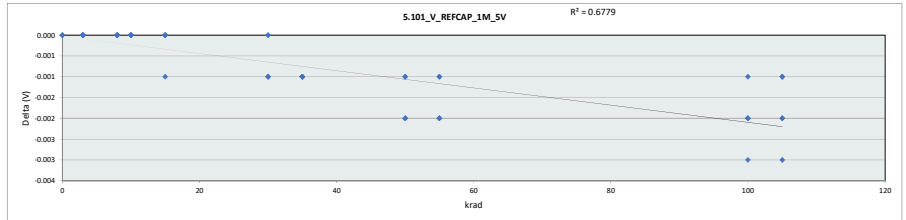
| 5.100_V_REFCAP_1M_4V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit            |       |       |       |       |       |       |       |       |       |       |       |
| krad                 | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                   | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                  | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average              | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                  | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.225 | 1.224 |
| UL                   | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



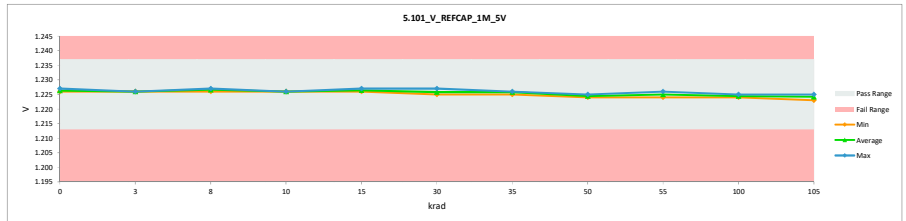
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| S.101_V_REFCAP_1M_5V |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 |          |         |          |        |
| Max Limit            |          |         |          |        |
| Min Limit            |          |         |          |        |
| krad                 | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                    | 552      | 1.226   | 1.226    | 0.000  |
| 0                    | 726      | 1.226   | 1.226    | 0.000  |
| 0                    | 791      | 1.227   | 1.227    | 0.000  |
| 3                    | 689      | 1.226   | 1.226    | 0.000  |
| 3                    | 688      | 1.226   | 1.226    | 0.000  |
| 3                    | 700      | 1.226   | 1.226    | 0.000  |
| 3                    | 482      | 1.226   | 1.226    | 0.000  |
| 3                    | 1033     | 1.226   | 1.226    | 0.000  |
| 8                    | 442      | 1.227   | 1.227    | 0.000  |
| 8                    | 699      | 1.227   | 1.227    | 0.000  |
| 8                    | 344      | 1.226   | 1.226    | 0.000  |
| 8                    | 355      | 1.227   | 1.227    | 0.000  |
| 8                    | 750      | 1.226   | 1.226    | 0.000  |
| 10                   | 537      | 1.226   | 1.226    | 0.000  |
| 10                   | 396      | 1.226   | 1.226    | 0.000  |
| 10                   | 521      | 1.226   | 1.226    | 0.000  |
| 10                   | 535      | 1.226   | 1.226    | 0.000  |
| 10                   | 526      | 1.226   | 1.226    | 0.000  |
| 15                   | 540      | 1.227   | 1.227    | 0.000  |
| 15                   | 387      | 1.226   | 1.226    | 0.000  |
| 15                   | 787      | 1.227   | 1.227    | 0.000  |
| 15                   | 1042     | 1.227   | 1.226    | -0.001 |
| 15                   | 483      | 1.226   | 1.226    | 0.000  |
| 30                   | 597      | 1.227   | 1.227    | 0.000  |
| 30                   | 853      | 1.226   | 1.225    | -0.001 |
| 30                   | 416      | 1.226   | 1.226    | 0.000  |
| 30                   | 949      | 1.227   | 1.226    | -0.001 |
| 30                   | 221      | 1.226   | 1.225    | -0.001 |
| 35                   | 538      | 1.226   | 1.225    | -0.001 |
| 35                   | 164      | 1.227   | 1.226    | -0.001 |
| 35                   | 1018     | 1.227   | 1.226    | -0.001 |
| 35                   | 462      | 1.227   | 1.226    | -0.001 |
| 35                   | 1032     | 1.227   | 1.226    | -0.001 |
| 50                   | 566      | 1.226   | 1.224    | -0.002 |
| 50                   | 197      | 1.226   | 1.224    | -0.002 |
| 50                   | 793      | 1.226   | 1.225    | -0.001 |
| 50                   | 802      | 1.226   | 1.224    | -0.002 |
| 50                   | 61       | 1.226   | 1.225    | -0.001 |
| 55                   | 795      | 1.227   | 1.226    | -0.001 |
| 55                   | 921      | 1.227   | 1.225    | -0.002 |
| 55                   | 741      | 1.226   | 1.225    | -0.001 |
| 55                   | 809      | 1.227   | 1.225    | -0.002 |
| 55                   | 804      | 1.226   | 1.224    | -0.002 |
| 100                  | 449      | 1.226   | 1.224    | -0.002 |
| 100                  | 541      | 1.226   | 1.224    | -0.002 |
| 100                  | 476      | 1.227   | 1.225    | -0.002 |
| 100                  | 45       | 1.227   | 1.224    | -0.003 |
| 100                  | 642      | 1.226   | 1.225    | -0.001 |
| 105                  | 1036     | 1.226   | 1.225    | -0.001 |
| 105                  | 1038     | 1.226   | 1.224    | -0.002 |
| 105                  | 203      | 1.226   | 1.224    | -0.002 |
| 105                  | 1029     | 1.226   | 1.223    | -0.003 |
| 105                  | 1027     | 1.226   | 1.225    | -0.001 |
| 105                  |          | 1.227   | 1.227    | 0.000  |
| Max                  |          | 1.226   | 1.226    | -0.001 |
| Average              |          | 1.226   | 1.223    | -0.003 |
| Std Dev              |          | 0.000   | 0.001    | 0.001  |



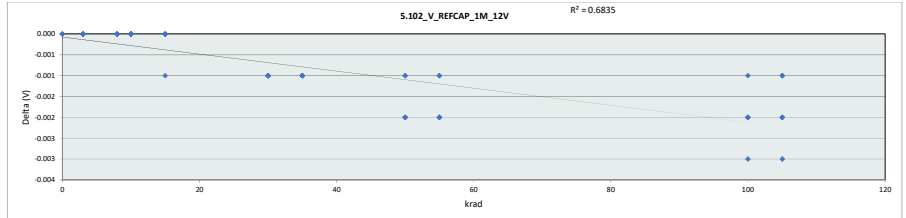
| S.101_V_REFCAP_1M_5V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit            |       |       |       |       |       |       |       |       |       |       |       |
| krad                 | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                   | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                  | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average              | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                  | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.227 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 |
| UL                   | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



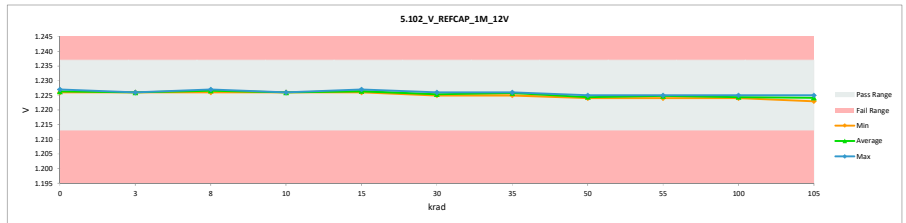
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.102_V_REFCAP_1M_12V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 1.226   | 1.226    | 0.000  |
| 0                     | 726      | 1.226   | 1.226    | 0.000  |
| 0                     | 791      | 1.227   | 1.227    | 0.000  |
| 3                     | 689      | 1.226   | 1.226    | 0.000  |
| 3                     | 688      | 1.226   | 1.226    | 0.000  |
| 3                     | 700      | 1.226   | 1.226    | 0.000  |
| 3                     | 482      | 1.226   | 1.226    | 0.000  |
| 3                     | 1033     | 1.226   | 1.226    | 0.000  |
| 8                     | 442      | 1.227   | 1.227    | 0.000  |
| 8                     | 699      | 1.227   | 1.227    | 0.000  |
| 8                     | 344      | 1.226   | 1.226    | 0.000  |
| 8                     | 355      | 1.227   | 1.227    | 0.000  |
| 8                     | 750      | 1.226   | 1.226    | 0.000  |
| 10                    | 537      | 1.226   | 1.226    | 0.000  |
| 10                    | 396      | 1.226   | 1.226    | 0.000  |
| 10                    | 521      | 1.226   | 1.226    | 0.000  |
| 10                    | 535      | 1.226   | 1.226    | 0.000  |
| 10                    | 526      | 1.226   | 1.226    | 0.000  |
| 15                    | 540      | 1.227   | 1.227    | 0.000  |
| 15                    | 387      | 1.226   | 1.226    | 0.000  |
| 15                    | 787      | 1.227   | 1.227    | 0.000  |
| 15                    | 1042     | 1.227   | 1.226    | -0.001 |
| 15                    | 483      | 1.226   | 1.226    | 0.000  |
| 30                    | 597      | 1.227   | 1.226    | -0.001 |
| 30                    | 853      | 1.226   | 1.225    | -0.001 |
| 30                    | 416      | 1.226   | 1.225    | -0.001 |
| 30                    | 949      | 1.227   | 1.226    | -0.001 |
| 30                    | 221      | 1.226   | 1.225    | -0.001 |
| 35                    | 538      | 1.226   | 1.225    | -0.001 |
| 35                    | 164      | 1.227   | 1.226    | -0.001 |
| 35                    | 1018     | 1.227   | 1.226    | -0.001 |
| 35                    | 462      | 1.227   | 1.226    | -0.001 |
| 35                    | 1032     | 1.227   | 1.226    | -0.001 |
| 50                    | 566      | 1.226   | 1.224    | -0.002 |
| 50                    | 197      | 1.226   | 1.224    | -0.002 |
| 50                    | 793      | 1.226   | 1.225    | -0.001 |
| 50                    | 802      | 1.226   | 1.224    | -0.002 |
| 50                    | 61       | 1.226   | 1.225    | -0.001 |
| 55                    | 795      | 1.227   | 1.225    | -0.002 |
| 55                    | 921      | 1.227   | 1.225    | -0.002 |
| 55                    | 741      | 1.226   | 1.225    | -0.001 |
| 55                    | 809      | 1.226   | 1.225    | -0.001 |
| 55                    | 804      | 1.226   | 1.224    | -0.002 |
| 100                   | 449      | 1.226   | 1.224    | -0.002 |
| 100                   | 541      | 1.226   | 1.224    | -0.002 |
| 100                   | 476      | 1.227   | 1.225    | -0.002 |
| 100                   | 45       | 1.227   | 1.224    | -0.003 |
| 100                   | 642      | 1.226   | 1.225    | -0.001 |
| 105                   | 1036     | 1.226   | 1.225    | -0.001 |
| 105                   | 1038     | 1.226   | 1.224    | -0.002 |
| 105                   | 203      | 1.226   | 1.224    | -0.002 |
| 105                   | 1029     | 1.226   | 1.223    | -0.003 |
| 105                   | 1027     | 1.226   | 1.225    | -0.001 |
| 105                   |          | 1.227   | 1.227    | 0.000  |
| Max                   |          | 1.226   | 1.225    | -0.001 |
| Average               |          | 1.226   | 1.223    | -0.003 |
| Min                   |          | 1.226   | 1.223    | -0.003 |
| Std Dev               |          | 0.000   | 0.001    | 0.001  |



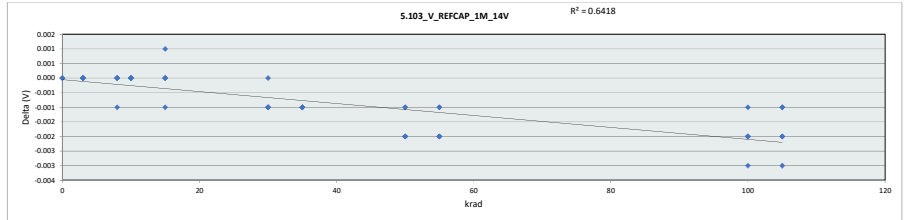
| 5.102_V_REFCAP_1M_12V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit             |       |       |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                   | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average               | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                   | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.225 | 1.225 |
| UL                    | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



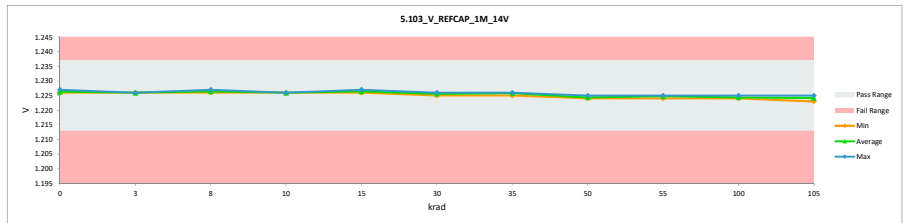
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.103_V_REFCAP_1M_14V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 1.226   | 1.226    | 0.000  |
| 0                     | 726      | 1.226   | 1.226    | 0.000  |
| 0                     | 791      | 1.227   | 1.227    | 0.000  |
| 3                     | 689      | 1.226   | 1.226    | 0.000  |
| 3                     | 688      | 1.226   | 1.226    | 0.000  |
| 3                     | 700      | 1.226   | 1.226    | 0.000  |
| 3                     | 482      | 1.226   | 1.226    | 0.000  |
| 3                     | 1033     | 1.226   | 1.226    | 0.000  |
| 8                     | 442      | 1.227   | 1.226    | -0.001 |
| 8                     | 699      | 1.227   | 1.227    | 0.000  |
| 8                     | 344      | 1.226   | 1.226    | 0.000  |
| 8                     | 355      | 1.227   | 1.227    | 0.000  |
| 8                     | 750      | 1.226   | 1.226    | 0.000  |
| 10                    | 537      | 1.226   | 1.226    | 0.000  |
| 10                    | 396      | 1.226   | 1.226    | 0.000  |
| 10                    | 521      | 1.226   | 1.226    | 0.000  |
| 10                    | 535      | 1.226   | 1.226    | 0.000  |
| 10                    | 526      | 1.226   | 1.226    | 0.000  |
| 15                    | 540      | 1.227   | 1.227    | 0.000  |
| 15                    | 387      | 1.226   | 1.226    | 0.000  |
| 15                    | 787      | 1.226   | 1.227    | 0.001  |
| 15                    | 1042     | 1.227   | 1.226    | -0.001 |
| 15                    | 483      | 1.226   | 1.226    | 0.000  |
| 30                    | 597      | 1.227   | 1.226    | -0.001 |
| 30                    | 853      | 1.226   | 1.225    | -0.001 |
| 30                    | 416      | 1.226   | 1.226    | 0.000  |
| 30                    | 949      | 1.227   | 1.226    | -0.001 |
| 30                    | 221      | 1.226   | 1.225    | -0.001 |
| 35                    | 538      | 1.226   | 1.225    | -0.001 |
| 35                    | 164      | 1.227   | 1.226    | -0.001 |
| 35                    | 1018     | 1.227   | 1.226    | -0.001 |
| 35                    | 462      | 1.227   | 1.226    | -0.001 |
| 35                    | 1032     | 1.227   | 1.226    | -0.001 |
| 50                    | 566      | 1.226   | 1.224    | -0.002 |
| 50                    | 197      | 1.226   | 1.224    | -0.002 |
| 50                    | 793      | 1.226   | 1.225    | -0.001 |
| 50                    | 802      | 1.226   | 1.224    | -0.002 |
| 50                    | 61       | 1.226   | 1.225    | -0.001 |
| 55                    | 795      | 1.227   | 1.225    | -0.002 |
| 55                    | 921      | 1.227   | 1.225    | -0.002 |
| 55                    | 741      | 1.226   | 1.225    | -0.001 |
| 55                    | 809      | 1.226   | 1.225    | -0.001 |
| 55                    | 804      | 1.226   | 1.224    | -0.002 |
| 100                   | 449      | 1.226   | 1.224    | -0.002 |
| 100                   | 541      | 1.226   | 1.224    | -0.002 |
| 100                   | 476      | 1.227   | 1.225    | -0.002 |
| 100                   | 45       | 1.227   | 1.224    | -0.003 |
| 100                   | 642      | 1.226   | 1.225    | -0.001 |
| 105                   | 1036     | 1.226   | 1.225    | -0.001 |
| 105                   | 1038     | 1.226   | 1.224    | -0.002 |
| 105                   | 203      | 1.226   | 1.224    | -0.002 |
| 105                   | 1029     | 1.226   | 1.223    | -0.003 |
| 105                   | 1027     | 1.226   | 1.225    | -0.001 |
| 105                   |          | 1.227   | 1.227    | 0.001  |
| Max                   |          | 1.226   | 1.225    | -0.001 |
| Average               |          | 1.226   | 1.223    | -0.003 |
| Min                   |          | 1.226   | 1.223    | -0.003 |
| Std Dev               |          | 0.000   | 0.001    | 0.001  |



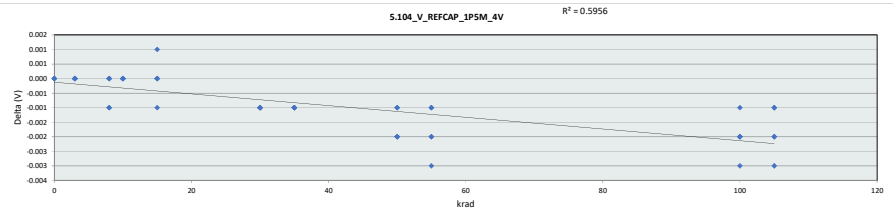
| 5.103_V_REFCAP_1M_14V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit             |       |       |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                   | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average               | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                   | 1.227 | 1.226 | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.225 | 1.225 | 1.225 | 1.225 |
| UL                    | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



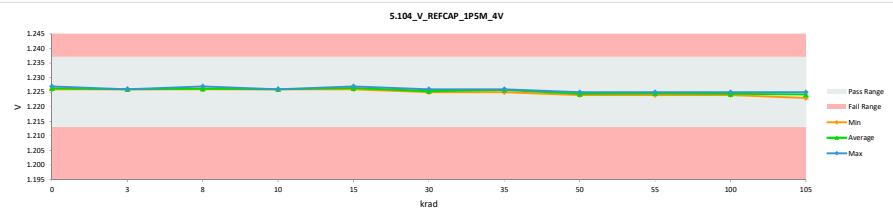
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.104_V_REFCAP_1P5M_4V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 1.226   | 1.226    | 0.000  |
| 0                      | 726      | 1.226   | 1.226    | 0.000  |
| 0                      | 791      | 1.227   | 1.227    | 0.000  |
| 3                      | 689      | 1.226   | 1.226    | 0.000  |
| 3                      | 688      | 1.226   | 1.226    | 0.000  |
| 3                      | 700      | 1.226   | 1.226    | 0.000  |
| 3                      | 482      | 1.226   | 1.226    | 0.000  |
| 3                      | 1033     | 1.226   | 1.226    | 0.000  |
| 8                      | 442      | 1.227   | 1.226    | -0.001 |
| 8                      | 699      | 1.227   | 1.226    | -0.001 |
| 8                      | 344      | 1.226   | 1.226    | 0.000  |
| 8                      | 355      | 1.227   | 1.227    | 0.000  |
| 8                      | 750      | 1.226   | 1.226    | 0.000  |
| 10                     | 537      | 1.226   | 1.226    | 0.000  |
| 10                     | 396      | 1.226   | 1.226    | 0.000  |
| 10                     | 521      | 1.226   | 1.226    | 0.000  |
| 10                     | 535      | 1.226   | 1.226    | 0.000  |
| 10                     | 526      | 1.226   | 1.226    | 0.000  |
| 15                     | 540      | 1.227   | 1.227    | 0.000  |
| 15                     | 387      | 1.226   | 1.226    | 0.000  |
| 15                     | 787      | 1.226   | 1.227    | 0.001  |
| 15                     | 1042     | 1.227   | 1.226    | -0.001 |
| 15                     | 483      | 1.226   | 1.226    | 0.000  |
| 30                     | 597      | 1.227   | 1.226    | -0.001 |
| 30                     | 853      | 1.226   | 1.225    | -0.001 |
| 30                     | 416      | 1.226   | 1.225    | -0.001 |
| 30                     | 949      | 1.227   | 1.226    | -0.001 |
| 30                     | 221      | 1.226   | 1.225    | -0.001 |
| 35                     | 538      | 1.226   | 1.225    | -0.001 |
| 35                     | 164      | 1.227   | 1.226    | -0.001 |
| 35                     | 1018     | 1.227   | 1.226    | -0.001 |
| 35                     | 462      | 1.227   | 1.226    | -0.001 |
| 35                     | 1032     | 1.227   | 1.226    | -0.001 |
| 50                     | 566      | 1.226   | 1.224    | -0.002 |
| 50                     | 197      | 1.226   | 1.224    | -0.002 |
| 50                     | 793      | 1.226   | 1.225    | -0.001 |
| 50                     | 802      | 1.226   | 1.224    | -0.002 |
| 50                     | 61       | 1.226   | 1.225    | -0.001 |
| 55                     | 795      | 1.227   | 1.225    | -0.002 |
| 55                     | 921      | 1.227   | 1.224    | -0.003 |
| 55                     | 741      | 1.226   | 1.225    | -0.001 |
| 55                     | 809      | 1.226   | 1.225    | -0.001 |
| 55                     | 804      | 1.226   | 1.224    | -0.002 |
| 100                    | 449      | 1.226   | 1.224    | -0.002 |
| 100                    | 541      | 1.226   | 1.224    | -0.002 |
| 100                    | 476      | 1.227   | 1.225    | -0.002 |
| 100                    | 45       | 1.227   | 1.224    | -0.003 |
| 100                    | 642      | 1.226   | 1.225    | -0.001 |
| 105                    | 1036     | 1.226   | 1.225    | -0.001 |
| 105                    | 1038     | 1.226   | 1.224    | -0.002 |
| 105                    | 203      | 1.226   | 1.224    | -0.002 |
| 105                    | 1029     | 1.226   | 1.223    | -0.003 |
| 105                    | 1027     | 1.226   | 1.225    | -0.001 |
| 105                    | Max      | 1.227   | 1.227    | 0.001  |
| Average                |          | 1.226   | 1.225    | -0.001 |
| Min                    |          | 1.226   | 1.223    | -0.003 |
| Std Dev                |          | 0.000   | 0.001    | 0.001  |



| 5.104_V_REFCAP_1P5M_4V |       |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site              |       |       |       |       |       |       |       |       |       |       |       |
| Tester                 |       |       |       |       |       |       |       |       |       |       |       |
| Test Number            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit              |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit              |       |       |       |       |       |       |       |       |       |       |       |
| krad                   | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                     | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                    | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average                | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                    | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.225 | 1.225 |
| UL                     | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |

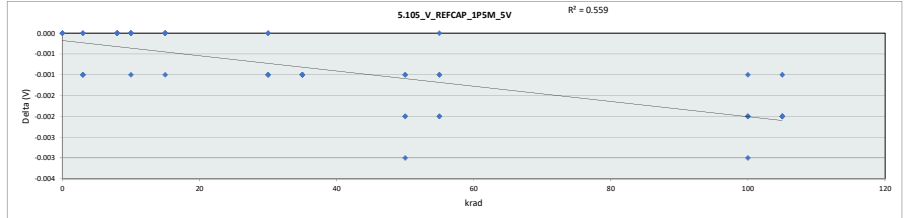


# HDR TID Report

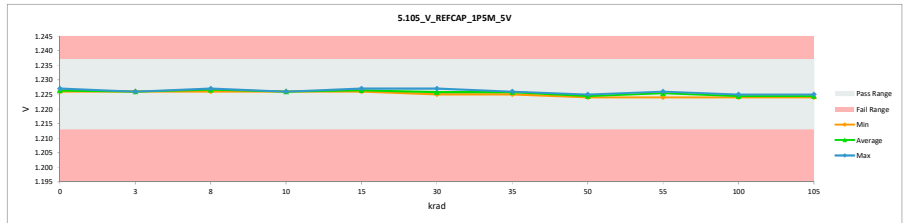
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.105_V_REFCAP_1PSM_SV |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 1.226   | 1.226    | 0.000  |
| 0                      | 726      | 1.226   | 1.226    | 0.000  |
| 0                      | 791      | 1.227   | 1.227    | 0.000  |
| 3                      | 689      | 1.227   | 1.226    | -0.001 |
| 3                      | 688      | 1.227   | 1.226    | -0.001 |
| 3                      | 700      | 1.226   | 1.226    | 0.000  |
| 3                      | 482      | 1.226   | 1.226    | 0.000  |
| 3                      | 1033     | 1.227   | 1.226    | -0.001 |
| 8                      | 442      | 1.227   | 1.227    | 0.000  |
| 8                      | 699      | 1.227   | 1.227    | 0.000  |
| 8                      | 344      | 1.226   | 1.226    | 0.000  |
| 8                      | 355      | 1.227   | 1.227    | 0.000  |
| 8                      | 750      | 1.226   | 1.226    | 0.000  |
| 10                     | 537      | 1.226   | 1.226    | 0.000  |
| 10                     | 396      | 1.226   | 1.226    | 0.000  |
| 10                     | 521      | 1.227   | 1.226    | -0.001 |
| 10                     | 535      | 1.226   | 1.226    | 0.000  |
| 10                     | 526      | 1.226   | 1.226    | 0.000  |
| 15                     | 540      | 1.227   | 1.227    | 0.000  |
| 15                     | 387      | 1.226   | 1.226    | 0.000  |
| 15                     | 787      | 1.227   | 1.227    | 0.000  |
| 15                     | 1042     | 1.227   | 1.226    | -0.001 |
| 15                     | 483      | 1.226   | 1.226    | 0.000  |
| 30                     | 597      | 1.227   | 1.227    | 0.000  |
| 30                     | 853      | 1.226   | 1.225    | -0.001 |
| 30                     | 416      | 1.226   | 1.226    | 0.000  |
| 30                     | 949      | 1.227   | 1.226    | -0.001 |
| 30                     | 221      | 1.226   | 1.225    | -0.001 |
| 35                     | 538      | 1.226   | 1.225    | -0.001 |
| 35                     | 164      | 1.227   | 1.226    | -0.001 |
| 35                     | 1018     | 1.227   | 1.226    | -0.001 |
| 35                     | 462      | 1.227   | 1.226    | -0.001 |
| 35                     | 1032     | 1.227   | 1.226    | -0.001 |
| 50                     | 566      | 1.226   | 1.224    | -0.002 |
| 50                     | 197      | 1.226   | 1.224    | -0.002 |
| 50                     | 793      | 1.226   | 1.225    | -0.001 |
| 50                     | 802      | 1.227   | 1.224    | -0.003 |
| 50                     | 61       | 1.226   | 1.225    | -0.001 |
| 55                     | 795      | 1.227   | 1.226    | -0.001 |
| 55                     | 921      | 1.227   | 1.225    | -0.002 |
| 55                     | 741      | 1.226   | 1.226    | 0.000  |
| 55                     | 809      | 1.227   | 1.226    | -0.001 |
| 55                     | 804      | 1.226   | 1.224    | -0.002 |
| 100                    | 449      | 1.226   | 1.224    | -0.002 |
| 100                    | 541      | 1.226   | 1.224    | -0.002 |
| 100                    | 476      | 1.227   | 1.225    | -0.002 |
| 100                    | 45       | 1.227   | 1.224    | -0.003 |
| 100                    | 642      | 1.226   | 1.225    | -0.001 |
| 105                    | 1036     | 1.226   | 1.225    | -0.001 |
| 105                    | 1038     | 1.226   | 1.224    | -0.002 |
| 105                    | 203      | 1.226   | 1.224    | -0.002 |
| 105                    | 1029     | 1.226   | 1.224    | -0.002 |
| 105                    | 1027     | 1.227   | 1.225    | -0.002 |
| 105                    |          | 1.227   | 1.227    | 0.000  |
| Max                    |          | 1.226   | 1.226    | -0.001 |
| Average                |          | 1.226   | 1.224    | -0.003 |
| Min                    |          | 1.226   | 1.224    | -0.003 |
| Std Dev                |          | 0.001   | 0.001    | 0.001  |



| 5.105_V_REFCAP_1PSM_SV |       |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site              |       |       |       |       |       |       |       |       |       |       |       |
| Tester                 |       |       |       |       |       |       |       |       |       |       |       |
| Test Number            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit              |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit              |       |       |       |       |       |       |       |       |       |       |       |
| krad                   | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                     | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                    | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.224 |
| Average                | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                    | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.227 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 |
| UL                     | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |

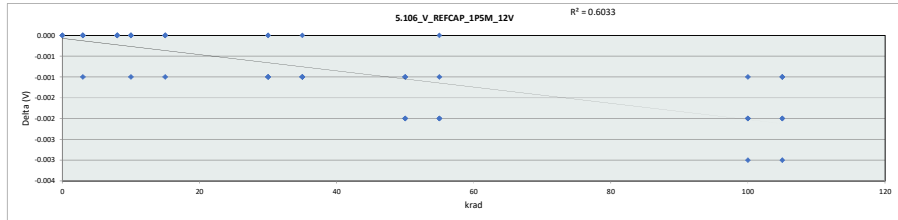


# HDR TID Report

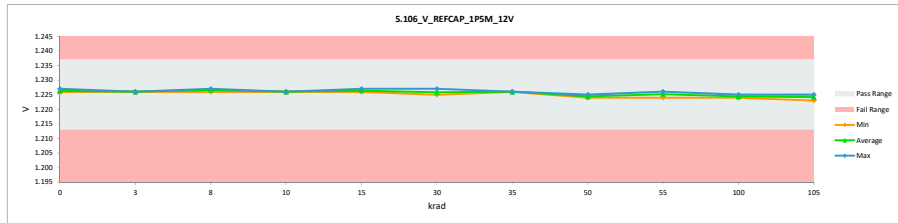
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.106_V_REFCAP_1PSM_12V |          |         |          |        |
|-------------------------|----------|---------|----------|--------|
| Test Site               |          |         |          |        |
| Tester                  |          |         |          |        |
| Test Number             |          |         |          |        |
| Unit                    |          |         |          |        |
| Max Limit               |          |         |          |        |
| Min Limit               |          |         |          |        |
| krad                    | Serial # | PRE HDR | POST HDR | Delta  |
| 0                       | 552      | 1.226   | 1.226    | 0.000  |
| 0                       | 726      | 1.226   | 1.226    | 0.000  |
| 0                       | 791      | 1.227   | 1.227    | 0.000  |
| 3                       | 689      | 1.226   | 1.226    | 0.000  |
| 3                       | 688      | 1.227   | 1.226    | -0.001 |
| 3                       | 700      | 1.226   | 1.226    | 0.000  |
| 3                       | 482      | 1.226   | 1.226    | 0.000  |
| 3                       | 1033     | 1.226   | 1.226    | 0.000  |
| 8                       | 442      | 1.227   | 1.227    | 0.000  |
| 8                       | 699      | 1.227   | 1.227    | 0.000  |
| 8                       | 344      | 1.226   | 1.226    | 0.000  |
| 8                       | 355      | 1.227   | 1.227    | 0.000  |
| 8                       | 750      | 1.226   | 1.226    | 0.000  |
| 10                      | 537      | 1.226   | 1.226    | 0.000  |
| 10                      | 396      | 1.226   | 1.226    | 0.000  |
| 10                      | 521      | 1.227   | 1.226    | -0.001 |
| 10                      | 535      | 1.226   | 1.226    | 0.000  |
| 10                      | 526      | 1.226   | 1.226    | 0.000  |
| 15                      | 540      | 1.227   | 1.227    | 0.000  |
| 15                      | 387      | 1.226   | 1.226    | 0.000  |
| 15                      | 787      | 1.227   | 1.227    | 0.000  |
| 15                      | 1042     | 1.227   | 1.226    | -0.001 |
| 15                      | 483      | 1.226   | 1.226    | 0.000  |
| 30                      | 597      | 1.227   | 1.227    | 0.000  |
| 30                      | 853      | 1.226   | 1.225    | -0.001 |
| 30                      | 416      | 1.226   | 1.226    | 0.000  |
| 30                      | 949      | 1.227   | 1.226    | -0.001 |
| 30                      | 221      | 1.226   | 1.225    | -0.001 |
| 35                      | 538      | 1.226   | 1.226    | 0.000  |
| 35                      | 164      | 1.227   | 1.226    | -0.001 |
| 35                      | 1018     | 1.227   | 1.226    | -0.001 |
| 35                      | 462      | 1.227   | 1.226    | -0.001 |
| 35                      | 1032     | 1.227   | 1.226    | -0.001 |
| 50                      | 566      | 1.226   | 1.224    | -0.002 |
| 50                      | 197      | 1.226   | 1.224    | -0.002 |
| 50                      | 793      | 1.226   | 1.225    | -0.001 |
| 50                      | 802      | 1.226   | 1.224    | -0.002 |
| 50                      | 61       | 1.226   | 1.225    | -0.001 |
| 55                      | 795      | 1.227   | 1.226    | -0.001 |
| 55                      | 921      | 1.227   | 1.225    | -0.002 |
| 55                      | 741      | 1.226   | 1.226    | 0.000  |
| 55                      | 809      | 1.227   | 1.225    | -0.002 |
| 55                      | 804      | 1.226   | 1.224    | -0.002 |
| 100                     | 449      | 1.226   | 1.224    | -0.002 |
| 100                     | 541      | 1.226   | 1.224    | -0.002 |
| 100                     | 476      | 1.227   | 1.225    | -0.002 |
| 100                     | 45       | 1.227   | 1.224    | -0.003 |
| 100                     | 642      | 1.226   | 1.225    | -0.001 |
| 105                     | 1036     | 1.226   | 1.225    | -0.001 |
| 105                     | 1038     | 1.226   | 1.224    | -0.002 |
| 105                     | 203      | 1.226   | 1.224    | -0.002 |
| 105                     | 1029     | 1.226   | 1.223    | -0.003 |
| 105                     | 1027     | 1.226   | 1.225    | -0.001 |
| 105                     |          | 1.227   | 1.227    | 0.000  |
| Max                     |          | 1.226   | 1.226    | -0.001 |
| Average                 |          | 1.226   | 1.223    | -0.003 |
| Std Dev                 |          | 0.000   | 0.001    | 0.001  |



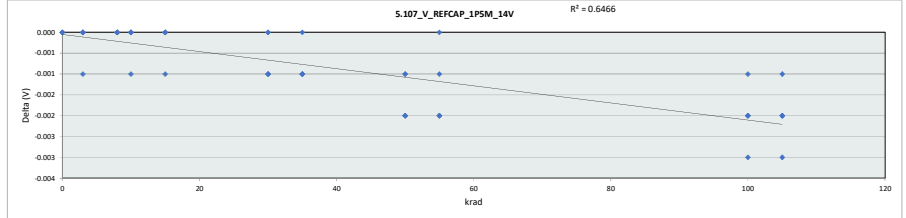
| 5.106_V_REFCAP_1PSM_12V |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site               |       |       |       |       |       |       |       |       |       |       |       |
| Tester                  |       |       |       |       |       |       |       |       |       |       |       |
| Test Number             |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit               |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit               |       |       |       |       |       |       |       |       |       |       |       |
| krad                    | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                      | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                     | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average                 | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                     | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.227 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 |
| UL                      | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



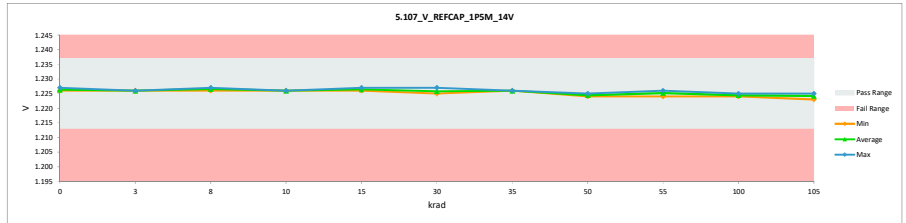
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.107_V_REFCAP_1PSM_14V |          |         |          |        |
|-------------------------|----------|---------|----------|--------|
| Test Site               |          |         |          |        |
| Tester                  |          |         |          |        |
| Test Number             |          |         |          |        |
| Unit                    |          |         |          |        |
| Max Limit               |          |         |          |        |
| Min Limit               |          |         |          |        |
| krad                    | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                       | 552      | 1.226   | 1.226    | 0.000  |
| 0                       | 726      | 1.226   | 1.226    | 0.000  |
| 0                       | 791      | 1.227   | 1.227    | 0.000  |
| 3                       | 689      | 1.226   | 1.226    | 0.000  |
| 3                       | 688      | 1.227   | 1.226    | -0.001 |
| 3                       | 700      | 1.226   | 1.226    | 0.000  |
| 3                       | 482      | 1.226   | 1.226    | 0.000  |
| 3                       | 1033     | 1.226   | 1.226    | 0.000  |
| 8                       | 442      | 1.227   | 1.227    | 0.000  |
| 8                       | 699      | 1.227   | 1.227    | 0.000  |
| 8                       | 344      | 1.226   | 1.226    | 0.000  |
| 8                       | 355      | 1.227   | 1.227    | 0.000  |
| 8                       | 750      | 1.226   | 1.226    | 0.000  |
| 10                      | 537      | 1.226   | 1.226    | 0.000  |
| 10                      | 396      | 1.226   | 1.226    | 0.000  |
| 10                      | 521      | 1.227   | 1.226    | -0.001 |
| 10                      | 535      | 1.226   | 1.226    | 0.000  |
| 10                      | 526      | 1.226   | 1.226    | 0.000  |
| 15                      | 540      | 1.227   | 1.227    | 0.000  |
| 15                      | 387      | 1.226   | 1.226    | 0.000  |
| 15                      | 787      | 1.227   | 1.227    | 0.000  |
| 15                      | 1042     | 1.227   | 1.226    | -0.001 |
| 15                      | 483      | 1.226   | 1.226    | 0.000  |
| 30                      | 597      | 1.227   | 1.227    | 0.000  |
| 30                      | 853      | 1.226   | 1.225    | -0.001 |
| 30                      | 416      | 1.226   | 1.226    | 0.000  |
| 30                      | 949      | 1.227   | 1.226    | -0.001 |
| 30                      | 221      | 1.226   | 1.225    | -0.001 |
| 35                      | 538      | 1.226   | 1.226    | 0.000  |
| 35                      | 164      | 1.227   | 1.226    | -0.001 |
| 35                      | 1018     | 1.227   | 1.226    | -0.001 |
| 35                      | 462      | 1.227   | 1.226    | -0.001 |
| 35                      | 1032     | 1.227   | 1.226    | -0.001 |
| 50                      | 566      | 1.226   | 1.224    | -0.002 |
| 50                      | 197      | 1.226   | 1.224    | -0.002 |
| 50                      | 793      | 1.226   | 1.225    | -0.001 |
| 50                      | 802      | 1.226   | 1.224    | -0.002 |
| 50                      | 61       | 1.226   | 1.225    | -0.001 |
| 55                      | 795      | 1.227   | 1.226    | -0.001 |
| 55                      | 921      | 1.227   | 1.225    | -0.002 |
| 55                      | 741      | 1.226   | 1.226    | 0.000  |
| 55                      | 809      | 1.227   | 1.225    | -0.002 |
| 55                      | 804      | 1.226   | 1.224    | -0.002 |
| 100                     | 449      | 1.226   | 1.224    | -0.002 |
| 100                     | 541      | 1.226   | 1.224    | -0.002 |
| 100                     | 476      | 1.227   | 1.225    | -0.002 |
| 100                     | 45       | 1.227   | 1.224    | -0.003 |
| 100                     | 642      | 1.226   | 1.225    | -0.001 |
| 105                     | 1036     | 1.226   | 1.225    | -0.001 |
| 105                     | 1038     | 1.226   | 1.224    | -0.002 |
| 105                     | 203      | 1.226   | 1.224    | -0.002 |
| 105                     | 1029     | 1.226   | 1.223    | -0.003 |
| 105                     | 1027     | 1.227   | 1.225    | -0.002 |
| 105                     | Max      | 1.227   | 1.227    | 0.000  |
| Average                 |          | 1.226   | 1.226    | -0.001 |
| Min                     |          | 1.226   | 1.223    | -0.003 |
| Std Dev                 |          | 0.000   | 0.001    | 0.001  |



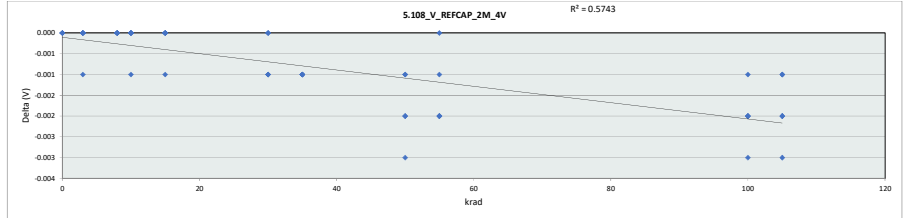
| 5.107_V_REFCAP_1PSM_14V |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site               |       |       |       |       |       |       |       |       |       |       |       |
| Tester                  |       |       |       |       |       |       |       |       |       |       |       |
| Test Number             |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit               |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit               |       |       |       |       |       |       |       |       |       |       |       |
| krad                    | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                      | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                     | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average                 | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                     | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.227 | 1.226 | 1.225 | 1.225 | 1.225 |
| UL                      | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



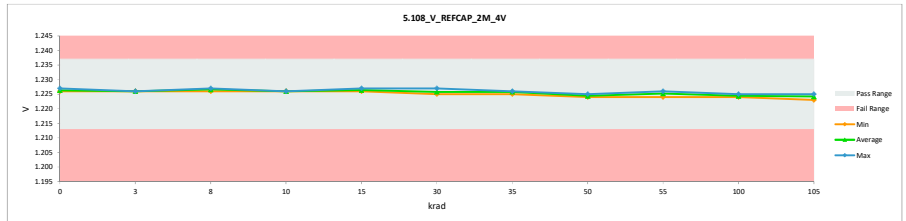
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.108_V_REFCAP_2M_4V |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 |          |         |          |        |
| Max Limit            |          |         |          |        |
| Min Limit            |          |         |          |        |
| krad                 | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                    | 552      | 1.226   | 1.226    | 0.000  |
| 0                    | 726      | 1.226   | 1.226    | 0.000  |
| 0                    | 791      | 1.227   | 1.227    | 0.000  |
| 3                    | 689      | 1.226   | 1.226    | 0.000  |
| 3                    | 688      | 1.227   | 1.226    | -0.001 |
| 3                    | 700      | 1.226   | 1.226    | 0.000  |
| 3                    | 482      | 1.226   | 1.226    | 0.000  |
| 3                    | 1033     | 1.226   | 1.226    | 0.000  |
| 8                    | 442      | 1.227   | 1.227    | 0.000  |
| 8                    | 699      | 1.227   | 1.227    | 0.000  |
| 8                    | 344      | 1.226   | 1.226    | 0.000  |
| 8                    | 355      | 1.227   | 1.227    | 0.000  |
| 8                    | 750      | 1.226   | 1.226    | 0.000  |
| 10                   | 537      | 1.226   | 1.226    | 0.000  |
| 10                   | 396      | 1.226   | 1.226    | 0.000  |
| 10                   | 521      | 1.227   | 1.226    | -0.001 |
| 10                   | 535      | 1.226   | 1.226    | 0.000  |
| 10                   | 526      | 1.226   | 1.226    | 0.000  |
| 15                   | 540      | 1.227   | 1.227    | 0.000  |
| 15                   | 387      | 1.226   | 1.226    | 0.000  |
| 15                   | 787      | 1.227   | 1.227    | 0.000  |
| 15                   | 1042     | 1.227   | 1.226    | -0.001 |
| 15                   | 483      | 1.226   | 1.226    | 0.000  |
| 30                   | 597      | 1.227   | 1.227    | 0.000  |
| 30                   | 853      | 1.226   | 1.225    | -0.001 |
| 30                   | 416      | 1.226   | 1.226    | 0.000  |
| 30                   | 949      | 1.227   | 1.226    | -0.001 |
| 30                   | 221      | 1.226   | 1.225    | -0.001 |
| 35                   | 538      | 1.226   | 1.225    | -0.001 |
| 35                   | 164      | 1.227   | 1.226    | -0.001 |
| 35                   | 1018     | 1.227   | 1.226    | -0.001 |
| 35                   | 462      | 1.227   | 1.226    | -0.001 |
| 35                   | 1032     | 1.227   | 1.226    | -0.001 |
| 50                   | 566      | 1.226   | 1.224    | -0.002 |
| 50                   | 197      | 1.226   | 1.224    | -0.002 |
| 50                   | 793      | 1.226   | 1.225    | -0.001 |
| 50                   | 802      | 1.227   | 1.224    | -0.003 |
| 50                   | 61       | 1.226   | 1.225    | -0.001 |
| 55                   | 795      | 1.227   | 1.226    | -0.001 |
| 55                   | 921      | 1.227   | 1.225    | -0.002 |
| 55                   | 741      | 1.226   | 1.226    | 0.000  |
| 55                   | 809      | 1.227   | 1.225    | -0.002 |
| 55                   | 804      | 1.226   | 1.224    | -0.002 |
| 100                  | 449      | 1.226   | 1.224    | -0.002 |
| 100                  | 541      | 1.226   | 1.224    | -0.002 |
| 100                  | 476      | 1.227   | 1.225    | -0.002 |
| 100                  | 45       | 1.227   | 1.224    | -0.003 |
| 100                  | 642      | 1.226   | 1.225    | -0.001 |
| 105                  | 1036     | 1.226   | 1.225    | -0.001 |
| 105                  | 1038     | 1.226   | 1.224    | -0.002 |
| 105                  | 203      | 1.226   | 1.224    | -0.002 |
| 105                  | 1029     | 1.226   | 1.223    | -0.003 |
| 105                  | 1027     | 1.226   | 1.225    | -0.001 |
| 105                  |          | 1.227   | 1.227    | 0.000  |
| Max                  |          | 1.226   | 1.226    | -0.001 |
| Average              |          | 1.226   | 1.223    | -0.003 |
| Min                  |          | 1.226   | 1.223    | -0.003 |
| Std Dev              |          | 0.000   | 0.001    | 0.001  |



| 5.108_V_REFCAP_2M_4V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit            |       |       |       |       |       |       |       |       |       |       |       |
| krad                 | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                   | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                  | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.225 | 1.224 | 1.224 | 1.224 | 1.223 |
| Average              | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.226 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Max                  | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.227 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 |
| UL                   | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |

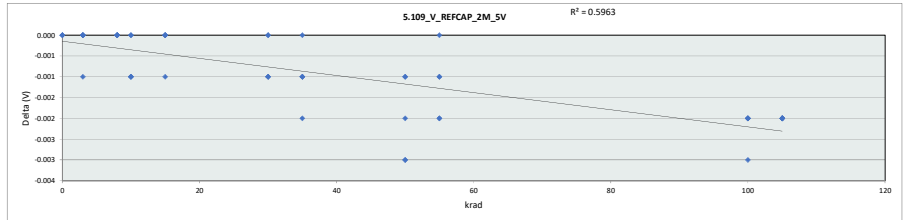


# HDR TID Report

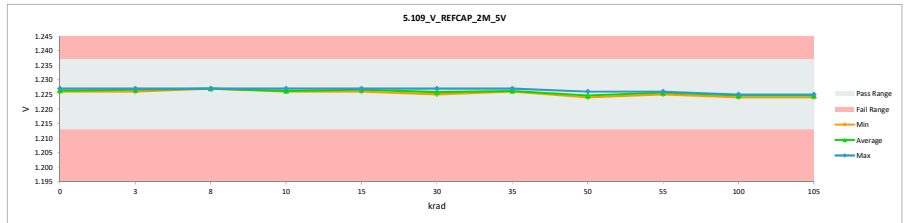
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.109_V_REFCAP_2M_5V |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 |          |         |          |        |
| Max Limit            |          |         |          |        |
| Min Limit            |          |         |          |        |
| krad                 | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                    | 552      | 1.226   | 1.226    | 0.000  |
| 0                    | 726      | 1.226   | 1.226    | 0.000  |
| 0                    | 791      | 1.227   | 1.227    | 0.000  |
| 3                    | 689      | 1.227   | 1.226    | -0.001 |
| 3                    | 688      | 1.227   | 1.227    | 0.000  |
| 3                    | 700      | 1.227   | 1.227    | 0.000  |
| 3                    | 482      | 1.226   | 1.226    | 0.000  |
| 3                    | 1033     | 1.227   | 1.227    | 0.000  |
| 8                    | 442      | 1.227   | 1.227    | 0.000  |
| 8                    | 699      | 1.227   | 1.227    | 0.000  |
| 8                    | 344      | 1.227   | 1.227    | 0.000  |
| 8                    | 355      | 1.227   | 1.227    | 0.000  |
| 8                    | 750      | 1.227   | 1.227    | 0.000  |
| 10                   | 537      | 1.227   | 1.226    | -0.001 |
| 10                   | 396      | 1.227   | 1.227    | 0.000  |
| 10                   | 521      | 1.227   | 1.226    | -0.001 |
| 10                   | 535      | 1.226   | 1.226    | 0.000  |
| 10                   | 526      | 1.227   | 1.226    | -0.001 |
| 15                   | 540      | 1.227   | 1.227    | 0.000  |
| 15                   | 387      | 1.227   | 1.226    | -0.001 |
| 15                   | 787      | 1.227   | 1.227    | 0.000  |
| 15                   | 1042     | 1.227   | 1.227    | 0.000  |
| 15                   | 483      | 1.226   | 1.226    | 0.000  |
| 30                   | 597      | 1.227   | 1.227    | 0.000  |
| 30                   | 853      | 1.226   | 1.225    | -0.001 |
| 30                   | 416      | 1.226   | 1.226    | 0.000  |
| 30                   | 949      | 1.227   | 1.226    | -0.001 |
| 30                   | 221      | 1.226   | 1.225    | -0.001 |
| 35                   | 538      | 1.227   | 1.226    | -0.001 |
| 35                   | 164      | 1.227   | 1.226    | -0.001 |
| 35                   | 1018     | 1.227   | 1.226    | -0.001 |
| 35                   | 462      | 1.227   | 1.227    | 0.000  |
| 35                   | 1032     | 1.228   | 1.226    | -0.002 |
| 50                   | 566      | 1.226   | 1.224    | -0.002 |
| 50                   | 197      | 1.227   | 1.224    | -0.003 |
| 50                   | 793      | 1.227   | 1.226    | -0.001 |
| 50                   | 802      | 1.227   | 1.224    | -0.003 |
| 50                   | 61       | 1.226   | 1.225    | -0.001 |
| 55                   | 795      | 1.227   | 1.226    | -0.001 |
| 55                   | 921      | 1.227   | 1.225    | -0.002 |
| 55                   | 741      | 1.226   | 1.226    | 0.000  |
| 55                   | 809      | 1.227   | 1.226    | -0.001 |
| 55                   | 804      | 1.227   | 1.225    | -0.002 |
| 100                  | 449      | 1.226   | 1.224    | -0.002 |
| 100                  | 541      | 1.227   | 1.225    | -0.002 |
| 100                  | 476      | 1.227   | 1.225    | -0.002 |
| 100                  | 45       | 1.227   | 1.224    | -0.003 |
| 100                  | 642      | 1.227   | 1.225    | -0.002 |
| 105                  | 1036     | 1.227   | 1.225    | -0.002 |
| 105                  | 1038     | 1.226   | 1.224    | -0.002 |
| 105                  | 203      | 1.227   | 1.225    | -0.002 |
| 105                  | 1029     | 1.226   | 1.224    | -0.002 |
| 105                  | 1027     | 1.227   | 1.225    | -0.002 |
| 105                  | Max      | 1.228   | 1.227    | 0.000  |
| 105                  | Average  | 1.227   | 1.226    | -0.001 |
| 105                  | Min      | 1.226   | 1.224    | -0.003 |
| 105                  | Std Dev  | 0.000   | 0.001    | 0.001  |



| 5.109_V_REFCAP_2M_5V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit            |       |       |       |       |       |       |       |       |       |       |       |
| krad                 | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                   | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                  | 1.226 | 1.226 | 1.227 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Average              | 1.226 | 1.227 | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.225 | 1.226 | 1.225 | 1.225 |
| Max                  | 1.227 | 1.227 | 1.227 | 1.227 | 1.227 | 1.227 | 1.227 | 1.226 | 1.226 | 1.225 | 1.225 |
| UL                   | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |

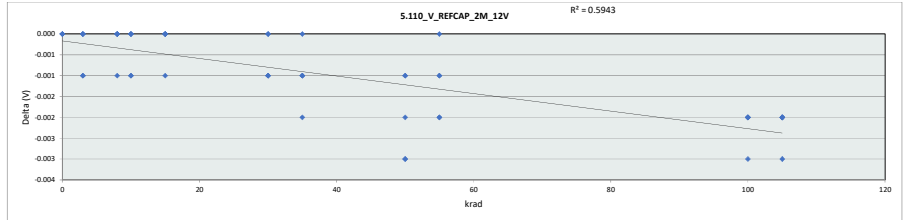


# HDR TID Report

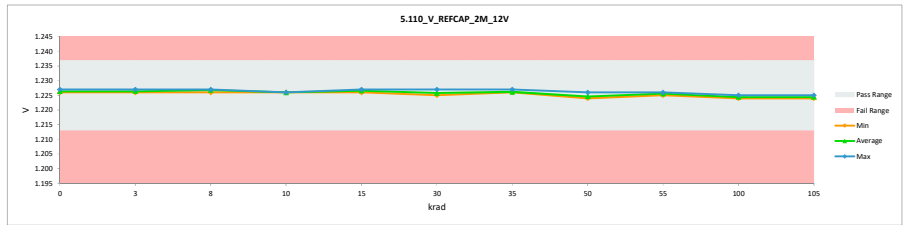
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.110_V_REFCAP_2M_12V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 1.226   | 1.226    | 0.000  |
| 0                     | 726      | 1.226   | 1.226    | 0.000  |
| 0                     | 791      | 1.227   | 1.227    | 0.000  |
| 3                     | 689      | 1.227   | 1.226    | -0.001 |
| 3                     | 688      | 1.227   | 1.227    | 0.000  |
| 3                     | 700      | 1.227   | 1.227    | 0.000  |
| 3                     | 482      | 1.226   | 1.226    | 0.000  |
| 3                     | 1033     | 1.227   | 1.226    | -0.001 |
| 8                     | 442      | 1.227   | 1.227    | 0.000  |
| 8                     | 699      | 1.227   | 1.227    | 0.000  |
| 8                     | 344      | 1.227   | 1.226    | -0.001 |
| 8                     | 355      | 1.227   | 1.227    | 0.000  |
| 8                     | 750      | 1.227   | 1.227    | 0.000  |
| 10                    | 537      | 1.226   | 1.226    | 0.000  |
| 10                    | 396      | 1.226   | 1.226    | 0.000  |
| 10                    | 521      | 1.227   | 1.226    | -0.001 |
| 10                    | 535      | 1.226   | 1.226    | 0.000  |
| 10                    | 526      | 1.227   | 1.226    | -0.001 |
| 15                    | 540      | 1.227   | 1.227    | 0.000  |
| 15                    | 387      | 1.227   | 1.226    | -0.001 |
| 15                    | 787      | 1.227   | 1.227    | 0.000  |
| 15                    | 1042     | 1.227   | 1.227    | 0.000  |
| 15                    | 483      | 1.226   | 1.226    | 0.000  |
| 30                    | 597      | 1.227   | 1.227    | 0.000  |
| 30                    | 853      | 1.226   | 1.225    | -0.001 |
| 30                    | 416      | 1.226   | 1.226    | 0.000  |
| 30                    | 949      | 1.227   | 1.226    | -0.001 |
| 30                    | 221      | 1.226   | 1.225    | -0.001 |
| 35                    | 538      | 1.227   | 1.226    | -0.001 |
| 35                    | 164      | 1.227   | 1.226    | -0.001 |
| 35                    | 1018     | 1.227   | 1.226    | -0.001 |
| 35                    | 462      | 1.227   | 1.227    | 0.000  |
| 35                    | 1032     | 1.228   | 1.226    | -0.002 |
| 50                    | 566      | 1.226   | 1.224    | -0.002 |
| 50                    | 197      | 1.227   | 1.224    | -0.003 |
| 50                    | 793      | 1.227   | 1.226    | -0.001 |
| 50                    | 802      | 1.227   | 1.224    | -0.003 |
| 50                    | 61       | 1.226   | 1.225    | -0.001 |
| 55                    | 795      | 1.227   | 1.226    | -0.001 |
| 55                    | 921      | 1.227   | 1.225    | -0.002 |
| 55                    | 741      | 1.226   | 1.226    | 0.000  |
| 55                    | 809      | 1.227   | 1.226    | -0.001 |
| 55                    | 804      | 1.227   | 1.225    | -0.002 |
| 100                   | 449      | 1.226   | 1.224    | -0.002 |
| 100                   | 541      | 1.226   | 1.224    | -0.002 |
| 100                   | 476      | 1.227   | 1.225    | -0.002 |
| 100                   | 45       | 1.227   | 1.224    | -0.003 |
| 100                   | 642      | 1.227   | 1.225    | -0.002 |
| 105                   | 1036     | 1.227   | 1.225    | -0.002 |
| 105                   | 1038     | 1.226   | 1.224    | -0.002 |
| 105                   | 203      | 1.227   | 1.224    | -0.003 |
| 105                   | 1029     | 1.226   | 1.224    | -0.002 |
| 105                   | 1027     | 1.227   | 1.225    | -0.002 |
| 105                   | Max      | 1.228   | 1.227    | 0.000  |
| 105                   | Average  | 1.227   | 1.226    | -0.001 |
| 105                   | Min      | 1.226   | 1.224    | -0.003 |
| 105                   | Std Dev  | 0.001   | 0.001    | 0.001  |



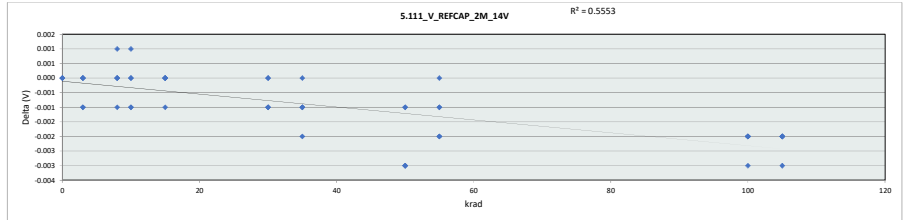
| 5.110_V_REFCAP_2M_12V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit             |       |       |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                   | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Average               | 1.226 | 1.226 | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.224 |
| Max                   | 1.227 | 1.227 | 1.227 | 1.226 | 1.227 | 1.227 | 1.227 | 1.226 | 1.226 | 1.225 | 1.225 |
| UL                    | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |



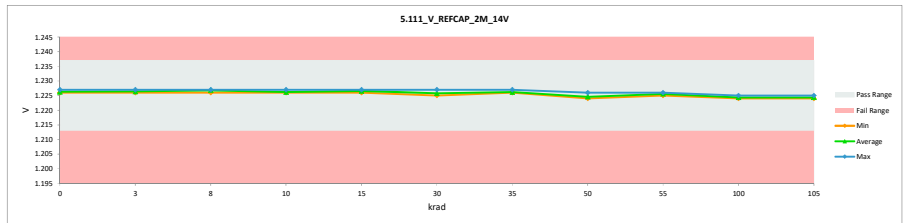
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 5.111_V_REFCAP_2M_14V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 1.226   | 1.226    | 0.000  |
| 0                     | 726      | 1.226   | 1.226    | 0.000  |
| 0                     | 791      | 1.227   | 1.227    | 0.000  |
| 3                     | 689      | 1.227   | 1.226    | -0.001 |
| 3                     | 688      | 1.227   | 1.227    | 0.000  |
| 3                     | 700      | 1.227   | 1.227    | 0.000  |
| 3                     | 482      | 1.226   | 1.226    | 0.000  |
| 3                     | 1033     | 1.227   | 1.226    | -0.001 |
| 8                     | 442      | 1.227   | 1.227    | 0.000  |
| 8                     | 699      | 1.227   | 1.227    | 0.000  |
| 8                     | 344      | 1.227   | 1.226    | -0.001 |
| 8                     | 355      | 1.227   | 1.227    | 0.000  |
| 8                     | 750      | 1.226   | 1.227    | 0.001  |
| 10                    | 537      | 1.226   | 1.226    | 0.000  |
| 10                    | 396      | 1.226   | 1.227    | 0.001  |
| 10                    | 521      | 1.227   | 1.226    | -0.001 |
| 10                    | 535      | 1.226   | 1.226    | 0.000  |
| 10                    | 526      | 1.227   | 1.226    | -0.001 |
| 15                    | 540      | 1.227   | 1.227    | 0.000  |
| 15                    | 387      | 1.227   | 1.226    | -0.001 |
| 15                    | 787      | 1.227   | 1.227    | 0.000  |
| 15                    | 1042     | 1.227   | 1.227    | 0.000  |
| 15                    | 483      | 1.226   | 1.226    | 0.000  |
| 30                    | 597      | 1.227   | 1.227    | 0.000  |
| 30                    | 853      | 1.226   | 1.225    | -0.001 |
| 30                    | 416      | 1.226   | 1.226    | 0.000  |
| 30                    | 949      | 1.227   | 1.226    | -0.001 |
| 30                    | 221      | 1.226   | 1.225    | -0.001 |
| 35                    | 538      | 1.227   | 1.226    | -0.001 |
| 35                    | 164      | 1.227   | 1.226    | -0.001 |
| 35                    | 1018     | 1.227   | 1.226    | -0.001 |
| 35                    | 462      | 1.227   | 1.227    | 0.000  |
| 35                    | 1032     | 1.228   | 1.226    | -0.002 |
| 50                    | 566      | 1.227   | 1.224    | -0.003 |
| 50                    | 197      | 1.227   | 1.224    | -0.003 |
| 50                    | 793      | 1.227   | 1.226    | -0.001 |
| 50                    | 802      | 1.227   | 1.224    | -0.003 |
| 50                    | 61       | 1.226   | 1.225    | -0.001 |
| 55                    | 795      | 1.227   | 1.226    | -0.001 |
| 55                    | 921      | 1.227   | 1.225    | -0.002 |
| 55                    | 741      | 1.226   | 1.226    | 0.000  |
| 55                    | 809      | 1.227   | 1.226    | -0.001 |
| 55                    | 804      | 1.227   | 1.225    | -0.002 |
| 100                   | 449      | 1.226   | 1.224    | -0.002 |
| 100                   | 541      | 1.226   | 1.224    | -0.002 |
| 100                   | 476      | 1.227   | 1.225    | -0.002 |
| 100                   | 45       | 1.227   | 1.224    | -0.003 |
| 100                   | 642      | 1.227   | 1.225    | -0.002 |
| 105                   | 1036     | 1.227   | 1.225    | -0.002 |
| 105                   | 1038     | 1.226   | 1.224    | -0.002 |
| 105                   | 203      | 1.227   | 1.224    | -0.003 |
| 105                   | 1029     | 1.226   | 1.224    | -0.002 |
| 105                   | 1027     | 1.227   | 1.225    | -0.002 |
| 105                   | Max      | 1.228   | 1.227    | 0.001  |
| 105                   | Average  | 1.227   | 1.226    | -0.001 |
| 105                   | Min      | 1.226   | 1.224    | -0.003 |
| 105                   | Std Dev  | 0.001   | 0.001    | 0.001  |



| 5.111_V_REFCAP_2M_14V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit             |       |       |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 | 1.213 |
| Min                   | 1.226 | 1.226 | 1.226 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.225 | 1.224 | 1.224 |
| Average               | 1.226 | 1.226 | 1.227 | 1.226 | 1.227 | 1.226 | 1.226 | 1.225 | 1.226 | 1.224 | 1.224 |
| Max                   | 1.227 | 1.227 | 1.227 | 1.227 | 1.227 | 1.227 | 1.227 | 1.226 | 1.226 | 1.225 | 1.225 |
| UL                    | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 | 1.237 |

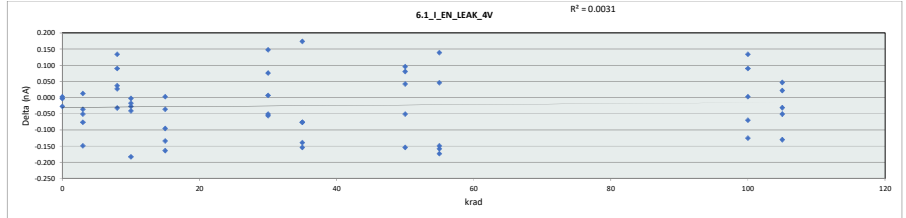


# HDR TID Report

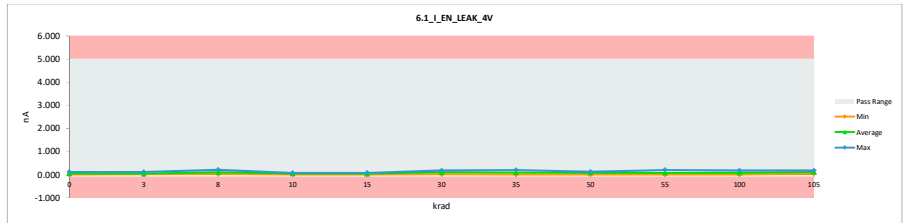
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.1_I_EN_LEAK_4V |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             | nA       | nA      |          |        |
| Max Limit        | 5        | 5       |          |        |
| Min Limit        | -0.1     | -0.1    |          |        |
| krad             | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                | 552      | 0.112   | 0.115    | 0.003  |
| 0                | 726      | 0.015   | 0.012    | -0.003 |
| 0                | 791      | 0.034   | 0.007    | -0.027 |
| 3                | 689      | 0.024   | 0.037    | 0.013  |
| 3                | 688      | 0.063   | 0.027    | -0.036 |
| 3                | 700      | 0.161   | 0.110    | -0.051 |
| 3                | 482      | 0.171   | 0.022    | -0.149 |
| 3                | 1033     | 0.093   | 0.017    | -0.076 |
| 8                | 442      | 0.073   | 0.207    | 0.134  |
| 8                | 699      | 0.034   | 0.071    | 0.037  |
| 8                | 344      | 0.024   | 0.051    | 0.027  |
| 8                | 355      | 0.015   | 0.105    | 0.090  |
| 8                | 750      | 0.073   | 0.041    | -0.032 |
| 10               | 537      | 0.073   | 0.056    | -0.017 |
| 10               | 396      | 0.112   | 0.071    | -0.041 |
| 10               | 521      | 0.210   | 0.027    | -0.183 |
| 10               | 535      | 0.034   | 0.007    | -0.027 |
| 10               | 526      | 0.073   | 0.071    | -0.002 |
| 15               | 540      | 0.132   | 0.037    | -0.095 |
| 15               | 387      | 0.210   | 0.076    | -0.134 |
| 15               | 787      | 0.171   | 0.007    | -0.164 |
| 15               | 1042     | 0.024   | 0.027    | 0.003  |
| 15               | 483      | 0.102   | 0.066    | -0.036 |
| 30               | 597      | 0.015   | 0.163    | 0.148  |
| 30               | 853      | 0.054   | 0.061    | 0.007  |
| 30               | 416      | 0.102   | 0.178    | 0.076  |
| 30               | 949      | 0.073   | 0.022    | -0.051 |
| 30               | 221      | 0.122   | 0.066    | -0.056 |
| 35               | 538      | 0.024   | 0.198    | 0.174  |
| 35               | 164      | 0.259   | 0.105    | -0.154 |
| 35               | 1018     | 0.141   | 0.002    | -0.139 |
| 35               | 462      | 0.122   | 0.046    | -0.076 |
| 35               | 1032     | 0.171   | 0.095    | -0.076 |
| 50               | 566      | 0.161   | 0.007    | -0.154 |
| 50               | 197      | 0.034   | 0.076    | 0.042  |
| 50               | 793      | 0.024   | 0.120    | 0.096  |
| 50               | 802      | 0.034   | 0.115    | 0.081  |
| 50               | 61       | 0.122   | 0.071    | -0.051 |
| 55               | 795      | 0.151   | 0.002    | -0.149 |
| 55               | 921      | 0.190   | 0.032    | -0.158 |
| 55               | 741      | 0.063   | 0.202    | 0.139  |
| 55               | 809      | 0.190   | 0.017    | -0.173 |
| 55               | 804      | 0.093   | 0.139    | 0.046  |
| 100              | 449      | 0.102   | 0.032    | -0.070 |
| 100              | 541      | 0.132   | 0.007    | -0.125 |
| 100              | 476      | 0.044   | 0.178    | 0.134  |
| 100              | 45       | 0.005   | 0.095    | 0.090  |
| 100              | 642      | 0.063   | 0.066    | 0.003  |
| 105              | 1036     | 0.181   | 0.051    | -0.130 |
| 105              | 1038     | 0.112   | 0.081    | -0.031 |
| 105              | 203      | 0.102   | 0.124    | 0.022  |
| 105              | 1029     | 0.102   | 0.149    | 0.047  |
| 105              | 1027     | 0.229   | 0.178    | -0.051 |
| 105              | Max      | 0.259   | 0.207    | 0.174  |
| 105              | Average  | 0.099   | 0.074    | -0.025 |
| 105              | Min      | 0.005   | 0.002    | -0.183 |
| 105              | Std Dev  | 0.064   | 0.058    | 0.093  |



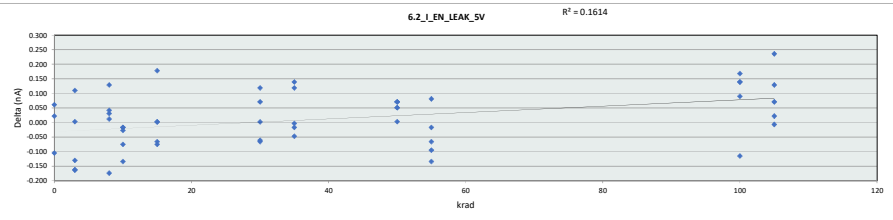
| 6.1_I_EN_LEAK_4V |        |        |        |        |        |        |        |        |        |        |        |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site        |        |        |        |        |        |        |        |        |        |        |        |
| Tester           |        |        |        |        |        |        |        |        |        |        |        |
| Test Number      |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit        | 5      | nA     |        |        |        |        |        |        |        |        |        |
| Min Limit        | -0.1   | nA     |        |        |        |        |        |        |        |        |        |
| krad             | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL               | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 |
| Min              | 0.007  | 0.017  | 0.041  | 0.007  | 0.007  | 0.022  | 0.002  | 0.007  | 0.002  | 0.007  | 0.051  |
| Average          | 0.045  | 0.043  | 0.095  | 0.046  | 0.043  | 0.098  | 0.089  | 0.078  | 0.078  | 0.076  | 0.117  |
| Max              | 0.115  | 0.110  | 0.207  | 0.071  | 0.076  | 0.178  | 0.198  | 0.120  | 0.202  | 0.178  | 0.178  |
| UL               | 5.000  |        | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  |



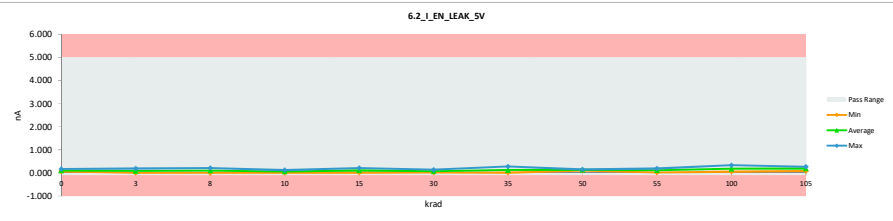
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.2_I_EN_LEAK_SV |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             |          |         |          |        |
| Max Limit        |          |         |          |        |
| Min Limit        |          |         |          |        |
| krad             | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                | 552      | 0.166   | 0.061    | -0.105 |
| 0                | 726      | 0.010   | 0.071    | 0.061  |
| 0                | 791      | 0.146   | 0.168    | 0.022  |
| 3                | 689      | 0.234   | 0.071    | -0.163 |
| 3                | 688      | 0.029   | 0.139    | 0.110  |
| 3                | 700      | 0.195   | 0.032    | -0.163 |
| 3                | 482      | 0.185   | 0.188    | 0.003  |
| 3                | 1033     | 0.197   | 0.007    | -0.130 |
| 8                | 442      | 0.176   | 0.002    | -0.174 |
| 8                | 699      | 0.078   | 0.207    | 0.129  |
| 8                | 344      | 0.059   | 0.090    | 0.031  |
| 8                | 355      | 0.049   | 0.061    | 0.012  |
| 8                | 790      | 0.117   | 0.159    | 0.042  |
| 10               | 537      | 0.051   | -0.027   | -0.077 |
| 10               | 396      | 0.205   | 0.071    | -0.134 |
| 10               | 521      | 0.195   | 0.120    | -0.075 |
| 10               | 535      | 0.068   | 0.051    | -0.017 |
| 10               | 526      | 0.029   | 0.012    | -0.017 |
| 15               | 540      | 0.166   | 0.100    | -0.066 |
| 15               | 387      | 0.127   | 0.129    | 0.002  |
| 15               | 787      | 0.039   | 0.217    | 0.178  |
| 15               | 1042     | 0.146   | 0.071    | -0.075 |
| 15               | 483      | 0.010   | 0.012    | 0.002  |
| 30               | 597      | 0.020   | 0.139    | 0.119  |
| 30               | 853      | 0.039   | 0.041    | 0.002  |
| 30               | 416      | 0.098   | 0.037    | -0.061 |
| 30               | 949      | 0.088   | 0.022    | -0.066 |
| 30               | 221      | 0.029   | 0.100    | 0.071  |
| 35               | 538      | 0.137   | 0.276    | 0.139  |
| 35               | 164      | 0.059   | 0.012    | -0.047 |
| 35               | 1018     | 0.146   | 0.129    | -0.017 |
| 35               | 462      | 0.098   | 0.095    | -0.003 |
| 35               | 1032     | 0.010   | 0.129    | 0.119  |
| 50               | 566      | 0.098   | 0.149    | 0.051  |
| 50               | 197      | 0.146   | 0.149    | 0.003  |
| 50               | 793      | 0.078   | 0.149    | 0.071  |
| 50               | 802      | 0.049   | 0.100    | 0.051  |
| 50               | 61       | 0.049   | 0.120    | 0.071  |
| 55               | 795      | 0.117   | 0.022    | -0.095 |
| 55               | 921      | 0.273   | 0.139    | -0.134 |
| 55               | 741      | 0.166   | 0.149    | -0.017 |
| 55               | 809      | 0.107   | 0.188    | 0.081  |
| 55               | 804      | 0.166   | 0.100    | -0.066 |
| 100              | 449      | 0.020   | 0.159    | 0.139  |
| 100              | 541      | 0.000   | 0.090    | 0.090  |
| 100              | 476      | 0.117   | 0.256    | 0.139  |
| 100              | 45       | 0.166   | 0.051    | -0.115 |
| 100              | 642      | 0.166   | 0.334    | 0.168  |
| 105              | 1036     | 0.088   | 0.081    | -0.007 |
| 105              | 1038     | 0.195   | 0.266    | 0.071  |
| 105              | 203      | 0.137   | 0.159    | 0.022  |
| 105              | 1029     | 0.020   | 0.256    | 0.236  |
| 105              | 1027     | 0.059   | 0.188    | 0.129  |
| 105              | Max      | 0.273   | 0.334    | 0.236  |
| 105              | Average  | 0.105   | 0.117    | 0.011  |
| 105              | Min      | 0.000   | 0.002    | -0.174 |
| 105              | Std Dev  | 0.066   | 0.077    | 0.097  |



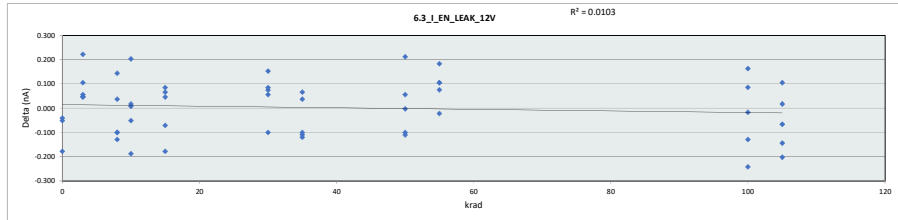
| 6.2_I_EN_LEAK_SV |        |        |        |        |        |        |        |        |        |        |        |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site        |        |        |        |        |        |        |        |        |        |        |        |
| Tester           |        |        |        |        |        |        |        |        |        |        |        |
| Test Number      |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit        | 5      | nA     |        |        |        |        |        |        |        |        |        |
| Min Limit        | -0.1   | nA     |        |        |        |        |        |        |        |        |        |
| krad             | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL               | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 |
| Min              | 0.061  | 0.007  | 0.002  | 0.012  | 0.012  | 0.022  | 0.012  | 0.100  | 0.022  | 0.051  | 0.081  |
| Average          | 0.100  | 0.087  | 0.104  | 0.061  | 0.106  | 0.068  | 0.128  | 0.133  | 0.120  | 0.178  | 0.190  |
| Max              | 0.168  | 0.188  | 0.207  | 0.120  | 0.217  | 0.139  | 0.276  | 0.149  | 0.188  | 0.334  | 0.266  |
| UL               | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  |



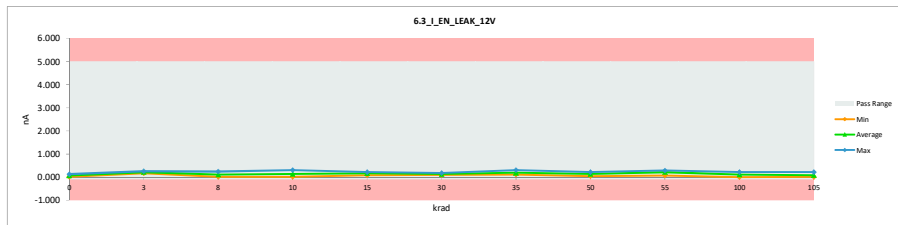
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.3 I_EN_LEAK_12V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              | nA       | nA      |          |        |
| Max Limit         | 5        | 5       |          |        |
| Min Limit         | -0.1     | -0.1    |          |        |
| krad              | Serial # | PRE HDR | POST HDR | Delta  |
| 0                 | 552      | 0.312   | 0.134    | -0.178 |
| 0                 | 726      | 0.068   | 0.017    | -0.051 |
| 0                 | 791      | 0.117   | 0.076    | -0.041 |
| 3                 | 689      | 0.146   | 0.193    | 0.047  |
| 3                 | 688      | 0.215   | 0.261    | 0.046  |
| 3                 | 700      | 0.117   | 0.222    | 0.105  |
| 3                 | 482      | 0.010   | 0.232    | 0.222  |
| 3                 | 1033     | 0.117   | 0.173    | 0.056  |
| 8                 | 442      | 0.146   | 0.046    | -0.100 |
| 8                 | 699      | 0.156   | 0.193    | 0.037  |
| 8                 | 344      | 0.098   | 0.242    | 0.144  |
| 8                 | 355      | 0.176   | 0.076    | -0.100 |
| 8                 | 790      | 0.146   | 0.017    | -0.129 |
| 10                | 537      | 0.107   | 0.310    | 0.203  |
| 10                | 396      | 0.185   | 0.134    | -0.051 |
| 10                | 521      | 0.205   | 0.017    | -0.188 |
| 10                | 535      | 0.107   | 0.115    | 0.008  |
| 10                | 526      | 0.098   | 0.115    | 0.017  |
| 15                | 540      | 0.137   | 0.222    | 0.085  |
| 15                | 387      | 0.078   | 0.144    | 0.066  |
| 15                | 787      | 0.166   | 0.212    | 0.046  |
| 15                | 1042     | 0.273   | 0.202    | -0.071 |
| 15                | 483      | 0.263   | 0.085    | -0.178 |
| 30                | 597      | 0.010   | 0.095    | 0.085  |
| 30                | 853      | 0.205   | 0.105    | -0.100 |
| 30                | 416      | 0.010   | 0.163    | 0.153  |
| 30                | 949      | 0.127   | 0.183    | 0.056  |
| 30                | 221      | 0.088   | 0.163    | 0.075  |
| 35                | 538      | 0.176   | 0.242    | 0.066  |
| 35                | 164      | 0.273   | 0.310    | 0.037  |
| 35                | 1018     | 0.215   | 0.115    | -0.100 |
| 35                | 462      | 0.293   | 0.173    | -0.120 |
| 35                | 1032     | 0.224   | 0.115    | -0.109 |
| 50                | 566      | 0.166   | 0.163    | -0.003 |
| 50                | 197      | 0.195   | 0.085    | -0.110 |
| 50                | 793      | 0.010   | 0.222    | 0.212  |
| 50                | 802      | 0.117   | 0.173    | 0.056  |
| 50                | 61       | 0.146   | 0.046    | -0.100 |
| 55                | 795      | 0.166   | 0.271    | 0.105  |
| 55                | 921      | 0.078   | 0.261    | 0.183  |
| 55                | 741      | 0.098   | 0.076    | -0.022 |
| 55                | 809      | 0.107   | 0.183    | 0.076  |
| 55                | 804      | 0.185   | 0.290    | 0.105  |
| 100               | 449      | 0.244   | 0.002    | -0.242 |
| 100               | 541      | 0.312   | 0.183    | -0.129 |
| 100               | 476      | 0.088   | 0.071    | -0.017 |
| 100               | 45       | 0.029   | 0.115    | 0.086  |
| 100               | 642      | 0.059   | 0.222    | 0.163  |
| 105               | 1036     | 0.078   | 0.012    | -0.066 |
| 105               | 1038     | 0.224   | 0.022    | -0.202 |
| 105               | 203      | 0.049   | 0.154    | 0.105  |
| 105               | 1029     | 0.205   | 0.222    | 0.017  |
| 105               | 1027     | 0.176   | 0.032    | -0.144 |
| 105               | Max      | 0.312   | 0.310    | 0.222  |
| 105               | Average  | 0.147   | 0.149    | 0.002  |
| 105               | Min      | 0.010   | 0.002    | -0.242 |
| 105               | Std Dev  | 0.078   | 0.084    | 0.116  |



| 6.3 I EN LEAK 12V |        |        |        |        |        |        |        |        |        |        |  |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| Test Site         |        |        |        |        |        |        |        |        |        |        |  |
| Tester            |        |        |        |        |        |        |        |        |        |        |  |
| Test Number       |        |        |        |        |        |        |        |        |        |        |  |
| Max Limit         | 5      | nA     |        |        |        |        |        |        |        |        |  |
| Min Limit         | -0.1   | nA     |        |        |        |        |        |        |        |        |  |
| krad              | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |  |
| LL                | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 |  |
| Min               | 0.017  | 0.173  | 0.017  | 0.017  | 0.085  | 0.095  | 0.115  | 0.046  | 0.076  | 0.002  |  |
| Average           | 0.076  | 0.216  | 0.115  | 0.138  | 0.173  | 0.142  | 0.191  | 0.138  | 0.216  | 0.119  |  |
| Max               | 0.134  | 0.261  | 0.242  | 0.310  | 0.222  | 0.183  | 0.310  | 0.222  | 0.290  | 0.222  |  |
| UL                | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  |  |

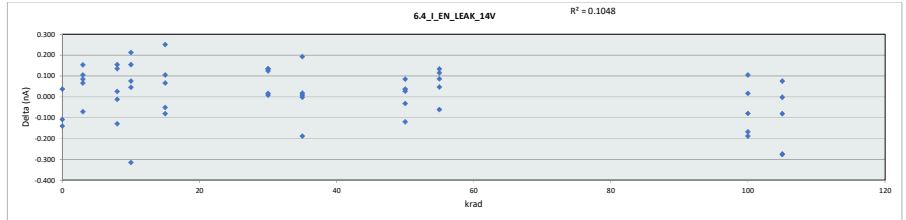


# HDR TID Report

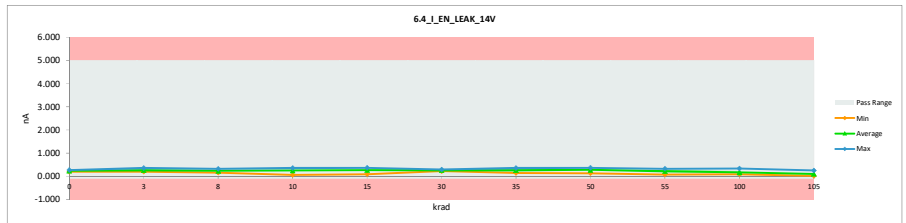
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.4_I_EN_LEAK_14V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              |          |         |          |        |
| Max Limit         |          |         |          |        |
| Min Limit         |          |         |          |        |
| krad              | Serial # | PRE HDR | POST HDR | Delta  |
| 0                 | 552      | 0.342   | 0.202    | -0.140 |
| 0                 | 726      | 0.351   | 0.242    | -0.109 |
| 0                 | 791      | 0.234   | 0.271    | 0.037  |
| 3                 | 689      | 0.156   | 0.222    | 0.066  |
| 3                 | 688      | 0.293   | 0.222    | -0.071 |
| 3                 | 700      | 0.049   | 0.202    | 0.153  |
| 3                 | 482      | 0.205   | 0.290    | 0.085  |
| 3                 | 1033     | 0.254   | 0.359    | 0.105  |
| 8                 | 442      | 0.176   | 0.202    | 0.026  |
| 8                 | 699      | 0.283   | 0.154    | -0.129 |
| 8                 | 344      | 0.283   | 0.271    | -0.012 |
| 8                 | 355      | 0.068   | 0.222    | 0.154  |
| 8                 | 790      | 0.185   | 0.320    | 0.135  |
| 10                | 537      | 0.156   | 0.310    | 0.154  |
| 10                | 396      | 0.371   | 0.056    | -0.315 |
| 10                | 521      | 0.146   | 0.359    | 0.213  |
| 10                | 535      | 0.156   | 0.232    | 0.076  |
| 10                | 526      | 0.254   | 0.300    | 0.046  |
| 15                | 540      | 0.146   | 0.095    | -0.051 |
| 15                | 387      | 0.449   | 0.368    | -0.081 |
| 15                | 787      | 0.088   | 0.339    | 0.251  |
| 15                | 1042     | 0.224   | 0.290    | 0.066  |
| 15                | 483      | 0.127   | 0.232    | 0.105  |
| 30                | 597      | 0.107   | 0.242    | 0.135  |
| 30                | 853      | 0.273   | 0.281    | 0.008  |
| 30                | 416      | 0.205   | 0.222    | 0.017  |
| 30                | 949      | 0.156   | 0.290    | 0.134  |
| 30                | 221      | 0.137   | 0.261    | 0.124  |
| 35                | 538      | 0.332   | 0.144    | -0.188 |
| 35                | 164      | 0.263   | 0.271    | 0.008  |
| 35                | 1018     | 0.224   | 0.242    | 0.018  |
| 35                | 462      | 0.302   | 0.300    | -0.002 |
| 35                | 1032     | 0.166   | 0.359    | 0.193  |
| 50                | 566      | 0.283   | 0.320    | 0.037  |
| 50                | 197      | 0.244   | 0.271    | 0.027  |
| 50                | 793      | 0.254   | 0.134    | -0.120 |
| 50                | 802      | 0.400   | 0.368    | -0.032 |
| 50                | 61       | 0.215   | 0.300    | 0.085  |
| 55                | 795      | 0.195   | 0.281    | 0.086  |
| 55                | 921      | 0.107   | 0.154    | 0.047  |
| 55                | 741      | 0.195   | 0.329    | 0.134  |
| 55                | 809      | 0.137   | 0.076    | -0.061 |
| 55                | 804      | 0.146   | 0.261    | 0.115  |
| 100               | 449      | 0.332   | 0.144    | -0.188 |
| 100               | 541      | 0.234   | 0.339    | 0.105  |
| 100               | 476      | 0.234   | 0.154    | -0.080 |
| 100               | 45       | 0.263   | 0.095    | -0.168 |
| 100               | 642      | 0.098   | 0.115    | 0.017  |
| 105               | 1036     | 0.146   | 0.144    | -0.002 |
| 105               | 1038     | 0.351   | 0.076    | -0.275 |
| 105               | 203      | 0.127   | 0.046    | -0.081 |
| 105               | 1029     | 0.176   | 0.251    | 0.075  |
| 105               | 1027     | 0.293   | 0.017    | -0.276 |
| 105               | Max      | 0.449   | 0.368    | 0.251  |
| 105               | Average  | 0.219   | 0.231    | 0.012  |
| 105               | Min      | 0.049   | 0.017    | -0.315 |
| 105               | Std Dev  | 0.089   | 0.092    | 0.127  |



| 6.4_I_EN_LEAK_14V                                            |         |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------------------------------------------|---------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |         |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |         |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |         |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|                                                              | 5 nA    |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|                                                              | -0.1 nA |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| krad                                                         |         |  | 8      |        | 10     |        | 15     |        | 30     |        | 35     |        | 50     |        | 55     |        | 100    |        | 105    |        |
| LL                                                           |         |  | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 | -0.100 |
| Min                                                          |         |  | 0.202  | 0.202  | 0.154  | 0.056  | 0.095  | 0.222  | 0.144  | 0.134  | 0.076  | 0.095  | 0.017  |        |        |        |        |        |        |        |
| Average                                                      |         |  | 0.238  | 0.259  | 0.234  | 0.251  | 0.265  | 0.259  | 0.263  | 0.279  | 0.220  | 0.169  | 0.107  |        |        |        |        |        |        |        |
| Max                                                          |         |  | 0.271  | 0.359  | 0.320  | 0.359  | 0.368  | 0.290  | 0.359  | 0.368  | 0.329  | 0.339  | 0.251  |        |        |        |        |        |        |        |
| UL                                                           |         |  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  |

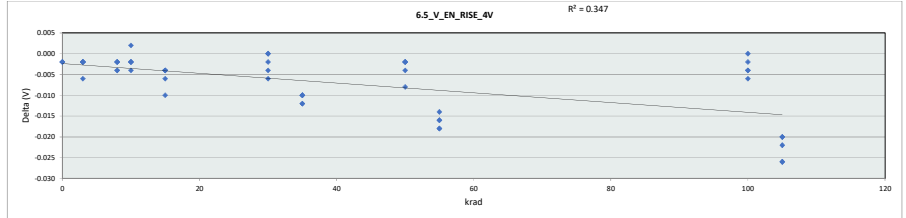


# HDR TID Report

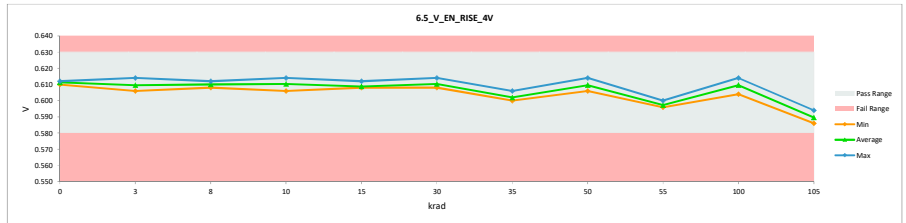
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.5_V_EN_RISE_4V |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             |          | V       | V        |        |
| Max Limit        |          | 0.63    | 0.63     |        |
| Min Limit        |          | 0.58    | 0.58     |        |
| krad             | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                | 552      | 0.614   | 0.612    | -0.002 |
| 0                | 726      | 0.612   | 0.610    | -0.002 |
| 0                | 791      | 0.614   | 0.612    | -0.002 |
| 3                | 689      | 0.612   | 0.610    | -0.002 |
| 3                | 688      | 0.612   | 0.610    | -0.002 |
| 3                | 700      | 0.616   | 0.614    | -0.002 |
| 3                | 482      | 0.612   | 0.606    | -0.006 |
| 3                | 1033     | 0.610   | 0.608    | -0.002 |
| 8                | 442      | 0.614   | 0.610    | -0.004 |
| 8                | 699      | 0.612   | 0.610    | -0.002 |
| 8                | 344      | 0.612   | 0.608    | -0.004 |
| 8                | 355      | 0.612   | 0.610    | -0.002 |
| 8                | 790      | 0.614   | 0.612    | -0.002 |
| 10               | 537      | 0.614   | 0.610    | -0.004 |
| 10               | 396      | 0.608   | 0.606    | -0.002 |
| 10               | 521      | 0.612   | 0.610    | -0.002 |
| 10               | 535      | 0.612   | 0.614    | 0.002  |
| 10               | 526      | 0.614   | 0.612    | -0.002 |
| 15               | 540      | 0.612   | 0.608    | -0.004 |
| 15               | 387      | 0.612   | 0.608    | -0.004 |
| 15               | 787      | 0.618   | 0.608    | -0.010 |
| 15               | 1042     | 0.618   | 0.612    | -0.006 |
| 15               | 483      | 0.612   | 0.608    | -0.004 |
| 30               | 597      | 0.612   | 0.612    | 0.000  |
| 30               | 853      | 0.612   | 0.610    | -0.002 |
| 30               | 416      | 0.612   | 0.608    | -0.004 |
| 30               | 949      | 0.614   | 0.614    | 0.000  |
| 30               | 221      | 0.614   | 0.608    | -0.006 |
| 35               | 538      | 0.612   | 0.602    | -0.010 |
| 35               | 164      | 0.610   | 0.600    | -0.010 |
| 35               | 1018     | 0.610   | 0.600    | -0.010 |
| 35               | 462      | 0.618   | 0.606    | -0.012 |
| 35               | 1032     | 0.614   | 0.602    | -0.012 |
| 50               | 566      | 0.616   | 0.614    | -0.002 |
| 50               | 197      | 0.616   | 0.608    | -0.008 |
| 50               | 793      | 0.614   | 0.612    | -0.002 |
| 50               | 802      | 0.612   | 0.608    | -0.004 |
| 50               | 61       | 0.608   | 0.606    | -0.002 |
| 55               | 795      | 0.610   | 0.596    | -0.014 |
| 55               | 921      | 0.616   | 0.600    | -0.016 |
| 55               | 741      | 0.614   | 0.596    | -0.018 |
| 55               | 809      | 0.616   | 0.598    | -0.018 |
| 55               | 804      | 0.612   | 0.596    | -0.016 |
| 100              | 449      | 0.616   | 0.610    | -0.006 |
| 100              | 541      | 0.616   | 0.614    | -0.002 |
| 100              | 476      | 0.608   | 0.604    | -0.004 |
| 100              | 45       | 0.612   | 0.608    | -0.004 |
| 100              | 642      | 0.612   | 0.612    | 0.000  |
| 105              | 1036     | 0.612   | 0.592    | -0.020 |
| 105              | 1038     | 0.612   | 0.590    | -0.022 |
| 105              | 203      | 0.612   | 0.586    | -0.026 |
| 105              | 1029     | 0.612   | 0.586    | -0.026 |
| 105              | 1027     | 0.614   | 0.594    | -0.020 |
|                  | Max      |         | 0.614    | 0.002  |
|                  | Average  | 0.613   | 0.606    | -0.007 |
|                  | Min      | 0.608   | 0.586    | -0.026 |
|                  | Std Dev  | 0.002   | 0.007    | 0.007  |



| 6.5_V_EN_RISE_4V |       |       |       |       |       |       |       |       |       |       |       |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site        |       |       |       |       |       |       |       |       |       |       |       |
| Tester           |       |       |       |       |       |       |       |       |       |       |       |
| Test Number      |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit        |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit        |       |       |       |       |       |       |       |       |       |       |       |
| krad             | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL               | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 |
| Min              | 0.610 | 0.606 | 0.608 | 0.606 | 0.608 | 0.608 | 0.600 | 0.606 | 0.596 | 0.604 | 0.586 |
| Average          | 0.611 | 0.610 | 0.610 | 0.610 | 0.609 | 0.610 | 0.602 | 0.610 | 0.597 | 0.610 | 0.590 |
| Max              | 0.612 | 0.614 | 0.612 | 0.614 | 0.612 | 0.614 | 0.606 | 0.614 | 0.600 | 0.614 | 0.594 |
| UL               | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 |

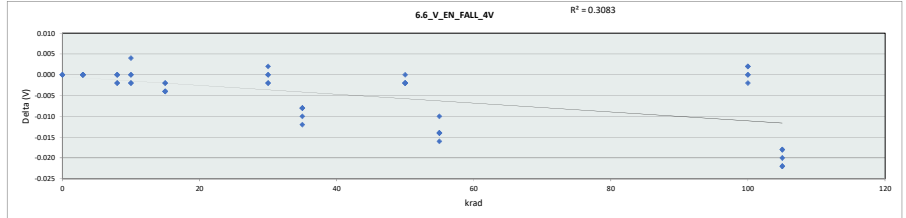


# HDR TID Report

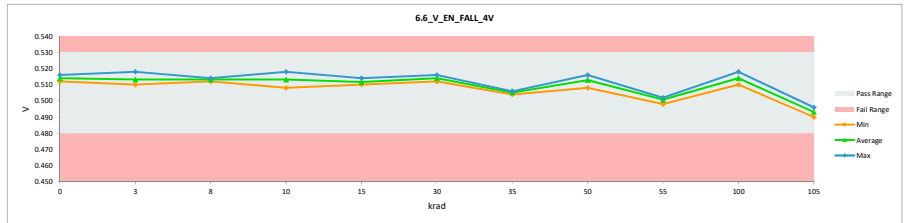
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.6_V_EN_FALL_4V |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             |          |         |          |        |
| Max Limit        |          |         |          |        |
| Min Limit        |          |         |          |        |
| krad             | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                | 552      | 0.514   | 0.514    | 0.000  |
| 0                | 726      | 0.512   | 0.512    | 0.000  |
| 0                | 791      | 0.516   | 0.516    | 0.000  |
| 3                | 689      | 0.512   | 0.512    | 0.000  |
| 3                | 688      | 0.514   | 0.514    | 0.000  |
| 3                | 700      | 0.518   | 0.518    | 0.000  |
| 3                | 482      | 0.512   | 0.512    | 0.000  |
| 3                | 1033     | 0.510   | 0.510    | 0.000  |
| 8                | 442      | 0.514   | 0.514    | 0.000  |
| 8                | 699      | 0.514   | 0.512    | -0.002 |
| 8                | 344      | 0.514   | 0.514    | 0.000  |
| 8                | 355      | 0.512   | 0.512    | 0.000  |
| 8                | 790      | 0.516   | 0.514    | -0.002 |
| 10               | 537      | 0.514   | 0.512    | -0.002 |
| 10               | 396      | 0.510   | 0.508    | -0.002 |
| 10               | 521      | 0.514   | 0.514    | 0.000  |
| 10               | 535      | 0.514   | 0.518    | 0.004  |
| 10               | 526      | 0.514   | 0.514    | 0.000  |
| 15               | 540      | 0.514   | 0.510    | -0.004 |
| 15               | 387      | 0.512   | 0.510    | -0.002 |
| 15               | 787      | 0.518   | 0.514    | -0.004 |
| 15               | 1042     | 0.518   | 0.514    | -0.004 |
| 15               | 483      | 0.512   | 0.510    | -0.002 |
| 30               | 597      | 0.516   | 0.514    | -0.002 |
| 30               | 853      | 0.512   | 0.514    | 0.002  |
| 30               | 416      | 0.514   | 0.514    | 0.000  |
| 30               | 949      | 0.516   | 0.516    | 0.000  |
| 30               | 221      | 0.514   | 0.512    | -0.002 |
| 35               | 538      | 0.514   | 0.506    | -0.008 |
| 35               | 164      | 0.512   | 0.504    | -0.008 |
| 35               | 1018     | 0.512   | 0.504    | -0.008 |
| 35               | 462      | 0.518   | 0.506    | -0.012 |
| 35               | 1032     | 0.516   | 0.506    | -0.010 |
| 50               | 566      | 0.518   | 0.516    | -0.002 |
| 50               | 197      | 0.516   | 0.514    | -0.002 |
| 50               | 793      | 0.516   | 0.514    | -0.002 |
| 50               | 802      | 0.512   | 0.512    | 0.000  |
| 50               | 61       | 0.510   | 0.508    | -0.002 |
| 55               | 795      | 0.512   | 0.502    | -0.010 |
| 55               | 921      | 0.516   | 0.502    | -0.014 |
| 55               | 741      | 0.514   | 0.500    | -0.014 |
| 55               | 809      | 0.516   | 0.502    | -0.014 |
| 55               | 804      | 0.514   | 0.498    | -0.016 |
| 100              | 449      | 0.516   | 0.514    | -0.002 |
| 100              | 541      | 0.516   | 0.518    | 0.002  |
| 100              | 476      | 0.510   | 0.510    | 0.000  |
| 100              | 45       | 0.512   | 0.512    | 0.000  |
| 100              | 642      | 0.514   | 0.516    | 0.002  |
| 105              | 1036     | 0.514   | 0.494    | -0.020 |
| 105              | 1038     | 0.512   | 0.494    | -0.018 |
| 105              | 203      | 0.514   | 0.492    | -0.022 |
| 105              | 1029     | 0.512   | 0.490    | -0.022 |
| 105              | 1027     | 0.514   | 0.496    | -0.018 |
| 105              | Max      | 0.518   | 0.518    | 0.004  |
| 105              | Average  | 0.514   | 0.509    | -0.005 |
| 105              | Min      | 0.510   | 0.490    | -0.022 |
| 105              | Std Dev  | 0.002   | 0.007    | 0.007  |



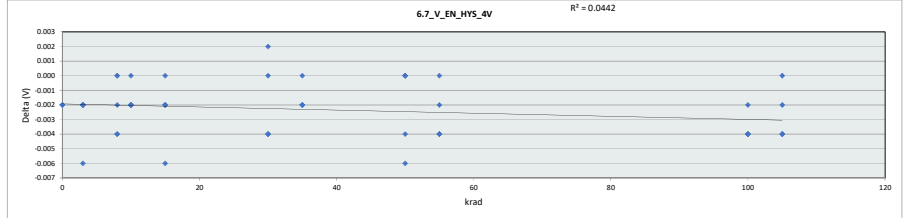
| 6.6_V_EN_FALL_4V |       |       |       |       |       |       |       |       |       |       |       |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site        |       |       |       |       |       |       |       |       |       |       |       |
| Tester           |       |       |       |       |       |       |       |       |       |       |       |
| Test Number      |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit        | 0.53  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit        | 0.48  | V     |       |       |       |       |       |       |       |       |       |
| krad             | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL               | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 |
| Min              | 0.512 | 0.510 | 0.512 | 0.508 | 0.510 | 0.512 | 0.504 | 0.508 | 0.498 | 0.510 | 0.490 |
| Average          | 0.514 | 0.513 | 0.513 | 0.513 | 0.512 | 0.514 | 0.505 | 0.513 | 0.501 | 0.514 | 0.493 |
| Max              | 0.516 | 0.518 | 0.514 | 0.518 | 0.514 | 0.516 | 0.506 | 0.516 | 0.502 | 0.518 | 0.496 |
| UL               | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 |



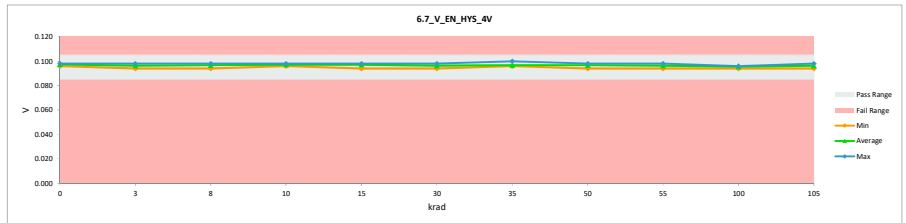
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.7_V_EN_HYS_4V |          |         |          |        |
|-----------------|----------|---------|----------|--------|
| Test Site       |          |         |          |        |
| Tester          |          |         |          |        |
| Test Number     |          |         |          |        |
| Unit            | V        | V       |          |        |
| Max Limit       | 0.105    | 0.105   |          |        |
| Min Limit       | 0.085    | 0.085   |          |        |
| krad            | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0               | 552      | 0.100   | 0.098    | -0.002 |
| 0               | 726      | 0.100   | 0.098    | -0.002 |
| 0               | 791      | 0.098   | 0.096    | -0.002 |
| 3               | 689      | 0.100   | 0.098    | -0.002 |
| 3               | 688      | 0.098   | 0.096    | -0.002 |
| 3               | 700      | 0.098   | 0.096    | -0.002 |
| 3               | 482      | 0.100   | 0.094    | -0.006 |
| 3               | 1033     | 0.100   | 0.098    | -0.002 |
| 8               | 442      | 0.100   | 0.096    | -0.004 |
| 8               | 699      | 0.098   | 0.098    | 0.000  |
| 8               | 344      | 0.098   | 0.094    | -0.004 |
| 8               | 355      | 0.100   | 0.098    | -0.002 |
| 8               | 750      | 0.098   | 0.098    | 0.000  |
| 10              | 537      | 0.100   | 0.098    | -0.002 |
| 10              | 396      | 0.098   | 0.098    | 0.000  |
| 10              | 521      | 0.098   | 0.096    | -0.002 |
| 10              | 535      | 0.098   | 0.096    | -0.002 |
| 10              | 526      | 0.100   | 0.098    | -0.002 |
| 15              | 540      | 0.098   | 0.098    | 0.000  |
| 15              | 387      | 0.100   | 0.098    | -0.002 |
| 15              | 787      | 0.100   | 0.094    | -0.006 |
| 15              | 1042     | 0.100   | 0.098    | -0.002 |
| 15              | 483      | 0.100   | 0.098    | -0.002 |
| 30              | 597      | 0.096   | 0.098    | 0.002  |
| 30              | 853      | 0.100   | 0.096    | -0.004 |
| 30              | 416      | 0.098   | 0.094    | -0.004 |
| 30              | 949      | 0.098   | 0.098    | 0.000  |
| 30              | 221      | 0.100   | 0.096    | -0.004 |
| 35              | 538      | 0.098   | 0.096    | -0.002 |
| 35              | 164      | 0.098   | 0.096    | -0.002 |
| 35              | 1018     | 0.098   | 0.096    | -0.002 |
| 35              | 462      | 0.100   | 0.100    | 0.000  |
| 35              | 1032     | 0.098   | 0.096    | -0.002 |
| 50              | 566      | 0.098   | 0.098    | 0.000  |
| 50              | 197      | 0.100   | 0.094    | -0.006 |
| 50              | 793      | 0.098   | 0.098    | 0.000  |
| 50              | 802      | 0.100   | 0.096    | -0.004 |
| 50              | 61       | 0.098   | 0.098    | 0.000  |
| 55              | 795      | 0.098   | 0.094    | -0.004 |
| 55              | 921      | 0.100   | 0.098    | -0.002 |
| 55              | 741      | 0.100   | 0.096    | -0.004 |
| 55              | 809      | 0.100   | 0.096    | -0.004 |
| 55              | 804      | 0.098   | 0.098    | 0.000  |
| 100             | 449      | 0.100   | 0.096    | -0.004 |
| 100             | 541      | 0.100   | 0.096    | -0.004 |
| 100             | 476      | 0.098   | 0.094    | -0.004 |
| 100             | 45       | 0.100   | 0.096    | -0.004 |
| 100             | 642      | 0.098   | 0.096    | -0.002 |
| 105             | 1036     | 0.098   | 0.098    | 0.000  |
| 105             | 1038     | 0.100   | 0.096    | -0.004 |
| 105             | 203      | 0.098   | 0.094    | -0.004 |
| 105             | 1029     | 0.100   | 0.096    | -0.004 |
| 105             | 1027     | 0.100   | 0.098    | -0.002 |
| 105             | Max      | 0.100   | 0.100    | 0.002  |
| 105             | Average  | 0.099   | 0.097    | -0.002 |
| 105             | Min      | 0.096   | 0.094    | -0.006 |
| 105             | Std Dev  | 0.001   | 0.002    | 0.002  |



| 6.7_V_EN_HYS_4V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site       |       |       |       |       |       |       |       |       |       |       |       |
| Tester          |       |       |       |       |       |       |       |       |       |       |       |
| Test Number     |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit       | 0.105 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit       | 0.085 | V     |       |       |       |       |       |       |       |       |       |
| krad            | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL              | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 |
| Min             | 0.096 | 0.094 | 0.094 | 0.096 | 0.094 | 0.094 | 0.096 | 0.094 | 0.094 | 0.094 | 0.094 |
| Average         | 0.097 | 0.096 | 0.097 | 0.097 | 0.097 | 0.096 | 0.097 | 0.097 | 0.096 | 0.096 | 0.096 |
| Max             | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.100 | 0.098 | 0.098 | 0.096 | 0.098 |
| UL              | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 |

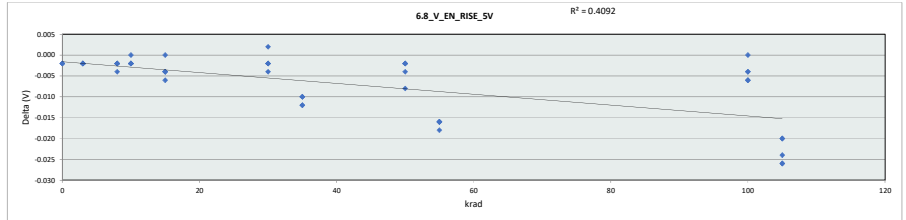


# HDR TID Report

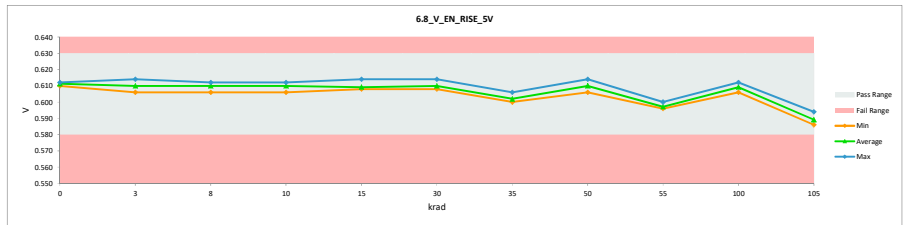
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.8_V_EN_RISE_5V |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             |          | V       | V        |        |
| Max Limit        |          | 0.63    | 0.63     |        |
| Min Limit        |          | 0.58    | 0.58     |        |
| krad             | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                | 552      | 0.614   | 0.612    | -0.002 |
| 0                | 726      | 0.612   | 0.610    | -0.002 |
| 0                | 791      | 0.614   | 0.612    | -0.002 |
| 3                | 689      | 0.612   | 0.610    | -0.002 |
| 3                | 688      | 0.612   | 0.610    | -0.002 |
| 3                | 700      | 0.616   | 0.614    | -0.002 |
| 3                | 482      | 0.608   | 0.606    | -0.002 |
| 3                | 1033     | 0.612   | 0.610    | -0.002 |
| 8                | 442      | 0.614   | 0.612    | -0.002 |
| 8                | 699      | 0.612   | 0.610    | -0.002 |
| 8                | 344      | 0.612   | 0.610    | -0.002 |
| 8                | 355      | 0.608   | 0.606    | -0.002 |
| 8                | 750      | 0.616   | 0.612    | -0.004 |
| 10               | 537      | 0.614   | 0.612    | -0.002 |
| 10               | 396      | 0.608   | 0.606    | -0.002 |
| 10               | 521      | 0.612   | 0.610    | -0.002 |
| 10               | 535      | 0.612   | 0.610    | -0.002 |
| 10               | 526      | 0.612   | 0.612    | 0.000  |
| 15               | 540      | 0.614   | 0.608    | -0.006 |
| 15               | 387      | 0.612   | 0.608    | -0.004 |
| 15               | 787      | 0.612   | 0.608    | -0.004 |
| 15               | 1042     | 0.618   | 0.614    | -0.004 |
| 15               | 483      | 0.608   | 0.608    | 0.000  |
| 30               | 597      | 0.612   | 0.610    | -0.002 |
| 30               | 853      | 0.612   | 0.610    | -0.002 |
| 30               | 416      | 0.612   | 0.608    | -0.004 |
| 30               | 949      | 0.612   | 0.614    | 0.002  |
| 30               | 221      | 0.610   | 0.608    | -0.002 |
| 35               | 538      | 0.612   | 0.602    | -0.010 |
| 35               | 164      | 0.610   | 0.600    | -0.010 |
| 35               | 1018     | 0.610   | 0.600    | -0.010 |
| 35               | 462      | 0.618   | 0.606    | -0.012 |
| 35               | 1032     | 0.614   | 0.602    | -0.012 |
| 50               | 566      | 0.616   | 0.614    | -0.002 |
| 50               | 197      | 0.616   | 0.608    | -0.008 |
| 50               | 793      | 0.614   | 0.612    | -0.002 |
| 50               | 802      | 0.612   | 0.610    | -0.002 |
| 50               | 61       | 0.610   | 0.606    | -0.004 |
| 55               | 795      | 0.612   | 0.596    | -0.016 |
| 55               | 921      | 0.616   | 0.600    | -0.016 |
| 55               | 741      | 0.612   | 0.596    | -0.016 |
| 55               | 809      | 0.616   | 0.598    | -0.018 |
| 55               | 804      | 0.612   | 0.596    | -0.016 |
| 100              | 449      | 0.616   | 0.610    | -0.006 |
| 100              | 541      | 0.616   | 0.610    | -0.006 |
| 100              | 476      | 0.610   | 0.606    | -0.004 |
| 100              | 45       | 0.612   | 0.608    | -0.004 |
| 100              | 642      | 0.612   | 0.612    | 0.000  |
| 105              | 1036     | 0.612   | 0.588    | -0.024 |
| 105              | 1038     | 0.612   | 0.592    | -0.020 |
| 105              | 203      | 0.612   | 0.586    | -0.026 |
| 105              | 1029     | 0.612   | 0.586    | -0.026 |
| 105              | 1027     | 0.614   | 0.594    | -0.020 |
|                  | Max      | 0.618   | 0.614    | 0.002  |
|                  | Average  | 0.613   | 0.606    | -0.007 |
|                  | Min      | 0.608   | 0.586    | -0.026 |
|                  | Std Dev  | 0.002   | 0.007    | 0.007  |



| 6.8_V_EN_RISE_5V |       |       |       |       |       |       |       |       |       |       |       |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site        |       |       |       |       |       |       |       |       |       |       |       |
| Tester           |       |       |       |       |       |       |       |       |       |       |       |
| Test Number      |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit        | 0.63  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit        | 0.58  | V     |       |       |       |       |       |       |       |       |       |
| krad             | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL               | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 |
| Min              | 0.610 | 0.606 | 0.606 | 0.606 | 0.608 | 0.608 | 0.600 | 0.606 | 0.596 | 0.606 | 0.586 |
| Average          | 0.611 | 0.610 | 0.610 | 0.610 | 0.609 | 0.610 | 0.602 | 0.610 | 0.597 | 0.609 | 0.589 |
| Max              | 0.612 | 0.614 | 0.612 | 0.612 | 0.614 | 0.614 | 0.606 | 0.614 | 0.600 | 0.612 | 0.594 |
| UL               | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 |

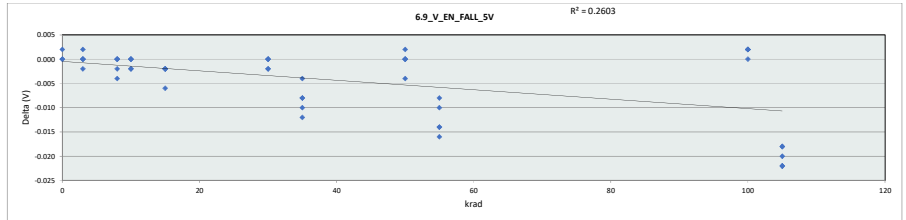


# HDR TID Report

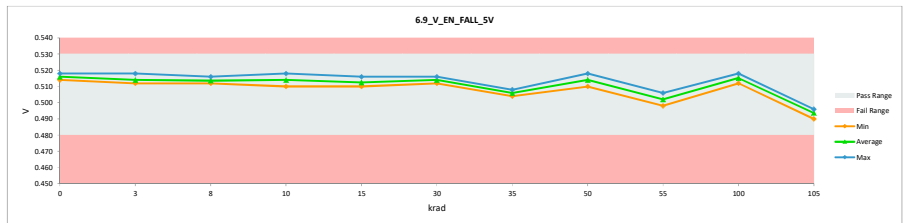
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.9_V_EN_FALL_SV |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             |          |         |          |        |
| Max Limit        |          |         |          |        |
| Min Limit        |          |         |          |        |
| krad             | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                | 552      | 0.514   | 0.516    | 0.002  |
| 0                | 726      | 0.514   | 0.514    | 0.000  |
| 0                | 791      | 0.518   | 0.518    | 0.000  |
| 3                | 689      | 0.512   | 0.514    | 0.002  |
| 3                | 688      | 0.514   | 0.514    | 0.000  |
| 3                | 700      | 0.518   | 0.518    | 0.000  |
| 3                | 482      | 0.512   | 0.512    | 0.000  |
| 3                | 1033     | 0.512   | 0.512    | -0.002 |
| 8                | 442      | 0.516   | 0.516    | 0.000  |
| 8                | 699      | 0.514   | 0.512    | -0.002 |
| 8                | 344      | 0.514   | 0.514    | 0.000  |
| 8                | 355      | 0.512   | 0.512    | 0.000  |
| 8                | 790      | 0.518   | 0.514    | -0.004 |
| 10               | 537      | 0.516   | 0.514    | -0.002 |
| 10               | 396      | 0.510   | 0.510    | 0.000  |
| 10               | 521      | 0.516   | 0.514    | -0.002 |
| 10               | 535      | 0.518   | 0.518    | 0.000  |
| 10               | 526      | 0.514   | 0.514    | 0.000  |
| 15               | 540      | 0.516   | 0.510    | -0.006 |
| 15               | 387      | 0.512   | 0.510    | -0.002 |
| 15               | 787      | 0.518   | 0.516    | -0.002 |
| 15               | 1042     | 0.518   | 0.516    | -0.002 |
| 15               | 483      | 0.512   | 0.510    | -0.002 |
| 30               | 597      | 0.516   | 0.514    | -0.002 |
| 30               | 853      | 0.514   | 0.514    | 0.000  |
| 30               | 416      | 0.514   | 0.514    | 0.000  |
| 30               | 949      | 0.516   | 0.516    | 0.000  |
| 30               | 221      | 0.514   | 0.512    | -0.002 |
| 35               | 538      | 0.514   | 0.506    | -0.008 |
| 35               | 164      | 0.510   | 0.506    | -0.004 |
| 35               | 1018     | 0.512   | 0.504    | -0.008 |
| 35               | 462      | 0.518   | 0.508    | -0.010 |
| 35               | 1032     | 0.518   | 0.506    | -0.012 |
| 50               | 566      | 0.518   | 0.518    | 0.000  |
| 50               | 197      | 0.514   | 0.514    | 0.000  |
| 50               | 793      | 0.518   | 0.514    | -0.004 |
| 50               | 802      | 0.512   | 0.514    | 0.002  |
| 50               | 61       | 0.510   | 0.510    | 0.000  |
| 55               | 795      | 0.512   | 0.504    | -0.008 |
| 55               | 921      | 0.516   | 0.502    | -0.014 |
| 55               | 741      | 0.514   | 0.500    | -0.014 |
| 55               | 809      | 0.516   | 0.506    | -0.010 |
| 55               | 804      | 0.514   | 0.498    | -0.016 |
| 100              | 449      | 0.516   | 0.518    | 0.002  |
| 100              | 541      | 0.516   | 0.518    | 0.002  |
| 100              | 476      | 0.510   | 0.512    | 0.002  |
| 100              | 45       | 0.512   | 0.512    | 0.000  |
| 100              | 642      | 0.514   | 0.516    | 0.002  |
| 105              | 1036     | 0.514   | 0.496    | -0.018 |
| 105              | 1038     | 0.514   | 0.494    | -0.020 |
| 105              | 203      | 0.514   | 0.492    | -0.022 |
| 105              | 1029     | 0.512   | 0.490    | -0.022 |
| 105              | 1027     | 0.514   | 0.496    | -0.018 |
| 105              | Max      | 0.518   | 0.518    | 0.002  |
| Average          |          | 0.514   | 0.510    | -0.004 |
| Min              |          | 0.510   | 0.490    | -0.022 |
| Std Dev          |          | 0.002   | 0.007    | 0.007  |



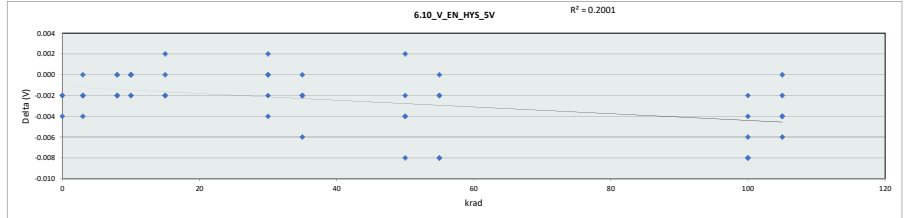
| 6.9_V_EN_FALL_SV |       |       |       |       |       |       |       |       |       |       |       |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site        |       |       |       |       |       |       |       |       |       |       |       |
| Tester           |       |       |       |       |       |       |       |       |       |       |       |
| Test Number      |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit        | 0.53  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit        | 0.48  | V     |       |       |       |       |       |       |       |       |       |
| krad             |       |       | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL               | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 |
| Min              | 0.514 | 0.512 | 0.512 | 0.510 | 0.510 | 0.512 | 0.504 | 0.510 | 0.498 | 0.512 | 0.490 |
| Average          | 0.516 | 0.514 | 0.514 | 0.514 | 0.512 | 0.514 | 0.506 | 0.514 | 0.502 | 0.515 | 0.494 |
| Max              | 0.518 | 0.518 | 0.516 | 0.518 | 0.516 | 0.516 | 0.508 | 0.518 | 0.506 | 0.518 | 0.496 |
| UL               | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 |



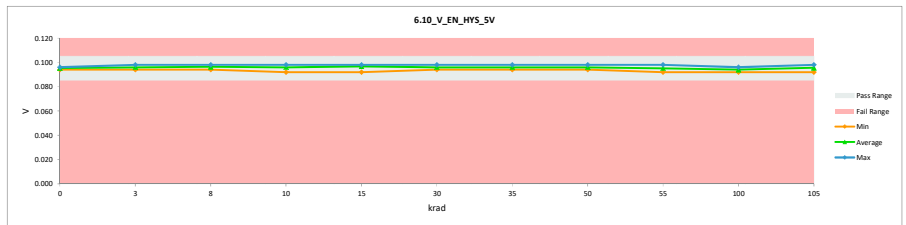
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.10_V_EN_HYS_5V |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             | V        | V       |          |        |
| Max Limit        | 0.105    | 0.105   |          |        |
| Min Limit        | 0.085    | 0.085   |          |        |
| krad             | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                | 552      | 0.100   | 0.096    | -0.004 |
| 0                | 726      | 0.098   | 0.096    | -0.002 |
| 0                | 791      | 0.096   | 0.094    | -0.002 |
| 3                | 689      | 0.100   | 0.096    | -0.004 |
| 3                | 688      | 0.098   | 0.096    | -0.002 |
| 3                | 700      | 0.098   | 0.096    | -0.002 |
| 3                | 482      | 0.096   | 0.094    | -0.002 |
| 3                | 1033     | 0.098   | 0.098    | 0.000  |
| 8                | 442      | 0.098   | 0.096    | -0.002 |
| 8                | 699      | 0.098   | 0.098    | 0.000  |
| 8                | 344      | 0.098   | 0.096    | -0.002 |
| 8                | 355      | 0.096   | 0.094    | -0.002 |
| 8                | 750      | 0.098   | 0.098    | 0.000  |
| 10               | 537      | 0.098   | 0.098    | 0.000  |
| 10               | 396      | 0.098   | 0.096    | -0.002 |
| 10               | 521      | 0.096   | 0.096    | 0.000  |
| 10               | 535      | 0.094   | 0.092    | -0.002 |
| 10               | 526      | 0.098   | 0.098    | 0.000  |
| 15               | 540      | 0.098   | 0.098    | 0.000  |
| 15               | 387      | 0.100   | 0.098    | -0.002 |
| 15               | 787      | 0.094   | 0.092    | -0.002 |
| 15               | 1042     | 0.100   | 0.098    | -0.002 |
| 15               | 483      | 0.096   | 0.098    | 0.002  |
| 30               | 597      | 0.096   | 0.096    | 0.000  |
| 30               | 853      | 0.098   | 0.096    | -0.002 |
| 30               | 416      | 0.098   | 0.094    | -0.004 |
| 30               | 949      | 0.096   | 0.098    | 0.002  |
| 30               | 221      | 0.096   | 0.096    | 0.000  |
| 35               | 538      | 0.098   | 0.096    | -0.002 |
| 35               | 164      | 0.100   | 0.094    | -0.006 |
| 35               | 1018     | 0.098   | 0.096    | -0.002 |
| 35               | 462      | 0.100   | 0.098    | -0.002 |
| 35               | 1032     | 0.096   | 0.096    | 0.000  |
| 50               | 566      | 0.098   | 0.096    | -0.002 |
| 50               | 197      | 0.102   | 0.094    | -0.008 |
| 50               | 793      | 0.096   | 0.098    | 0.002  |
| 50               | 802      | 0.100   | 0.096    | -0.004 |
| 50               | 61       | 0.100   | 0.096    | -0.004 |
| 55               | 795      | 0.100   | 0.092    | -0.008 |
| 55               | 921      | 0.100   | 0.098    | -0.002 |
| 55               | 741      | 0.098   | 0.096    | -0.002 |
| 55               | 809      | 0.100   | 0.092    | -0.008 |
| 55               | 804      | 0.098   | 0.098    | 0.000  |
| 100              | 449      | 0.100   | 0.092    | -0.008 |
| 100              | 541      | 0.100   | 0.092    | -0.008 |
| 100              | 476      | 0.100   | 0.094    | -0.006 |
| 100              | 45       | 0.100   | 0.096    | -0.004 |
| 100              | 642      | 0.098   | 0.096    | -0.002 |
| 105              | 1036     | 0.098   | 0.092    | -0.006 |
| 105              | 1038     | 0.098   | 0.098    | 0.000  |
| 105              | 203      | 0.098   | 0.094    | -0.004 |
| 105              | 1029     | 0.100   | 0.096    | -0.004 |
| 105              | 1027     | 0.100   | 0.098    | -0.002 |
| 105              | Max      | 0.102   | 0.098    | 0.002  |
|                  | Average  | 0.098   | 0.096    | -0.002 |
|                  | Min      | 0.094   | 0.092    | -0.008 |
|                  | Std Dev  | 0.002   | 0.002    | 0.003  |



| 6.10_V_EN_HYS_5V |       |       |       |       |       |       |       |       |       |       |       |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site        |       |       |       |       |       |       |       |       |       |       |       |
| Tester           |       |       |       |       |       |       |       |       |       |       |       |
| Test Number      |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit        | 0.105 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit        | 0.085 | V     |       |       |       |       |       |       |       |       |       |
| krad             | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL               | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 |
| Min              | 0.094 | 0.094 | 0.094 | 0.092 | 0.092 | 0.094 | 0.094 | 0.094 | 0.092 | 0.092 | 0.092 |
| Average          | 0.095 | 0.096 | 0.096 | 0.096 | 0.097 | 0.096 | 0.096 | 0.096 | 0.095 | 0.094 | 0.096 |
| Max              | 0.096 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.096 | 0.098 |
| UL               | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 |

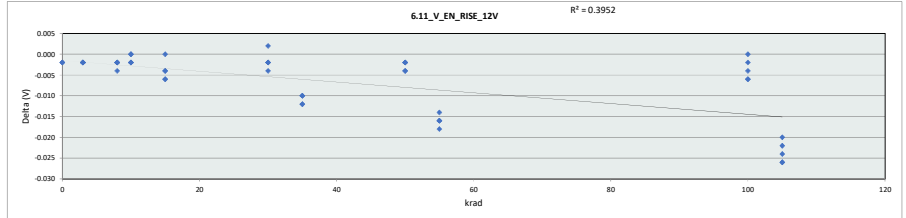


# HDR TID Report

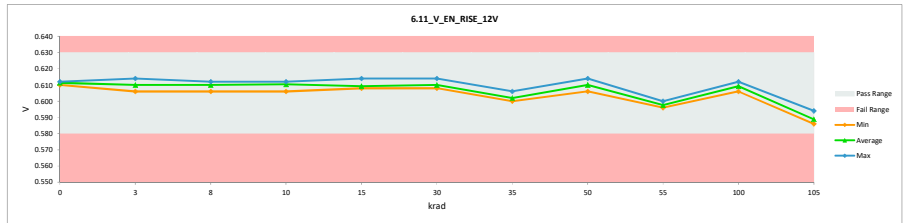
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.11_V_EN_RISE_12V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               | V        | V       |          |        |
| Max Limit          | 0.63     | 0.63    |          |        |
| Min Limit          | 0.58     | 0.58    |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 0.614   | 0.612    | -0.002 |
| 0                  | 726      | 0.612   | 0.610    | -0.002 |
| 0                  | 791      | 0.614   | 0.612    | -0.002 |
| 3                  | 689      | 0.612   | 0.610    | -0.002 |
| 3                  | 688      | 0.612   | 0.610    | -0.002 |
| 3                  | 700      | 0.616   | 0.614    | -0.002 |
| 3                  | 482      | 0.608   | 0.606    | -0.002 |
| 3                  | 1033     | 0.612   | 0.610    | -0.002 |
| 8                  | 442      | 0.614   | 0.612    | -0.002 |
| 8                  | 699      | 0.612   | 0.610    | -0.002 |
| 8                  | 344      | 0.612   | 0.610    | -0.002 |
| 8                  | 355      | 0.608   | 0.606    | -0.002 |
| 8                  | 790      | 0.616   | 0.612    | -0.004 |
| 10                 | 537      | 0.614   | 0.612    | -0.002 |
| 10                 | 396      | 0.608   | 0.606    | -0.002 |
| 10                 | 521      | 0.612   | 0.610    | -0.002 |
| 10                 | 535      | 0.612   | 0.612    | 0.000  |
| 10                 | 526      | 0.612   | 0.612    | 0.000  |
| 15                 | 540      | 0.614   | 0.608    | -0.006 |
| 15                 | 387      | 0.612   | 0.608    | -0.004 |
| 15                 | 787      | 0.614   | 0.608    | -0.006 |
| 15                 | 1042     | 0.618   | 0.614    | -0.004 |
| 15                 | 483      | 0.608   | 0.608    | 0.000  |
| 30                 | 597      | 0.612   | 0.610    | -0.002 |
| 30                 | 853      | 0.612   | 0.610    | -0.002 |
| 30                 | 416      | 0.612   | 0.608    | -0.004 |
| 30                 | 949      | 0.612   | 0.614    | 0.002  |
| 30                 | 221      | 0.610   | 0.608    | -0.002 |
| 35                 | 538      | 0.612   | 0.602    | -0.010 |
| 35                 | 164      | 0.610   | 0.600    | -0.010 |
| 35                 | 1018     | 0.610   | 0.600    | -0.010 |
| 35                 | 462      | 0.618   | 0.606    | -0.012 |
| 35                 | 1032     | 0.614   | 0.602    | -0.012 |
| 50                 | 566      | 0.616   | 0.614    | -0.002 |
| 50                 | 197      | 0.612   | 0.608    | -0.004 |
| 50                 | 793      | 0.614   | 0.612    | -0.002 |
| 50                 | 802      | 0.612   | 0.610    | -0.002 |
| 50                 | 61       | 0.610   | 0.606    | -0.004 |
| 55                 | 795      | 0.612   | 0.598    | -0.014 |
| 55                 | 921      | 0.616   | 0.600    | -0.016 |
| 55                 | 741      | 0.612   | 0.596    | -0.016 |
| 55                 | 809      | 0.616   | 0.598    | -0.018 |
| 55                 | 804      | 0.612   | 0.596    | -0.016 |
| 100                | 449      | 0.616   | 0.610    | -0.006 |
| 100                | 541      | 0.616   | 0.610    | -0.006 |
| 100                | 476      | 0.608   | 0.606    | -0.002 |
| 100                | 45       | 0.612   | 0.608    | -0.004 |
| 100                | 642      | 0.612   | 0.612    | 0.000  |
| 105                | 1036     | 0.612   | 0.588    | -0.024 |
| 105                | 1038     | 0.612   | 0.590    | -0.022 |
| 105                | 203      | 0.612   | 0.586    | -0.026 |
| 105                | 1029     | 0.612   | 0.586    | -0.026 |
| 105                | 1027     | 0.614   | 0.594    | -0.020 |
| 105                | Max      | 0.618   | 0.614    | 0.002  |
| 105                | Average  | 0.613   | 0.606    | -0.007 |
| 105                | Min      | 0.608   | 0.586    | -0.026 |
| 105                | Std Dev  | 0.002   | 0.007    | 0.007  |



| 6.11_V_EN_RISE_12V |       |       |       |       |       |       |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site          |       |       |       |       |       |       |       |       |       |       |       |
| Tester             |       |       |       |       |       |       |       |       |       |       |       |
| Test Number        |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit          | 0.63  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit          | 0.58  | V     |       |       |       |       |       |       |       |       |       |
| krad               | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 |
| Min                | 0.610 | 0.606 | 0.606 | 0.606 | 0.608 | 0.608 | 0.600 | 0.606 | 0.596 | 0.606 | 0.586 |
| Average            | 0.611 | 0.610 | 0.610 | 0.610 | 0.609 | 0.610 | 0.602 | 0.610 | 0.598 | 0.609 | 0.589 |
| Max                | 0.612 | 0.614 | 0.612 | 0.612 | 0.614 | 0.614 | 0.606 | 0.614 | 0.600 | 0.612 | 0.594 |
| UL                 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 |

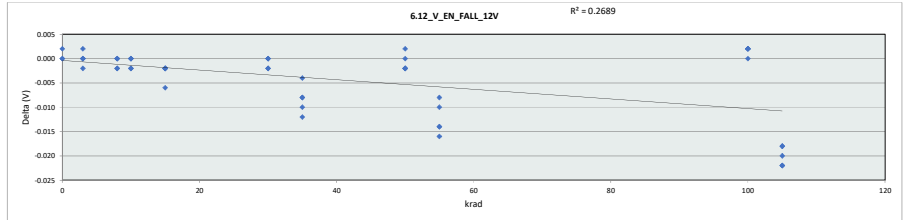


# HDR TID Report

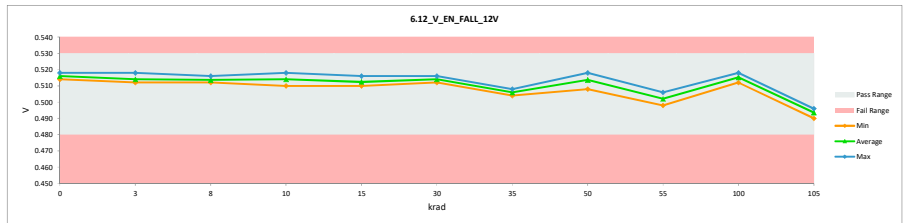
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.12_V_EN_FALL_12V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               | V        | V       |          |        |
| Max Limit          | 0.53     | 0.53    |          |        |
| Min Limit          | 0.48     | 0.48    |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 0.514   | 0.516    | 0.002  |
| 0                  | 726      | 0.514   | 0.514    | 0.000  |
| 0                  | 791      | 0.518   | 0.518    | 0.000  |
| 3                  | 689      | 0.512   | 0.514    | 0.002  |
| 3                  | 688      | 0.514   | 0.514    | 0.000  |
| 3                  | 700      | 0.518   | 0.518    | 0.000  |
| 3                  | 482      | 0.512   | 0.512    | 0.000  |
| 3                  | 1033     | 0.514   | 0.512    | -0.002 |
| 8                  | 442      | 0.516   | 0.516    | 0.000  |
| 8                  | 699      | 0.514   | 0.512    | -0.002 |
| 8                  | 344      | 0.514   | 0.514    | 0.000  |
| 8                  | 355      | 0.512   | 0.512    | 0.000  |
| 8                  | 790      | 0.516   | 0.514    | -0.002 |
| 10                 | 537      | 0.516   | 0.514    | -0.002 |
| 10                 | 396      | 0.510   | 0.510    | 0.000  |
| 10                 | 521      | 0.516   | 0.514    | -0.002 |
| 10                 | 535      | 0.518   | 0.518    | 0.000  |
| 10                 | 526      | 0.514   | 0.514    | 0.000  |
| 15                 | 540      | 0.516   | 0.510    | -0.006 |
| 15                 | 387      | 0.512   | 0.510    | -0.002 |
| 15                 | 787      | 0.518   | 0.516    | -0.002 |
| 15                 | 1042     | 0.518   | 0.516    | -0.002 |
| 15                 | 483      | 0.512   | 0.510    | -0.002 |
| 30                 | 597      | 0.516   | 0.514    | -0.002 |
| 30                 | 853      | 0.514   | 0.514    | 0.000  |
| 30                 | 416      | 0.514   | 0.514    | 0.000  |
| 30                 | 949      | 0.516   | 0.516    | 0.000  |
| 30                 | 221      | 0.514   | 0.512    | -0.002 |
| 35                 | 538      | 0.514   | 0.506    | -0.008 |
| 35                 | 164      | 0.510   | 0.506    | -0.004 |
| 35                 | 1018     | 0.512   | 0.504    | -0.008 |
| 35                 | 462      | 0.518   | 0.508    | -0.010 |
| 35                 | 1032     | 0.518   | 0.506    | -0.012 |
| 50                 | 566      | 0.518   | 0.518    | 0.000  |
| 50                 | 197      | 0.514   | 0.512    | -0.002 |
| 50                 | 793      | 0.518   | 0.516    | -0.002 |
| 50                 | 802      | 0.512   | 0.514    | 0.002  |
| 50                 | 61       | 0.510   | 0.508    | -0.002 |
| 55                 | 795      | 0.512   | 0.504    | -0.008 |
| 55                 | 921      | 0.516   | 0.502    | -0.014 |
| 55                 | 741      | 0.514   | 0.500    | -0.014 |
| 55                 | 809      | 0.516   | 0.506    | -0.010 |
| 55                 | 804      | 0.514   | 0.498    | -0.016 |
| 100                | 449      | 0.516   | 0.518    | 0.002  |
| 100                | 541      | 0.516   | 0.518    | 0.002  |
| 100                | 476      | 0.510   | 0.512    | 0.002  |
| 100                | 45       | 0.512   | 0.512    | 0.000  |
| 100                | 642      | 0.514   | 0.516    | 0.002  |
| 105                | 1036     | 0.514   | 0.496    | -0.018 |
| 105                | 1038     | 0.514   | 0.494    | -0.020 |
| 105                | 203      | 0.514   | 0.492    | -0.022 |
| 105                | 1029     | 0.512   | 0.490    | -0.022 |
| 105                | 1027     | 0.514   | 0.496    | -0.018 |
| 105                | Max      | 0.518   | 0.518    | 0.002  |
| 105                | Average  | 0.514   | 0.510    | -0.004 |
| 105                | Min      | 0.510   | 0.490    | -0.022 |
| 105                | Std Dev  | 0.002   | 0.007    | 0.007  |



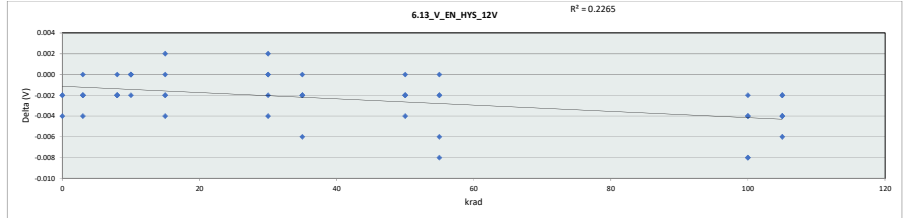
| 6.12_V_EN_FALL_12V |       |       |       |       |       |       |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site          |       |       |       |       |       |       |       |       |       |       |       |
| Tester             |       |       |       |       |       |       |       |       |       |       |       |
| Test Number        |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit          | 0.53  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit          | 0.48  | V     |       |       |       |       |       |       |       |       |       |
| krad               |       |       | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 |
| Min                | 0.514 | 0.512 | 0.512 | 0.510 | 0.510 | 0.512 | 0.504 | 0.508 | 0.498 | 0.512 | 0.490 |
| Average            | 0.516 | 0.514 | 0.514 | 0.514 | 0.512 | 0.514 | 0.506 | 0.514 | 0.502 | 0.515 | 0.494 |
| Max                | 0.518 | 0.518 | 0.516 | 0.518 | 0.516 | 0.516 | 0.508 | 0.518 | 0.506 | 0.518 | 0.496 |
| UL                 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 |



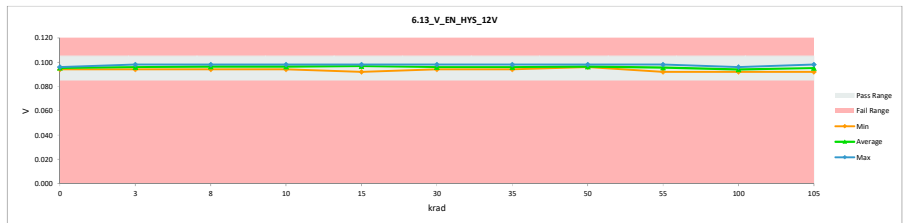
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.13_V_EN_HYS_12V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              |          |         |          |        |
| Max Limit         |          |         |          |        |
| Min Limit         |          |         |          |        |
| krad              | Serial # | PRE HDR | POST HDR | Delta  |
| 0                 | 552      | 0.100   | 0.096    | -0.004 |
| 0                 | 726      | 0.098   | 0.096    | -0.002 |
| 0                 | 791      | 0.096   | 0.094    | -0.002 |
| 3                 | 689      | 0.100   | 0.096    | -0.004 |
| 3                 | 688      | 0.098   | 0.096    | -0.002 |
| 3                 | 700      | 0.098   | 0.096    | -0.002 |
| 3                 | 482      | 0.096   | 0.094    | -0.002 |
| 3                 | 1033     | 0.098   | 0.098    | 0.000  |
| 8                 | 442      | 0.098   | 0.096    | -0.002 |
| 8                 | 699      | 0.098   | 0.098    | 0.000  |
| 8                 | 344      | 0.098   | 0.096    | -0.002 |
| 8                 | 355      | 0.096   | 0.094    | -0.002 |
| 8                 | 750      | 0.100   | 0.098    | -0.002 |
| 10                | 537      | 0.098   | 0.098    | 0.000  |
| 10                | 396      | 0.098   | 0.096    | -0.002 |
| 10                | 521      | 0.096   | 0.096    | 0.000  |
| 10                | 535      | 0.094   | 0.094    | 0.000  |
| 10                | 526      | 0.098   | 0.098    | 0.000  |
| 15                | 540      | 0.098   | 0.098    | 0.000  |
| 15                | 387      | 0.100   | 0.098    | -0.002 |
| 15                | 787      | 0.096   | 0.092    | -0.004 |
| 15                | 1042     | 0.100   | 0.098    | -0.002 |
| 15                | 483      | 0.096   | 0.098    | 0.002  |
| 30                | 597      | 0.096   | 0.096    | 0.000  |
| 30                | 853      | 0.098   | 0.096    | -0.002 |
| 30                | 416      | 0.098   | 0.094    | -0.004 |
| 30                | 949      | 0.096   | 0.098    | 0.002  |
| 30                | 221      | 0.096   | 0.096    | 0.000  |
| 35                | 538      | 0.098   | 0.096    | -0.002 |
| 35                | 164      | 0.100   | 0.094    | -0.006 |
| 35                | 1018     | 0.098   | 0.096    | -0.002 |
| 35                | 462      | 0.100   | 0.098    | -0.002 |
| 35                | 1032     | 0.096   | 0.096    | 0.000  |
| 50                | 566      | 0.098   | 0.096    | -0.002 |
| 50                | 197      | 0.098   | 0.096    | -0.002 |
| 50                | 793      | 0.096   | 0.096    | 0.000  |
| 50                | 802      | 0.100   | 0.096    | -0.004 |
| 50                | 61       | 0.100   | 0.098    | -0.002 |
| 55                | 795      | 0.100   | 0.094    | -0.006 |
| 55                | 921      | 0.100   | 0.098    | -0.002 |
| 55                | 741      | 0.098   | 0.096    | -0.002 |
| 55                | 809      | 0.100   | 0.092    | -0.008 |
| 55                | 804      | 0.098   | 0.098    | 0.000  |
| 100               | 449      | 0.100   | 0.092    | -0.008 |
| 100               | 541      | 0.100   | 0.092    | -0.008 |
| 100               | 476      | 0.098   | 0.094    | -0.004 |
| 100               | 45       | 0.100   | 0.096    | -0.004 |
| 100               | 642      | 0.098   | 0.096    | -0.002 |
| 105               | 1036     | 0.098   | 0.092    | -0.006 |
| 105               | 1038     | 0.098   | 0.096    | -0.002 |
| 105               | 203      | 0.098   | 0.094    | -0.004 |
| 105               | 1029     | 0.100   | 0.096    | -0.004 |
| 105               | 1027     | 0.098   | 0.098    | 0.000  |
| 105               | Max      | 0.100   | 0.098    | 0.002  |
| 105               | Average  | 0.098   | 0.096    | -0.002 |
| 105               | Min      | 0.094   | 0.092    | -0.008 |
| 105               | Std Dev  | 0.002   | 0.002    | 0.002  |



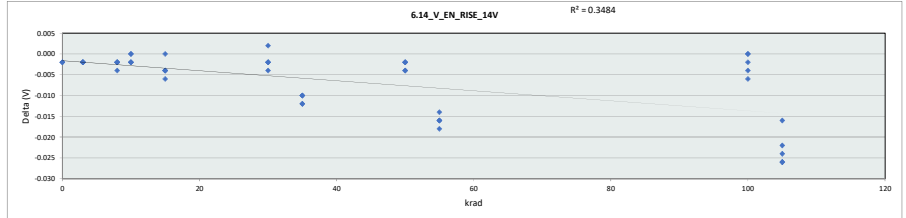
| 6.13_V_EN_HYS_12V |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site         |       |       |       |       |       |       |       |       |       |       |       |
| Tester            |       |       |       |       |       |       |       |       |       |       |       |
| Test Number       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit         | 0.105 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit         | 0.085 | V     |       |       |       |       |       |       |       |       |       |
| krad              | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 |
| Min               | 0.094 | 0.094 | 0.094 | 0.094 | 0.092 | 0.094 | 0.094 | 0.096 | 0.092 | 0.092 | 0.092 |
| Average           | 0.095 | 0.096 | 0.096 | 0.096 | 0.097 | 0.096 | 0.096 | 0.096 | 0.096 | 0.094 | 0.095 |
| Max               | 0.096 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.096 | 0.098 |
| UL                | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 |



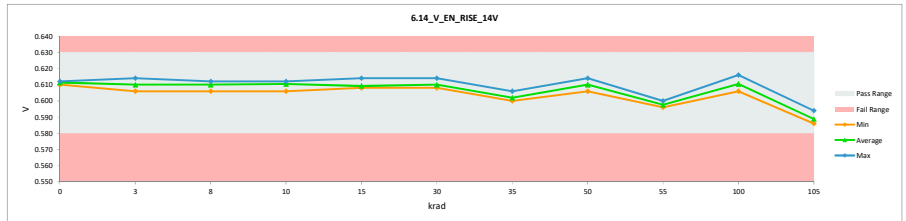
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.14_V_EN_RISE_14V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               |          |         |          |        |
| Max Limit          |          |         |          |        |
| Min Limit          |          |         |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 0.614   | 0.612    | -0.002 |
| 0                  | 726      | 0.612   | 0.610    | -0.002 |
| 0                  | 791      | 0.614   | 0.612    | -0.002 |
| 3                  | 689      | 0.612   | 0.610    | -0.002 |
| 3                  | 688      | 0.612   | 0.610    | -0.002 |
| 3                  | 700      | 0.616   | 0.614    | -0.002 |
| 3                  | 482      | 0.608   | 0.606    | -0.002 |
| 3                  | 1033     | 0.610   | 0.610    | -0.002 |
| 8                  | 442      | 0.614   | 0.612    | -0.002 |
| 8                  | 699      | 0.612   | 0.610    | -0.002 |
| 8                  | 344      | 0.612   | 0.610    | -0.002 |
| 8                  | 355      | 0.608   | 0.606    | -0.002 |
| 8                  | 790      | 0.616   | 0.612    | -0.004 |
| 10                 | 537      | 0.614   | 0.612    | -0.002 |
| 10                 | 396      | 0.608   | 0.606    | -0.002 |
| 10                 | 521      | 0.612   | 0.610    | -0.002 |
| 10                 | 535      | 0.612   | 0.612    | 0.000  |
| 10                 | 526      | 0.612   | 0.612    | 0.000  |
| 15                 | 540      | 0.614   | 0.608    | -0.006 |
| 15                 | 387      | 0.612   | 0.608    | -0.004 |
| 15                 | 787      | 0.612   | 0.608    | -0.004 |
| 15                 | 1042     | 0.618   | 0.614    | -0.004 |
| 15                 | 483      | 0.608   | 0.608    | 0.000  |
| 30                 | 597      | 0.612   | 0.610    | -0.002 |
| 30                 | 853      | 0.612   | 0.610    | -0.002 |
| 30                 | 416      | 0.612   | 0.608    | -0.004 |
| 30                 | 949      | 0.612   | 0.614    | 0.002  |
| 30                 | 221      | 0.610   | 0.608    | -0.002 |
| 35                 | 538      | 0.612   | 0.602    | -0.010 |
| 35                 | 164      | 0.610   | 0.600    | -0.010 |
| 35                 | 1018     | 0.610   | 0.600    | -0.010 |
| 35                 | 462      | 0.618   | 0.606    | -0.012 |
| 35                 | 1032     | 0.614   | 0.602    | -0.012 |
| 50                 | 566      | 0.616   | 0.614    | -0.002 |
| 50                 | 197      | 0.612   | 0.608    | -0.004 |
| 50                 | 793      | 0.614   | 0.612    | -0.002 |
| 50                 | 802      | 0.612   | 0.610    | -0.002 |
| 50                 | 61       | 0.610   | 0.606    | -0.004 |
| 55                 | 795      | 0.612   | 0.596    | -0.016 |
| 55                 | 921      | 0.616   | 0.600    | -0.016 |
| 55                 | 741      | 0.612   | 0.598    | -0.014 |
| 55                 | 809      | 0.616   | 0.598    | -0.018 |
| 55                 | 804      | 0.612   | 0.596    | -0.016 |
| 100                | 449      | 0.616   | 0.610    | -0.006 |
| 100                | 541      | 0.616   | 0.616    | 0.000  |
| 100                | 476      | 0.608   | 0.606    | -0.002 |
| 100                | 45       | 0.612   | 0.608    | -0.004 |
| 100                | 642      | 0.612   | 0.612    | 0.000  |
| 105                | 1036     | 0.612   | 0.588    | -0.024 |
| 105                | 1038     | 0.612   | 0.590    | -0.022 |
| 105                | 203      | 0.612   | 0.586    | -0.026 |
| 105                | 1029     | 0.612   | 0.586    | -0.026 |
| 105                | 1027     | 0.610   | 0.594    | -0.016 |
| 105                | Max      | 0.618   | 0.616    | 0.002  |
| Average            |          | 0.612   | 0.606    | -0.006 |
| Min                |          | 0.608   | 0.586    | -0.026 |
| Std Dev            |          | 0.002   | 0.007    | 0.007  |



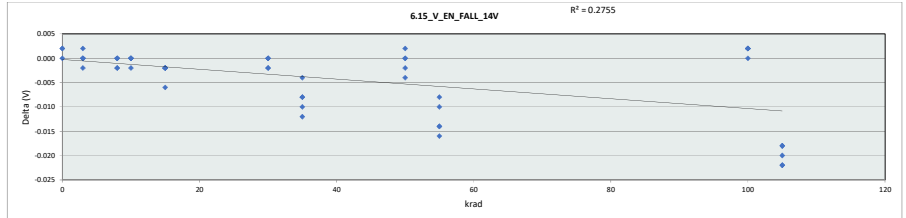
| 6.14_V_EN_RISE_14V |      |       |       |       |       |       |       |       |       |       |       |       |
|--------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site          |      |       |       |       |       |       |       |       |       |       |       |       |
| Tester             |      |       |       |       |       |       |       |       |       |       |       |       |
| Test Number        |      |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit          | 0.63 | V     |       |       |       |       |       |       |       |       |       |       |
| Min Limit          | 0.58 | V     |       |       |       |       |       |       |       |       |       |       |
| krad               |      | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                 |      | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 |
| Min                |      | 0.610 | 0.606 | 0.606 | 0.606 | 0.608 | 0.608 | 0.600 | 0.606 | 0.596 | 0.606 | 0.586 |
| Average            |      | 0.611 | 0.610 | 0.610 | 0.610 | 0.609 | 0.610 | 0.602 | 0.610 | 0.598 | 0.610 | 0.589 |
| Max                |      | 0.612 | 0.614 | 0.612 | 0.612 | 0.614 | 0.614 | 0.606 | 0.614 | 0.600 | 0.616 | 0.594 |
| UL                 |      | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 |



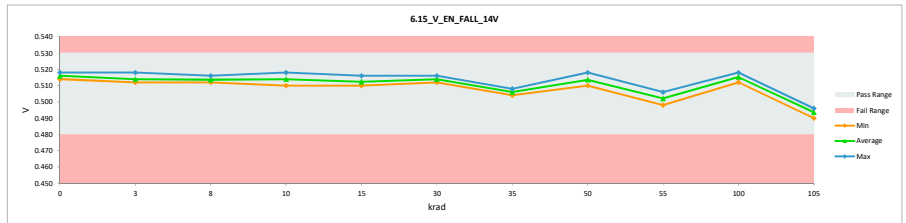
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.15_V_EN_FALL_14V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               |          |         |          |        |
| Max Limit          |          |         |          |        |
| Min Limit          |          |         |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 0.514   | 0.516    | 0.002  |
| 0                  | 726      | 0.514   | 0.514    | 0.000  |
| 0                  | 791      | 0.516   | 0.518    | 0.002  |
| 3                  | 689      | 0.512   | 0.514    | 0.002  |
| 3                  | 688      | 0.514   | 0.514    | 0.000  |
| 3                  | 700      | 0.518   | 0.518    | 0.000  |
| 3                  | 482      | 0.512   | 0.512    | 0.000  |
| 3                  | 1033     | 0.514   | 0.512    | -0.002 |
| 8                  | 442      | 0.516   | 0.516    | 0.000  |
| 8                  | 699      | 0.514   | 0.512    | -0.002 |
| 8                  | 344      | 0.514   | 0.514    | 0.000  |
| 8                  | 355      | 0.512   | 0.512    | 0.000  |
| 8                  | 790      | 0.516   | 0.514    | -0.002 |
| 10                 | 537      | 0.516   | 0.514    | -0.002 |
| 10                 | 396      | 0.510   | 0.510    | 0.000  |
| 10                 | 521      | 0.514   | 0.514    | 0.000  |
| 10                 | 535      | 0.518   | 0.518    | 0.000  |
| 10                 | 526      | 0.514   | 0.514    | 0.000  |
| 15                 | 540      | 0.516   | 0.510    | -0.006 |
| 15                 | 387      | 0.512   | 0.510    | -0.002 |
| 15                 | 787      | 0.518   | 0.516    | -0.002 |
| 15                 | 1042     | 0.518   | 0.516    | -0.002 |
| 15                 | 483      | 0.512   | 0.510    | -0.002 |
| 30                 | 597      | 0.516   | 0.514    | -0.002 |
| 30                 | 853      | 0.514   | 0.514    | 0.000  |
| 30                 | 416      | 0.514   | 0.514    | 0.000  |
| 30                 | 949      | 0.516   | 0.516    | 0.000  |
| 30                 | 221      | 0.514   | 0.512    | -0.002 |
| 35                 | 538      | 0.514   | 0.506    | -0.008 |
| 35                 | 164      | 0.510   | 0.506    | -0.004 |
| 35                 | 1018     | 0.512   | 0.504    | -0.008 |
| 35                 | 462      | 0.518   | 0.508    | -0.010 |
| 35                 | 1032     | 0.518   | 0.506    | -0.012 |
| 50                 | 566      | 0.518   | 0.518    | 0.000  |
| 50                 | 197      | 0.514   | 0.512    | -0.002 |
| 50                 | 793      | 0.518   | 0.514    | -0.004 |
| 50                 | 802      | 0.512   | 0.514    | 0.002  |
| 50                 | 61       | 0.510   | 0.510    | 0.000  |
| 55                 | 795      | 0.512   | 0.504    | -0.008 |
| 55                 | 921      | 0.516   | 0.502    | -0.014 |
| 55                 | 741      | 0.514   | 0.500    | -0.014 |
| 55                 | 809      | 0.516   | 0.506    | -0.010 |
| 55                 | 804      | 0.514   | 0.498    | -0.016 |
| 100                | 449      | 0.516   | 0.518    | 0.002  |
| 100                | 541      | 0.516   | 0.518    | 0.002  |
| 100                | 476      | 0.510   | 0.512    | 0.002  |
| 100                | 45       | 0.512   | 0.512    | 0.000  |
| 100                | 642      | 0.514   | 0.516    | 0.002  |
| 105                | 1036     | 0.514   | 0.496    | -0.018 |
| 105                | 1038     | 0.514   | 0.494    | -0.020 |
| 105                | 203      | 0.514   | 0.492    | -0.022 |
| 105                | 1029     | 0.512   | 0.490    | -0.022 |
| 105                | 1027     | 0.514   | 0.496    | -0.018 |
| 105                | Max      | 0.518   | 0.518    | 0.002  |
| 105                | Average  | 0.514   | 0.510    | -0.004 |
| 105                | Min      | 0.510   | 0.490    | -0.022 |
| 105                | Std Dev  | 0.002   | 0.007    | 0.007  |



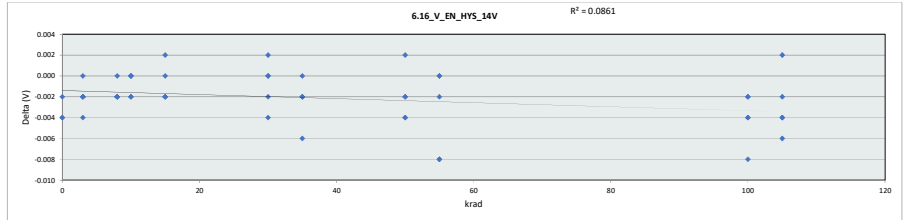
| 6.15_V_EN_FALL_14V |       |       |       |       |       |       |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site          |       |       |       |       |       |       |       |       |       |       |       |
| Tester             |       |       |       |       |       |       |       |       |       |       |       |
| Test Number        |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit          | 0.53  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit          | 0.48  | V     |       |       |       |       |       |       |       |       |       |
| krad               |       |       | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 |
| Min                | 0.514 | 0.512 | 0.512 | 0.510 | 0.510 | 0.512 | 0.504 | 0.510 | 0.498 | 0.512 | 0.490 |
| Average            | 0.516 | 0.514 | 0.514 | 0.514 | 0.512 | 0.514 | 0.506 | 0.514 | 0.502 | 0.515 | 0.494 |
| Max                | 0.518 | 0.518 | 0.516 | 0.518 | 0.516 | 0.516 | 0.508 | 0.518 | 0.506 | 0.518 | 0.496 |
| UL                 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 |



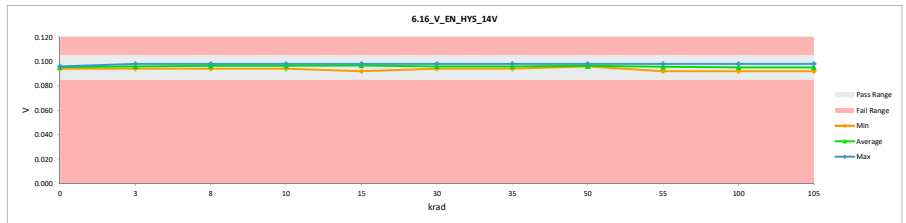
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.16_V_EN_HYS_14V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              |          |         |          |        |
| Max Limit         |          |         |          |        |
| Min Limit         |          |         |          |        |
| krad              | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                 | 552      | 0.100   | 0.096    | -0.004 |
| 0                 | 726      | 0.098   | 0.096    | -0.002 |
| 0                 | 791      | 0.098   | 0.094    | -0.004 |
| 3                 | 689      | 0.100   | 0.096    | -0.004 |
| 3                 | 688      | 0.098   | 0.096    | -0.002 |
| 3                 | 700      | 0.098   | 0.096    | -0.002 |
| 3                 | 482      | 0.096   | 0.094    | -0.002 |
| 3                 | 1033     | 0.098   | 0.098    | 0.000  |
| 8                 | 442      | 0.098   | 0.096    | -0.002 |
| 8                 | 699      | 0.098   | 0.098    | 0.000  |
| 8                 | 344      | 0.098   | 0.096    | -0.002 |
| 8                 | 355      | 0.096   | 0.094    | -0.002 |
| 8                 | 790      | 0.100   | 0.098    | -0.002 |
| 10                | 537      | 0.098   | 0.098    | 0.000  |
| 10                | 396      | 0.098   | 0.096    | -0.002 |
| 10                | 521      | 0.098   | 0.096    | -0.002 |
| 10                | 535      | 0.094   | 0.094    | 0.000  |
| 10                | 526      | 0.098   | 0.098    | 0.000  |
| 15                | 540      | 0.098   | 0.098    | 0.000  |
| 15                | 387      | 0.100   | 0.098    | -0.002 |
| 15                | 787      | 0.094   | 0.092    | -0.002 |
| 15                | 1042     | 0.100   | 0.098    | -0.002 |
| 15                | 483      | 0.096   | 0.098    | 0.002  |
| 30                | 597      | 0.096   | 0.096    | 0.000  |
| 30                | 853      | 0.098   | 0.096    | -0.002 |
| 30                | 416      | 0.098   | 0.094    | -0.004 |
| 30                | 949      | 0.096   | 0.098    | 0.002  |
| 30                | 221      | 0.096   | 0.096    | 0.000  |
| 35                | 538      | 0.098   | 0.096    | -0.002 |
| 35                | 164      | 0.100   | 0.094    | -0.006 |
| 35                | 1018     | 0.098   | 0.096    | -0.002 |
| 35                | 462      | 0.100   | 0.098    | -0.002 |
| 35                | 1032     | 0.096   | 0.096    | 0.000  |
| 50                | 566      | 0.098   | 0.096    | -0.002 |
| 50                | 197      | 0.098   | 0.096    | -0.002 |
| 50                | 793      | 0.096   | 0.098    | 0.002  |
| 50                | 802      | 0.100   | 0.096    | -0.004 |
| 50                | 61       | 0.100   | 0.096    | -0.004 |
| 55                | 795      | 0.100   | 0.092    | -0.008 |
| 55                | 921      | 0.100   | 0.098    | -0.002 |
| 55                | 741      | 0.098   | 0.098    | 0.000  |
| 55                | 809      | 0.100   | 0.092    | -0.008 |
| 55                | 804      | 0.098   | 0.098    | 0.000  |
| 100               | 449      | 0.100   | 0.092    | -0.008 |
| 100               | 541      | 0.100   | 0.098    | -0.002 |
| 100               | 476      | 0.098   | 0.094    | -0.004 |
| 100               | 45       | 0.100   | 0.096    | -0.004 |
| 100               | 642      | 0.098   | 0.096    | -0.002 |
| 105               | 1036     | 0.098   | 0.092    | -0.006 |
| 105               | 1038     | 0.098   | 0.096    | -0.002 |
| 105               | 203      | 0.098   | 0.094    | -0.004 |
| 105               | 1029     | 0.100   | 0.096    | -0.004 |
| 105               | 1027     | 0.096   | 0.098    | 0.002  |
| 105               | Max      | 0.100   | 0.098    | 0.002  |
| 105               | Average  | 0.098   | 0.096    | -0.002 |
| 105               | Min      | 0.094   | 0.092    | -0.008 |
| 105               | Std Dev  | 0.002   | 0.002    | 0.002  |



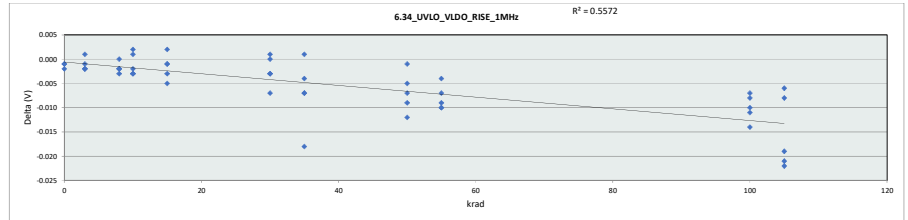
| 6.16_V_EN_HYS_14V |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site         |       |       |       |       |       |       |       |       |       |       |       |
| Tester            |       |       |       |       |       |       |       |       |       |       |       |
| Test Number       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit         |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit         |       |       |       |       |       |       |       |       |       |       |       |
| krad              | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 | 0.085 |
| Min               | 0.094 | 0.094 | 0.094 | 0.094 | 0.092 | 0.094 | 0.094 | 0.096 | 0.092 | 0.092 | 0.092 |
| Average           | 0.095 | 0.096 | 0.096 | 0.096 | 0.097 | 0.096 | 0.096 | 0.096 | 0.096 | 0.095 | 0.095 |
| Max               | 0.096 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 | 0.098 |
| UL                | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 |



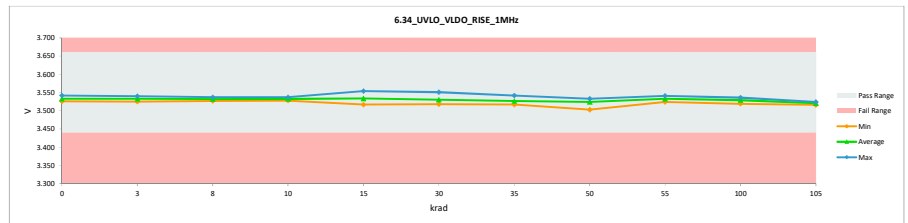
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.34_UVLO_VLDO_RISE_1MHz |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 3.543   | 3.542    | -0.001 |
| 0                        | 726      | 3.533   | 3.531    | -0.002 |
| 0                        | 791      | 3.527   | 3.526    | -0.001 |
| 3                        | 689      | 3.538   | 3.537    | -0.001 |
| 3                        | 688      | 3.533   | 3.531    | -0.002 |
| 3                        | 700      | 3.532   | 3.533    | 0.001  |
| 3                        | 482      | 3.542   | 3.540    | -0.002 |
| 3                        | 1033     | 3.527   | 3.525    | -0.002 |
| 8                        | 442      | 3.534   | 3.532    | -0.002 |
| 8                        | 699      | 3.539   | 3.537    | -0.002 |
| 8                        | 344      | 3.529   | 3.527    | -0.002 |
| 8                        | 355      | 3.536   | 3.533    | -0.003 |
| 8                        | 790      | 3.531   | 3.531    | 0.000  |
| 10                       | 537      | 3.537   | 3.529    | -0.002 |
| 10                       | 396      | 3.532   | 3.534    | 0.002  |
| 10                       | 521      | 3.540   | 3.537    | -0.003 |
| 10                       | 535      | 3.534   | 3.535    | 0.001  |
| 10                       | 526      | 3.531   | 3.528    | -0.003 |
| 15                       | 940      | 3.555   | 3.554    | -0.001 |
| 15                       | 387      | 3.523   | 3.522    | -0.001 |
| 15                       | 787      | 3.540   | 3.542    | 0.002  |
| 15                       | 1042     | 3.536   | 3.533    | -0.003 |
| 15                       | 483      | 3.522   | 3.517    | -0.005 |
| 30                       | 597      | 3.524   | 3.521    | -0.003 |
| 30                       | 853      | 3.521   | 3.518    | -0.003 |
| 30                       | 416      | 3.529   | 3.529    | 0.000  |
| 30                       | 949      | 3.541   | 3.534    | -0.007 |
| 30                       | 221      | 3.550   | 3.551    | 0.001  |
| 35                       | 538      | 3.534   | 3.527    | -0.007 |
| 35                       | 164      | 3.541   | 3.542    | 0.001  |
| 35                       | 1018     | 3.527   | 3.520    | -0.007 |
| 35                       | 462      | 3.521   | 3.517    | -0.004 |
| 35                       | 1032     | 3.546   | 3.528    | -0.018 |
| 50                       | 566      | 3.536   | 3.527    | -0.009 |
| 50                       | 197      | 3.515   | 3.503    | -0.012 |
| 50                       | 793      | 3.536   | 3.529    | -0.007 |
| 50                       | 802      | 3.538   | 3.533    | -0.005 |
| 50                       | 61       | 3.530   | 3.529    | -0.001 |
| 55                       | 795      | 3.538   | 3.528    | -0.010 |
| 55                       | 921      | 3.545   | 3.538    | -0.007 |
| 55                       | 741      | 3.539   | 3.535    | -0.004 |
| 55                       | 809      | 3.550   | 3.541    | -0.009 |
| 55                       | 804      | 3.534   | 3.524    | -0.010 |
| 100                      | 449      | 3.547   | 3.536    | -0.011 |
| 100                      | 541      | 3.527   | 3.519    | -0.008 |
| 100                      | 476      | 3.542   | 3.535    | -0.007 |
| 100                      | 45       | 3.538   | 3.524    | -0.014 |
| 100                      | 642      | 3.540   | 3.530    | -0.010 |
| 105                      | 1036     | 3.529   | 3.523    | -0.006 |
| 105                      | 1038     | 3.540   | 3.519    | -0.021 |
| 105                      | 203      | 3.543   | 3.524    | -0.019 |
| 105                      | 1029     | 3.538   | 3.516    | -0.022 |
| 105                      | 1027     | 3.529   | 3.521    | -0.008 |
| 105                      | Max      | 3.555   | 3.554    | 0.002  |
| 105                      | Average  | 3.535   | 3.530    | -0.005 |
| 105                      | Min      | 3.515   | 3.503    | -0.022 |
| 105                      | Std Dev  | 0.008   | 0.009    | 0.006  |



| 6.34_UVLO_VLDO_RISE_1MHz |       |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                |       |       |       |       |       |       |       |       |       |       |       |       |
| Tester                   |       |       |       |       |       |       |       |       |       |       |       |       |
| Test Number              |       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                | 3.66  | V     |       |       |       |       |       |       |       |       |       |       |
| Min Limit                | 3.44  | V     |       |       |       |       |       |       |       |       |       |       |
| krad                     |       |       | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                       | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 |
| Min                      | 3.526 | 3.525 | 3.527 | 3.528 | 3.517 | 3.518 | 3.517 | 3.503 | 3.524 | 3.519 | 3.516 |       |
| Average                  | 3.533 | 3.533 | 3.532 | 3.533 | 3.534 | 3.531 | 3.527 | 3.524 | 3.533 | 3.529 | 3.521 |       |
| Max                      | 3.542 | 3.540 | 3.537 | 3.537 | 3.554 | 3.551 | 3.542 | 3.533 | 3.541 | 3.536 | 3.524 |       |
| UL                       | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 |

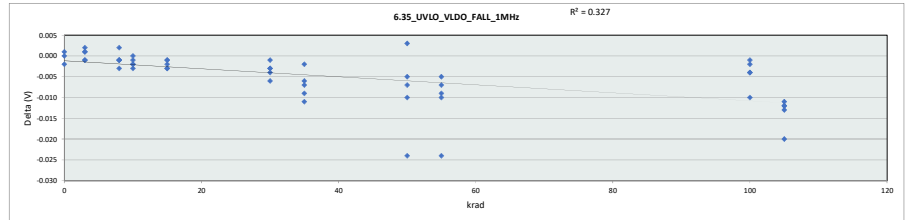


# HDR TID Report

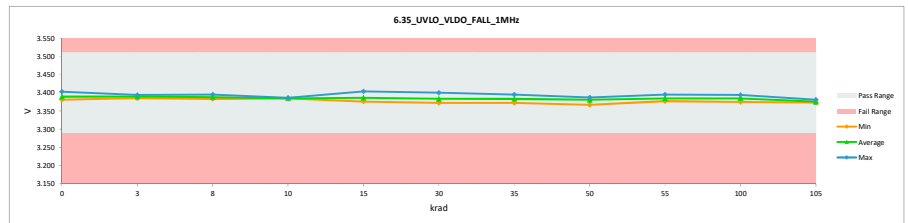
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.35_UVLO_VLDO_FALL_1MHz |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 3.405   | 3.403    | -0.002 |
| 0                        | 726      | 3.384   | 3.384    | 0.000  |
| 0                        | 791      | 3.380   | 3.381    | 0.001  |
| 3                        | 689      | 3.393   | 3.394    | 0.001  |
| 3                        | 688      | 3.383   | 3.385    | 0.002  |
| 3                        | 700      | 3.392   | 3.393    | 0.001  |
| 3                        | 482      | 3.392   | 3.391    | -0.001 |
| 3                        | 1033     | 3.386   | 3.385    | -0.001 |
| 8                        | 442      | 3.384   | 3.383    | -0.001 |
| 8                        | 699      | 3.388   | 3.387    | -0.001 |
| 8                        | 344      | 3.386   | 3.383    | -0.003 |
| 8                        | 355      | 3.388   | 3.390    | 0.002  |
| 8                        | 750      | 3.396   | 3.395    | -0.001 |
| 10                       | 537      | 3.397   | 3.385    | -0.002 |
| 10                       | 396      | 3.384   | 3.384    | 0.000  |
| 10                       | 521      | 3.387   | 3.385    | -0.002 |
| 10                       | 535      | 3.385   | 3.384    | -0.001 |
| 10                       | 526      | 3.389   | 3.386    | -0.003 |
| 15                       | 540      | 3.407   | 3.404    | -0.003 |
| 15                       | 387      | 3.379   | 3.377    | -0.002 |
| 15                       | 787      | 3.393   | 3.392    | -0.001 |
| 15                       | 1042     | 3.386   | 3.383    | -0.003 |
| 15                       | 483      | 3.377   | 3.376    | -0.001 |
| 30                       | 597      | 3.375   | 3.372    | -0.003 |
| 30                       | 853      | 3.375   | 3.372    | -0.003 |
| 30                       | 416      | 3.391   | 3.390    | -0.001 |
| 30                       | 949      | 3.388   | 3.384    | -0.004 |
| 30                       | 221      | 3.406   | 3.400    | -0.006 |
| 35                       | 538      | 3.394   | 3.392    | -0.002 |
| 35                       | 164      | 3.406   | 3.395    | -0.011 |
| 35                       | 1018     | 3.380   | 3.373    | -0.007 |
| 35                       | 462      | 3.378   | 3.372    | -0.006 |
| 35                       | 1032     | 3.393   | 3.384    | -0.009 |
| 50                       | 566      | 3.405   | 3.381    | -0.024 |
| 50                       | 197      | 3.377   | 3.367    | -0.010 |
| 50                       | 793      | 3.390   | 3.383    | -0.007 |
| 50                       | 802      | 3.392   | 3.387    | -0.005 |
| 50                       | 61       | 3.384   | 3.387    | 0.003  |
| 55                       | 795      | 3.401   | 3.377    | -0.024 |
| 55                       | 921      | 3.393   | 3.388    | -0.005 |
| 55                       | 741      | 3.394   | 3.385    | -0.009 |
| 55                       | 809      | 3.402   | 3.395    | -0.007 |
| 55                       | 804      | 3.387   | 3.377    | -0.010 |
| 100                      | 449      | 3.395   | 3.394    | -0.001 |
| 100                      | 541      | 3.381   | 3.379    | -0.002 |
| 100                      | 476      | 3.395   | 3.391    | -0.004 |
| 100                      | 45       | 3.385   | 3.375    | -0.010 |
| 100                      | 642      | 3.389   | 3.385    | -0.004 |
| 105                      | 1036     | 3.385   | 3.373    | -0.012 |
| 105                      | 1038     | 3.388   | 3.375    | -0.013 |
| 105                      | 203      | 3.393   | 3.381    | -0.012 |
| 105                      | 1029     | 3.395   | 3.375    | -0.020 |
| 105                      | 1027     | 3.384   | 3.373    | -0.011 |
| 105                      | Max      | 3.407   | 3.404    | 0.003  |
| 105                      | Average  | 3.389   | 3.384    | -0.005 |
| 105                      | Min      | 3.375   | 3.367    | -0.008 |
| 105                      | Std Dev  | 0.008   | 0.008    | 0.006  |



| 6.35_UVLO_VLDO_FALL_1MHz |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                |       |       |       |       |       |       |       |       |       |       |       |
| Tester                   |       |       |       |       |       |       |       |       |       |       |       |
| Test Number              |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit                |       |       |       |       |       |       |       |       |       |       |       |
| krad                     | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                       | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 |
| Min                      | 3.381 | 3.385 | 3.383 | 3.384 | 3.376 | 3.372 | 3.372 | 3.367 | 3.377 | 3.375 | 3.373 |
| Average                  | 3.389 | 3.390 | 3.388 | 3.385 | 3.386 | 3.384 | 3.383 | 3.381 | 3.384 | 3.385 | 3.375 |
| Max                      | 3.403 | 3.394 | 3.395 | 3.386 | 3.404 | 3.400 | 3.395 | 3.387 | 3.395 | 3.394 | 3.381 |
| UL                       | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 |

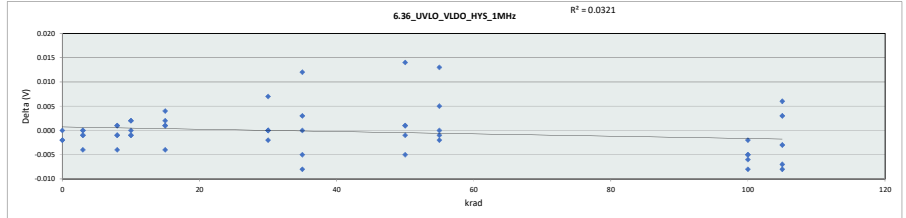


# HDR TID Report

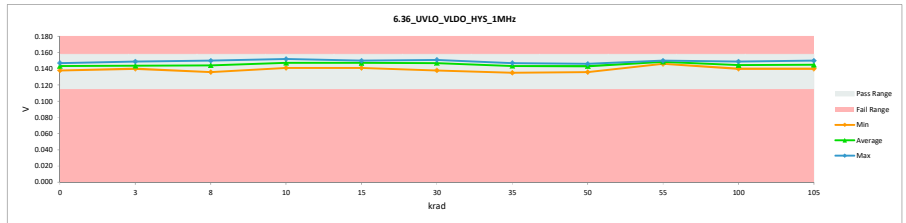
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.36_UVLO_VLDO_HYS_1MHz |          |         |          |        |
|-------------------------|----------|---------|----------|--------|
| Test Site               |          |         |          |        |
| Tester                  |          |         |          |        |
| Test Number             |          |         |          |        |
| Unit                    | V        | V       |          |        |
| Max Limit               | 0.158    | 0.158   |          |        |
| Min Limit               | 0.115    | 0.115   |          |        |
| krad                    | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                       | 552      | 0.138   | 0.138    | 0.000  |
| 0                       | 726      | 0.149   | 0.147    | -0.002 |
| 0                       | 791      | 0.147   | 0.145    | -0.002 |
| 3                       | 689      | 0.145   | 0.144    | -0.001 |
| 3                       | 688      | 0.150   | 0.146    | -0.004 |
| 3                       | 700      | 0.140   | 0.140    | 0.000  |
| 3                       | 482      | 0.149   | 0.149    | 0.000  |
| 3                       | 1033     | 0.141   | 0.140    | -0.001 |
| 8                       | 442      | 0.150   | 0.149    | -0.001 |
| 8                       | 699      | 0.151   | 0.150    | -0.001 |
| 8                       | 344      | 0.142   | 0.143    | 0.001  |
| 8                       | 355      | 0.147   | 0.143    | -0.004 |
| 8                       | 790      | 0.135   | 0.136    | 0.001  |
| 10                      | 537      | 0.144   | 0.144    | 0.000  |
| 10                      | 396      | 0.148   | 0.150    | 0.002  |
| 10                      | 521      | 0.153   | 0.152    | -0.001 |
| 10                      | 535      | 0.148   | 0.150    | 0.002  |
| 10                      | 526      | 0.142   | 0.141    | -0.001 |
| 15                      | 540      | 0.148   | 0.150    | 0.002  |
| 15                      | 387      | 0.144   | 0.145    | 0.001  |
| 15                      | 787      | 0.146   | 0.150    | 0.004  |
| 15                      | 1042     | 0.149   | 0.150    | 0.001  |
| 15                      | 483      | 0.145   | 0.141    | -0.004 |
| 30                      | 597      | 0.149   | 0.149    | 0.000  |
| 30                      | 853      | 0.146   | 0.146    | 0.000  |
| 30                      | 416      | 0.138   | 0.138    | 0.000  |
| 30                      | 949      | 0.153   | 0.151    | -0.002 |
| 30                      | 221      | 0.144   | 0.151    | 0.007  |
| 35                      | 538      | 0.140   | 0.135    | -0.005 |
| 35                      | 164      | 0.135   | 0.147    | 0.012  |
| 35                      | 1018     | 0.146   | 0.146    | 0.000  |
| 35                      | 462      | 0.143   | 0.146    | 0.003  |
| 35                      | 1032     | 0.152   | 0.144    | -0.008 |
| 50                      | 566      | 0.132   | 0.146    | 0.014  |
| 50                      | 197      | 0.137   | 0.136    | -0.001 |
| 50                      | 793      | 0.145   | 0.146    | 0.001  |
| 50                      | 802      | 0.145   | 0.146    | 0.001  |
| 50                      | 61       | 0.147   | 0.142    | -0.005 |
| 55                      | 795      | 0.137   | 0.150    | 0.013  |
| 55                      | 921      | 0.151   | 0.150    | -0.001 |
| 55                      | 741      | 0.145   | 0.150    | 0.005  |
| 55                      | 809      | 0.148   | 0.146    | -0.002 |
| 55                      | 804      | 0.147   | 0.147    | 0.000  |
| 100                     | 449      | 0.151   | 0.143    | -0.008 |
| 100                     | 541      | 0.146   | 0.140    | -0.006 |
| 100                     | 476      | 0.147   | 0.145    | -0.002 |
| 100                     | 45       | 0.154   | 0.149    | -0.005 |
| 100                     | 642      | 0.151   | 0.146    | -0.005 |
| 105                     | 1036     | 0.144   | 0.150    | 0.006  |
| 105                     | 1038     | 0.152   | 0.144    | -0.008 |
| 105                     | 203      | 0.150   | 0.143    | -0.007 |
| 105                     | 1029     | 0.143   | 0.140    | -0.003 |
| 105                     | 1027     | 0.145   | 0.148    | 0.003  |
| 105                     | Max      | 0.154   | 0.152    | 0.014  |
| 105                     | Average  | 0.146   | 0.145    | 0.000  |
| 105                     | Min      | 0.132   | 0.135    | -0.008 |
| 105                     | Std Dev  | 0.005   | 0.004    | 0.005  |



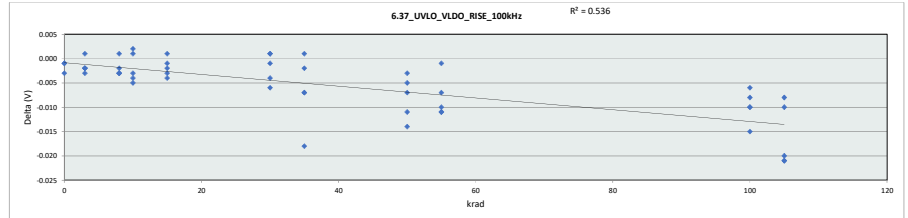
| 6.36_UVLO_VLDO_HYS_1MHz |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site               |       |       |       |       |       |       |       |       |       |       |       |
| Tester                  |       |       |       |       |       |       |       |       |       |       |       |
| Test Number             |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit               | 0.158 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit               | 0.115 | V     |       |       |       |       |       |       |       |       |       |
| krad                    | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                      | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 |
| Min                     | 0.138 | 0.140 | 0.136 | 0.141 | 0.141 | 0.138 | 0.135 | 0.136 | 0.146 | 0.140 | 0.140 |
| Average                 | 0.143 | 0.144 | 0.144 | 0.147 | 0.147 | 0.147 | 0.144 | 0.143 | 0.149 | 0.145 | 0.145 |
| Max                     | 0.147 | 0.149 | 0.150 | 0.152 | 0.150 | 0.151 | 0.147 | 0.146 | 0.150 | 0.149 | 0.150 |
| UL                      | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 |



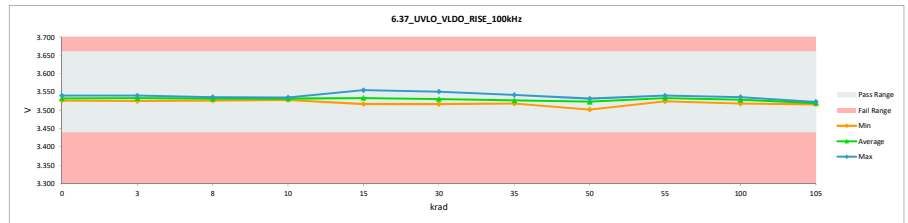
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.37_UVLO_VLDO_RISE_100kHz |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 3.543   | 3.540    | -0.003 |
| 0                          | 726      | 3.533   | 3.532    | -0.001 |
| 0                          | 791      | 3.527   | 3.526    | -0.001 |
| 3                          | 689      | 3.539   | 3.537    | -0.002 |
| 3                          | 688      | 3.534   | 3.531    | -0.003 |
| 3                          | 700      | 3.532   | 3.533    | 0.001  |
| 3                          | 482      | 3.542   | 3.540    | -0.002 |
| 3                          | 1033     | 3.527   | 3.525    | -0.002 |
| 8                          | 442      | 3.535   | 3.532    | -0.003 |
| 8                          | 699      | 3.539   | 3.536    | -0.003 |
| 8                          | 344      | 3.528   | 3.526    | -0.002 |
| 8                          | 355      | 3.536   | 3.533    | -0.003 |
| 8                          | 790      | 3.531   | 3.532    | 0.001  |
| 10                         | 537      | 3.532   | 3.529    | -0.003 |
| 10                         | 396      | 3.532   | 3.534    | 0.002  |
| 10                         | 521      | 3.540   | 3.535    | -0.005 |
| 10                         | 535      | 3.533   | 3.534    | 0.001  |
| 10                         | 526      | 3.532   | 3.528    | -0.004 |
| 15                         | 940      | 3.556   | 3.555    | -0.001 |
| 15                         | 387      | 3.524   | 3.522    | -0.002 |
| 15                         | 787      | 3.540   | 3.541    | 0.001  |
| 15                         | 1042     | 3.535   | 3.532    | -0.003 |
| 15                         | 483      | 3.521   | 3.517    | -0.004 |
| 30                         | 597      | 3.522   | 3.521    | -0.001 |
| 30                         | 853      | 3.521   | 3.517    | -0.004 |
| 30                         | 416      | 3.529   | 3.530    | 0.001  |
| 30                         | 949      | 3.540   | 3.534    | -0.006 |
| 30                         | 221      | 3.550   | 3.551    | 0.001  |
| 35                         | 538      | 3.534   | 3.527    | -0.007 |
| 35                         | 164      | 3.541   | 3.542    | 0.001  |
| 35                         | 1018     | 3.527   | 3.520    | -0.007 |
| 35                         | 462      | 3.520   | 3.518    | -0.002 |
| 35                         | 1032     | 3.545   | 3.527    | -0.018 |
| 50                         | 566      | 3.538   | 3.527    | -0.011 |
| 50                         | 197      | 3.516   | 3.502    | -0.014 |
| 50                         | 793      | 3.536   | 3.529    | -0.007 |
| 50                         | 802      | 3.537   | 3.532    | -0.005 |
| 50                         | 61       | 3.530   | 3.527    | -0.003 |
| 55                         | 795      | 3.539   | 3.528    | -0.011 |
| 55                         | 921      | 3.545   | 3.538    | -0.007 |
| 55                         | 741      | 3.538   | 3.537    | -0.001 |
| 55                         | 809      | 3.551   | 3.540    | -0.011 |
| 55                         | 804      | 3.534   | 3.524    | -0.010 |
| 100                        | 449      | 3.546   | 3.536    | -0.010 |
| 100                        | 541      | 3.526   | 3.518    | -0.008 |
| 100                        | 476      | 3.542   | 3.536    | -0.006 |
| 100                        | 45       | 3.538   | 3.523    | -0.015 |
| 100                        | 642      | 3.540   | 3.530    | -0.010 |
| 105                        | 1036     | 3.529   | 3.521    | -0.008 |
| 105                        | 1038     | 3.540   | 3.519    | -0.021 |
| 105                        | 203      | 3.543   | 3.523    | -0.020 |
| 105                        | 1029     | 3.537   | 3.516    | -0.021 |
| 105                        | 1027     | 3.529   | 3.519    | -0.010 |
| 105                        | Max      | 3.556   | 3.555    | 0.002  |
| 105                        | Average  | 3.535   | 3.529    | -0.006 |
| 105                        | Min      | 3.516   | 3.502    | -0.021 |
| 105                        | Std Dev  | 0.008   | 0.009    | 0.006  |



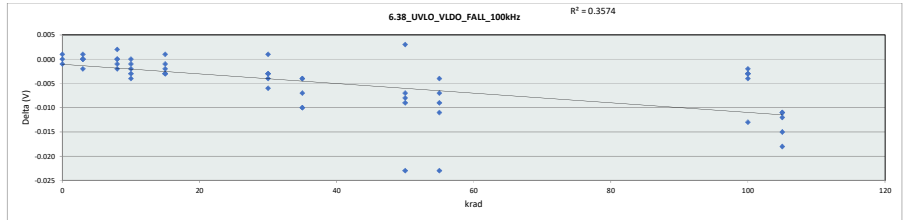
| 6.37_UVLO_VLDO_RISE_100kHz |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  | 3.66  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit                  | 3.44  | V     |       |       |       |       |       |       |       |       |       |
| krad                       | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                         | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 |
| Min                        | 3.526 | 3.525 | 3.526 | 3.528 | 3.517 | 3.517 | 3.518 | 3.502 | 3.524 | 3.518 | 3.516 |
| Average                    | 3.533 | 3.533 | 3.532 | 3.532 | 3.533 | 3.531 | 3.527 | 3.523 | 3.533 | 3.529 | 3.520 |
| Max                        | 3.540 | 3.540 | 3.536 | 3.535 | 3.555 | 3.551 | 3.542 | 3.532 | 3.540 | 3.536 | 3.523 |
| UL                         | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 |



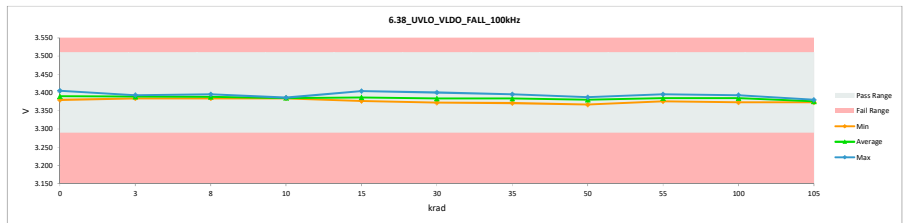
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.38_UVLO_VLDO_FALL_100kHz |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 3.404   | 3.405    | 0.001  |
| 0                          | 726      | 3.385   | 3.384    | -0.001 |
| 0                          | 791      | 3.380   | 3.380    | 0.000  |
| 3                          | 689      | 3.393   | 3.393    | 0.000  |
| 3                          | 688      | 3.384   | 3.385    | 0.001  |
| 3                          | 700      | 3.392   | 3.392    | 0.000  |
| 3                          | 482      | 3.391   | 3.391    | 0.000  |
| 3                          | 1033     | 3.386   | 3.384    | -0.002 |
| 8                          | 442      | 3.384   | 3.384    | 0.000  |
| 8                          | 699      | 3.388   | 3.388    | 0.000  |
| 8                          | 344      | 3.386   | 3.384    | -0.002 |
| 8                          | 355      | 3.388   | 3.390    | 0.002  |
| 8                          | 750      | 3.396   | 3.395    | -0.001 |
| 10                         | 537      | 3.387   | 3.384    | -0.003 |
| 10                         | 396      | 3.385   | 3.384    | -0.001 |
| 10                         | 521      | 3.387   | 3.385    | -0.002 |
| 10                         | 535      | 3.386   | 3.386    | 0.000  |
| 10                         | 526      | 3.390   | 3.386    | -0.004 |
| 15                         | 540      | 3.407   | 3.404    | -0.003 |
| 15                         | 387      | 3.378   | 3.377    | -0.001 |
| 15                         | 787      | 3.394   | 3.392    | -0.002 |
| 15                         | 1042     | 3.386   | 3.383    | -0.003 |
| 15                         | 483      | 3.376   | 3.377    | 0.001  |
| 30                         | 597      | 3.375   | 3.372    | -0.003 |
| 30                         | 853      | 3.375   | 3.372    | -0.003 |
| 30                         | 416      | 3.390   | 3.391    | 0.001  |
| 30                         | 949      | 3.388   | 3.384    | -0.004 |
| 30                         | 221      | 3.406   | 3.400    | -0.006 |
| 35                         | 538      | 3.395   | 3.391    | -0.004 |
| 35                         | 164      | 3.405   | 3.395    | -0.010 |
| 35                         | 1018     | 3.381   | 3.377    | -0.004 |
| 35                         | 462      | 3.378   | 3.371    | -0.007 |
| 35                         | 1032     | 3.394   | 3.384    | -0.010 |
| 50                         | 566      | 3.404   | 3.381    | -0.023 |
| 50                         | 197      | 3.376   | 3.367    | -0.009 |
| 50                         | 793      | 3.390   | 3.382    | -0.008 |
| 50                         | 802      | 3.393   | 3.386    | -0.007 |
| 50                         | 61       | 3.384   | 3.387    | 0.003  |
| 55                         | 795      | 3.400   | 3.377    | -0.023 |
| 55                         | 921      | 3.392   | 3.388    | -0.004 |
| 55                         | 741      | 3.395   | 3.386    | -0.009 |
| 55                         | 809      | 3.402   | 3.395    | -0.007 |
| 55                         | 804      | 3.387   | 3.376    | -0.011 |
| 100                        | 449      | 3.396   | 3.393    | -0.003 |
| 100                        | 541      | 3.382   | 3.379    | -0.003 |
| 100                        | 476      | 3.395   | 3.391    | -0.004 |
| 100                        | 45       | 3.386   | 3.373    | -0.013 |
| 100                        | 642      | 3.388   | 3.386    | -0.002 |
| 105                        | 1036     | 3.385   | 3.373    | -0.012 |
| 105                        | 1038     | 3.387   | 3.376    | -0.011 |
| 105                        | 203      | 3.395   | 3.380    | -0.015 |
| 105                        | 1029     | 3.394   | 3.376    | -0.018 |
| 105                        | 1027     | 3.384   | 3.373    | -0.011 |
| 105                        | Max      | 3.407   | 3.405    | 0.003  |
| 105                        | Average  | 3.389   | 3.384    | -0.005 |
| 105                        | Min      | 3.375   | 3.367    | -0.008 |
| 105                        | Std Dev  | 0.008   | 0.008    | 0.006  |



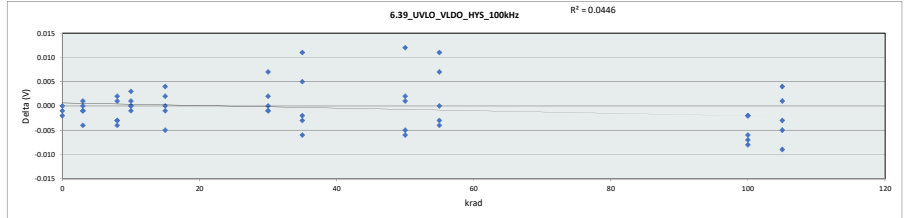
| 6.38_UVLO_VLDO_FALL_100kHz |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit                  |       |       |       |       |       |       |       |       |       |       |       |
| krad                       | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                         | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 |
| Min                        | 3.380 | 3.384 | 3.384 | 3.384 | 3.377 | 3.372 | 3.371 | 3.367 | 3.376 | 3.373 | 3.373 |
| Average                    | 3.390 | 3.389 | 3.388 | 3.385 | 3.387 | 3.384 | 3.384 | 3.381 | 3.384 | 3.384 | 3.376 |
| Max                        | 3.405 | 3.393 | 3.395 | 3.386 | 3.404 | 3.400 | 3.395 | 3.387 | 3.395 | 3.393 | 3.380 |
| UL                         | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 |



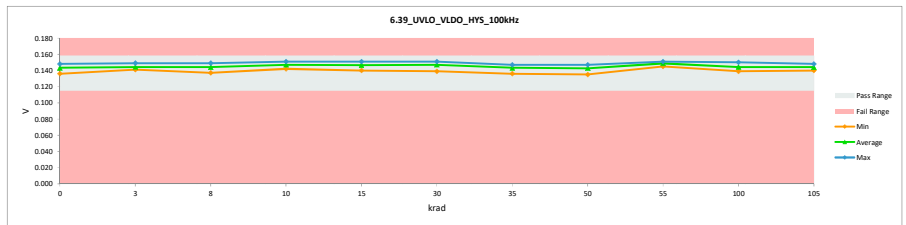
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.39_UVLO_VLDO_HYS_100kHz |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      | V        | V       |          |        |
| Max Limit                 | 0.158    | 0.158   |          |        |
| Min Limit                 | 0.115    | 0.115   |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 0.138   | 0.136    | -0.002 |
| 0                         | 726      | 0.148   | 0.148    | 0.000  |
| 0                         | 791      | 0.147   | 0.146    | -0.001 |
| 3                         | 689      | 0.146   | 0.145    | -0.001 |
| 3                         | 688      | 0.150   | 0.146    | -0.004 |
| 3                         | 700      | 0.140   | 0.141    | 0.001  |
| 3                         | 482      | 0.150   | 0.149    | -0.001 |
| 3                         | 1033     | 0.141   | 0.141    | 0.000  |
| 8                         | 442      | 0.151   | 0.148    | -0.003 |
| 8                         | 699      | 0.152   | 0.149    | -0.003 |
| 8                         | 344      | 0.142   | 0.143    | 0.001  |
| 8                         | 355      | 0.147   | 0.143    | -0.004 |
| 8                         | 790      | 0.135   | 0.137    | 0.002  |
| 10                        | 537      | 0.145   | 0.145    | 0.000  |
| 10                        | 396      | 0.147   | 0.150    | 0.003  |
| 10                        | 521      | 0.152   | 0.151    | -0.001 |
| 10                        | 535      | 0.147   | 0.148    | 0.001  |
| 10                        | 526      | 0.142   | 0.142    | 0.000  |
| 15                        | 540      | 0.149   | 0.151    | 0.002  |
| 15                        | 387      | 0.145   | 0.145    | 0.000  |
| 15                        | 787      | 0.145   | 0.149    | 0.004  |
| 15                        | 1042     | 0.149   | 0.148    | -0.001 |
| 15                        | 483      | 0.145   | 0.140    | -0.005 |
| 30                        | 597      | 0.148   | 0.150    | 0.002  |
| 30                        | 853      | 0.146   | 0.145    | -0.001 |
| 30                        | 416      | 0.139   | 0.139    | 0.000  |
| 30                        | 949      | 0.152   | 0.151    | -0.001 |
| 30                        | 221      | 0.144   | 0.151    | 0.007  |
| 35                        | 538      | 0.139   | 0.136    | -0.003 |
| 35                        | 164      | 0.136   | 0.147    | 0.011  |
| 35                        | 1018     | 0.145   | 0.143    | -0.002 |
| 35                        | 462      | 0.142   | 0.147    | 0.005  |
| 35                        | 1032     | 0.150   | 0.144    | -0.006 |
| 50                        | 566      | 0.134   | 0.146    | 0.012  |
| 50                        | 197      | 0.140   | 0.135    | -0.005 |
| 50                        | 793      | 0.146   | 0.147    | 0.001  |
| 50                        | 802      | 0.144   | 0.146    | 0.002  |
| 50                        | 61       | 0.146   | 0.140    | -0.006 |
| 55                        | 795      | 0.139   | 0.150    | 0.011  |
| 55                        | 921      | 0.153   | 0.150    | -0.003 |
| 55                        | 741      | 0.144   | 0.151    | 0.007  |
| 55                        | 809      | 0.149   | 0.145    | -0.004 |
| 55                        | 804      | 0.148   | 0.148    | 0.000  |
| 100                       | 449      | 0.150   | 0.143    | -0.007 |
| 100                       | 541      | 0.145   | 0.139    | -0.006 |
| 100                       | 476      | 0.147   | 0.145    | -0.002 |
| 100                       | 45       | 0.152   | 0.150    | -0.002 |
| 100                       | 642      | 0.152   | 0.144    | -0.008 |
| 105                       | 1036     | 0.144   | 0.148    | 0.004  |
| 105                       | 1038     | 0.152   | 0.143    | -0.009 |
| 105                       | 203      | 0.148   | 0.143    | -0.005 |
| 105                       | 1029     | 0.143   | 0.140    | -0.003 |
| 105                       | 1027     | 0.145   | 0.146    | 0.001  |
| 105                       | Max      | 0.153   | 0.151    | 0.012  |
| 105                       | Average  | 0.146   | 0.145    | 0.000  |
| 105                       | Min      | 0.134   | 0.135    | -0.009 |
| 105                       | Std Dev  | 0.005   | 0.004    | 0.005  |



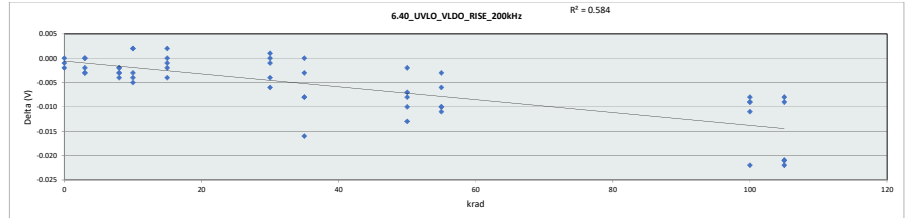
| 6.39_UVLO_VLDO_HYS_100kHz |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                 | 0.158 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit                 | 0.115 | V     |       |       |       |       |       |       |       |       |       |
| krad                      | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                        | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 |
| Min                       | 0.136 | 0.141 | 0.137 | 0.142 | 0.140 | 0.139 | 0.136 | 0.135 | 0.145 | 0.139 | 0.140 |
| Average                   | 0.143 | 0.144 | 0.144 | 0.147 | 0.147 | 0.147 | 0.143 | 0.143 | 0.149 | 0.144 | 0.144 |
| Max                       | 0.148 | 0.149 | 0.149 | 0.151 | 0.151 | 0.147 | 0.147 | 0.147 | 0.151 | 0.150 | 0.148 |
| UL                        | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 |



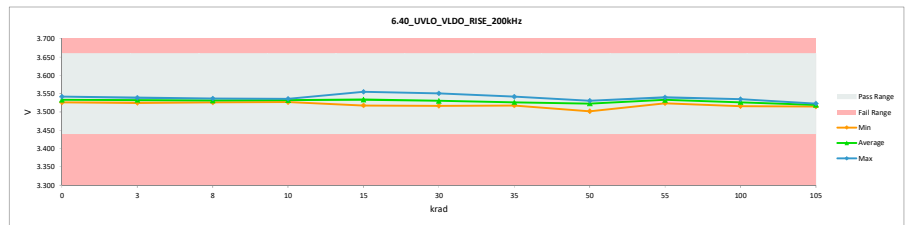
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.40_UVLO_VLDO_RISE_200kHz |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 3.542   | 3.542    | 0.000  |
| 0                          | 726      | 3.534   | 3.532    | -0.002 |
| 0                          | 791      | 3.527   | 3.526    | -0.001 |
| 3                          | 689      | 3.537   | 3.537    | 0.000  |
| 3                          | 688      | 3.533   | 3.530    | -0.003 |
| 3                          | 700      | 3.533   | 3.533    | 0.000  |
| 3                          | 482      | 3.542   | 3.539    | -0.003 |
| 3                          | 1033     | 3.527   | 3.525    | -0.002 |
| 8                          | 442      | 3.535   | 3.531    | -0.004 |
| 8                          | 699      | 3.540   | 3.537    | -0.003 |
| 8                          | 344      | 3.528   | 3.526    | -0.002 |
| 8                          | 355      | 3.536   | 3.533    | -0.003 |
| 8                          | 790      | 3.532   | 3.530    | -0.002 |
| 10                         | 537      | 3.532   | 3.529    | -0.003 |
| 10                         | 396      | 3.532   | 3.534    | 0.002  |
| 10                         | 521      | 3.540   | 3.536    | -0.004 |
| 10                         | 535      | 3.533   | 3.535    | 0.002  |
| 10                         | 526      | 3.532   | 3.527    | -0.005 |
| 15                         | 540      | 3.555   | 3.555    | 0.000  |
| 15                         | 387      | 3.523   | 3.522    | -0.001 |
| 15                         | 787      | 3.539   | 3.541    | 0.002  |
| 15                         | 1042     | 3.535   | 3.533    | -0.002 |
| 15                         | 483      | 3.522   | 3.518    | -0.004 |
| 30                         | 597      | 3.523   | 3.522    | -0.001 |
| 30                         | 853      | 3.521   | 3.517    | -0.004 |
| 30                         | 416      | 3.529   | 3.529    | 0.000  |
| 30                         | 949      | 3.540   | 3.534    | -0.006 |
| 30                         | 221      | 3.550   | 3.551    | 0.001  |
| 35                         | 538      | 3.534   | 3.526    | -0.008 |
| 35                         | 164      | 3.542   | 3.542    | 0.000  |
| 35                         | 1018     | 3.527   | 3.519    | -0.008 |
| 35                         | 462      | 3.521   | 3.518    | -0.003 |
| 35                         | 1032     | 3.544   | 3.528    | -0.016 |
| 50                         | 566      | 3.537   | 3.527    | -0.010 |
| 50                         | 197      | 3.515   | 3.502    | -0.013 |
| 50                         | 793      | 3.536   | 3.528    | -0.008 |
| 50                         | 802      | 3.538   | 3.531    | -0.007 |
| 50                         | 61       | 3.530   | 3.528    | -0.002 |
| 55                         | 795      | 3.539   | 3.529    | -0.010 |
| 55                         | 921      | 3.544   | 3.538    | -0.006 |
| 55                         | 741      | 3.538   | 3.535    | -0.003 |
| 55                         | 809      | 3.551   | 3.540    | -0.011 |
| 55                         | 804      | 3.534   | 3.524    | -0.010 |
| 100                        | 449      | 3.546   | 3.535    | -0.011 |
| 100                        | 541      | 3.527   | 3.518    | -0.009 |
| 100                        | 476      | 3.543   | 3.535    | -0.008 |
| 100                        | 45       | 3.538   | 3.516    | -0.022 |
| 100                        | 642      | 3.539   | 3.530    | -0.009 |
| 105                        | 1036     | 3.530   | 3.522    | -0.008 |
| 105                        | 1038     | 3.539   | 3.518    | -0.021 |
| 105                        | 203      | 3.544   | 3.523    | -0.021 |
| 105                        | 1029     | 3.537   | 3.515    | -0.022 |
| 105                        | 1027     | 3.529   | 3.520    | -0.009 |
| 105                        | Max      | 3.555   | 3.555    | 0.002  |
| 105                        | Average  | 3.535   | 3.529    | -0.006 |
| 105                        | Min      | 3.515   | 3.502    | -0.022 |
| 105                        | Std Dev  | 0.008   | 0.009    | 0.006  |



| 6.40_UVLO_VLDO_RISE_200kHz |       |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  | 3.66  | V     |       |       |       |       |       |       |       |       |       |       |
| Min Limit                  | 3.44  | V     |       |       |       |       |       |       |       |       |       |       |
| krad                       | 0     | 3     |       | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                         | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 |
| Min                        | 3.526 | 3.525 | 3.526 | 3.527 | 3.518 | 3.517 | 3.518 | 3.502 | 3.524 | 3.516 | 3.515 |       |
| Average                    | 3.533 | 3.533 | 3.531 | 3.532 | 3.534 | 3.531 | 3.527 | 3.523 | 3.533 | 3.527 | 3.520 |       |
| Max                        | 3.542 | 3.539 | 3.537 | 3.536 | 3.555 | 3.551 | 3.542 | 3.531 | 3.540 | 3.535 | 3.523 |       |
| UL                         | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 |       |

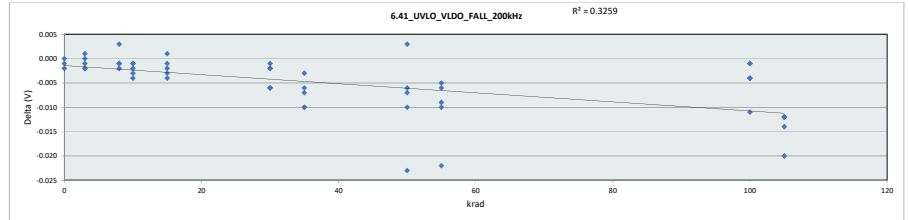


# HDR TID Report

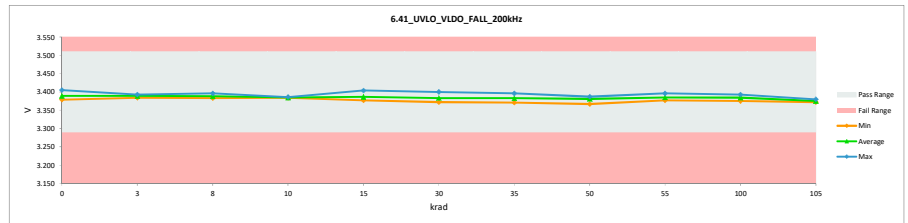
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.41_UVLO_VLDO_FALL_200kHz |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 3.405   | 3.405    | 0.000  |
| 0                          | 726      | 3.386   | 3.384    | -0.002 |
| 0                          | 791      | 3.380   | 3.379    | -0.001 |
| 3                          | 689      | 3.393   | 3.393    | 0.000  |
| 3                          | 688      | 3.384   | 3.385    | 0.001  |
| 3                          | 700      | 3.393   | 3.392    | -0.001 |
| 3                          | 482      | 3.393   | 3.391    | -0.002 |
| 3                          | 1033     | 3.386   | 3.384    | -0.002 |
| 8                          | 442      | 3.384   | 3.383    | -0.001 |
| 8                          | 699      | 3.388   | 3.387    | -0.001 |
| 8                          | 344      | 3.386   | 3.384    | -0.002 |
| 8                          | 355      | 3.388   | 3.391    | 0.003  |
| 8                          | 750      | 3.397   | 3.396    | -0.001 |
| 10                         | 537      | 3.387   | 3.385    | -0.002 |
| 10                         | 396      | 3.385   | 3.384    | -0.001 |
| 10                         | 521      | 3.388   | 3.385    | -0.003 |
| 10                         | 535      | 3.385   | 3.384    | -0.001 |
| 10                         | 526      | 3.390   | 3.386    | -0.004 |
| 15                         | 540      | 3.408   | 3.404    | -0.004 |
| 15                         | 387      | 3.379   | 3.377    | -0.002 |
| 15                         | 787      | 3.392   | 3.391    | -0.001 |
| 15                         | 1042     | 3.386   | 3.383    | -0.003 |
| 15                         | 483      | 3.376   | 3.377    | 0.001  |
| 30                         | 597      | 3.374   | 3.372    | -0.002 |
| 30                         | 853      | 3.375   | 3.373    | -0.002 |
| 30                         | 416      | 3.391   | 3.390    | -0.001 |
| 30                         | 949      | 3.388   | 3.382    | -0.006 |
| 30                         | 221      | 3.406   | 3.400    | -0.006 |
| 35                         | 538      | 3.394   | 3.391    | -0.003 |
| 35                         | 164      | 3.406   | 3.396    | -0.010 |
| 35                         | 1018     | 3.380   | 3.373    | -0.007 |
| 35                         | 462      | 3.377   | 3.371    | -0.006 |
| 35                         | 1032     | 3.393   | 3.383    | -0.010 |
| 50                         | 566      | 3.404   | 3.381    | -0.023 |
| 50                         | 197      | 3.377   | 3.367    | -0.010 |
| 50                         | 793      | 3.390   | 3.383    | -0.007 |
| 50                         | 802      | 3.393   | 3.387    | -0.006 |
| 50                         | 61       | 3.383   | 3.386    | 0.003  |
| 55                         | 795      | 3.400   | 3.378    | -0.022 |
| 55                         | 921      | 3.393   | 3.388    | -0.005 |
| 55                         | 741      | 3.395   | 3.386    | -0.009 |
| 55                         | 809      | 3.402   | 3.396    | -0.006 |
| 55                         | 804      | 3.387   | 3.377    | -0.010 |
| 100                        | 449      | 3.394   | 3.393    | -0.001 |
| 100                        | 541      | 3.380   | 3.379    | -0.001 |
| 100                        | 476      | 3.395   | 3.391    | -0.004 |
| 100                        | 45       | 3.386   | 3.375    | -0.011 |
| 100                        | 642      | 3.389   | 3.385    | -0.004 |
| 105                        | 1036     | 3.385   | 3.373    | -0.012 |
| 105                        | 1038     | 3.388   | 3.376    | -0.012 |
| 105                        | 203      | 3.394   | 3.380    | -0.014 |
| 105                        | 1029     | 3.394   | 3.374    | -0.020 |
| 105                        | 1027     | 3.384   | 3.372    | -0.012 |
| 105                        | Max      | 3.408   | 3.405    | 0.003  |
| 105                        | Average  | 3.389   | 3.384    | -0.005 |
| 105                        | Min      | 3.374   | 3.367    | -0.023 |
| 105                        | Std Dev  | 0.008   | 0.008    | 0.006  |



| 6.41_UVLO_VLDO_FALL_200kHz                                   |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |       |       |       |       |       |       |       |       |       |       |       |
|                                                              |       |       |       |       |       |       |       |       |       |       |       |
|                                                              |       |       |       |       |       |       |       |       |       |       |       |
|                                                              |       |       |       |       |       |       |       |       |       |       |       |
|                                                              |       |       |       |       |       |       |       |       |       |       |       |
|                                                              |       |       |       |       |       |       |       |       |       |       |       |
| krad                                                         | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                                                           | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 |
| Min                                                          | 3.379 | 3.384 | 3.383 | 3.384 | 3.377 | 3.372 | 3.371 | 3.367 | 3.377 | 3.375 | 3.372 |
| Average                                                      | 3.389 | 3.389 | 3.388 | 3.385 | 3.386 | 3.383 | 3.383 | 3.381 | 3.385 | 3.385 | 3.375 |
| Max                                                          | 3.405 | 3.393 | 3.396 | 3.386 | 3.404 | 3.400 | 3.396 | 3.387 | 3.396 | 3.393 | 3.380 |
| UL                                                           | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 |

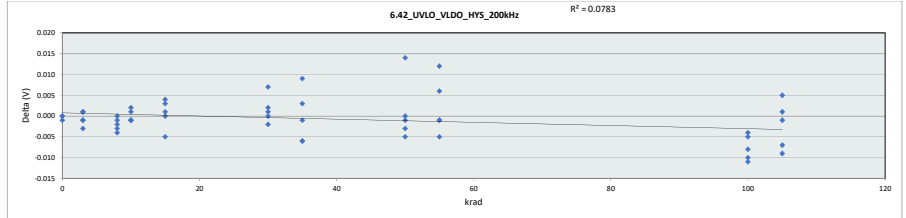


# HDR TID Report

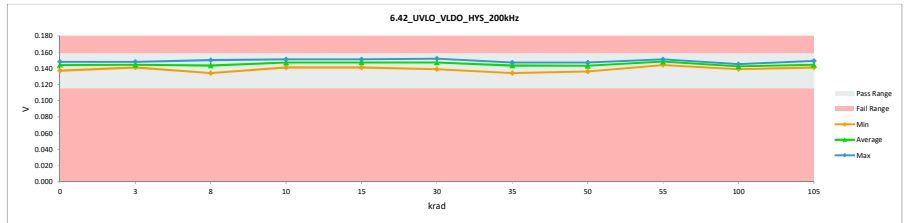
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.42_UVLO_VLDO_HYS_200kHz |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      | V        | V       |          |        |
| Max Limit                 | 0.158    | 0.158   |          |        |
| Min Limit                 | 0.115    | 0.115   |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 0.138   | 0.137    | -0.001 |
| 0                         | 726      | 0.148   | 0.148    | 0.000  |
| 0                         | 791      | 0.147   | 0.147    | 0.000  |
| 3                         | 689      | 0.145   | 0.144    | -0.001 |
| 3                         | 688      | 0.149   | 0.146    | -0.003 |
| 3                         | 700      | 0.140   | 0.141    | 0.001  |
| 3                         | 482      | 0.149   | 0.148    | -0.001 |
| 3                         | 1033     | 0.141   | 0.142    | 0.001  |
| 8                         | 442      | 0.151   | 0.148    | -0.003 |
| 8                         | 699      | 0.152   | 0.150    | -0.002 |
| 8                         | 344      | 0.142   | 0.142    | 0.000  |
| 8                         | 355      | 0.147   | 0.143    | -0.004 |
| 8                         | 790      | 0.135   | 0.134    | -0.001 |
| 10                        | 537      | 0.145   | 0.144    | -0.001 |
| 10                        | 396      | 0.148   | 0.149    | 0.001  |
| 10                        | 521      | 0.152   | 0.151    | -0.001 |
| 10                        | 535      | 0.148   | 0.150    | 0.002  |
| 10                        | 526      | 0.142   | 0.141    | -0.001 |
| 15                        | 540      | 0.147   | 0.151    | 0.004  |
| 15                        | 387      | 0.144   | 0.145    | 0.001  |
| 15                        | 787      | 0.147   | 0.150    | 0.003  |
| 15                        | 1042     | 0.149   | 0.149    | 0.000  |
| 15                        | 483      | 0.146   | 0.141    | -0.005 |
| 30                        | 597      | 0.148   | 0.150    | 0.002  |
| 30                        | 853      | 0.146   | 0.144    | -0.002 |
| 30                        | 416      | 0.138   | 0.139    | 0.001  |
| 30                        | 949      | 0.152   | 0.152    | 0.000  |
| 30                        | 221      | 0.144   | 0.151    | 0.007  |
| 35                        | 538      | 0.140   | 0.134    | -0.006 |
| 35                        | 164      | 0.136   | 0.145    | 0.009  |
| 35                        | 1018     | 0.147   | 0.146    | -0.001 |
| 35                        | 462      | 0.144   | 0.147    | 0.003  |
| 35                        | 1032     | 0.151   | 0.145    | -0.006 |
| 50                        | 566      | 0.133   | 0.147    | 0.014  |
| 50                        | 197      | 0.139   | 0.136    | -0.003 |
| 50                        | 793      | 0.146   | 0.145    | -0.001 |
| 50                        | 802      | 0.145   | 0.145    | 0.000  |
| 50                        | 61       | 0.147   | 0.142    | -0.005 |
| 55                        | 795      | 0.139   | 0.151    | 0.012  |
| 55                        | 921      | 0.151   | 0.150    | -0.001 |
| 55                        | 741      | 0.143   | 0.149    | 0.006  |
| 55                        | 809      | 0.149   | 0.144    | -0.005 |
| 55                        | 804      | 0.148   | 0.147    | -0.001 |
| 100                       | 449      | 0.152   | 0.142    | -0.010 |
| 100                       | 541      | 0.147   | 0.139    | -0.008 |
| 100                       | 476      | 0.148   | 0.144    | -0.004 |
| 100                       | 45       | 0.152   | 0.141    | -0.011 |
| 100                       | 642      | 0.150   | 0.145    | -0.005 |
| 105                       | 1036     | 0.144   | 0.149    | 0.005  |
| 105                       | 1038     | 0.151   | 0.142    | -0.009 |
| 105                       | 203      | 0.150   | 0.143    | -0.007 |
| 105                       | 1029     | 0.142   | 0.141    | -0.001 |
| 105                       | 1027     | 0.146   | 0.147    | 0.001  |
| 105                       | Max      | 0.152   | 0.152    | 0.014  |
| 105                       | Average  | 0.146   | 0.145    | -0.001 |
| 105                       | Min      | 0.133   | 0.134    | -0.011 |
| 105                       | Std Dev  | 0.005   | 0.004    | 0.005  |



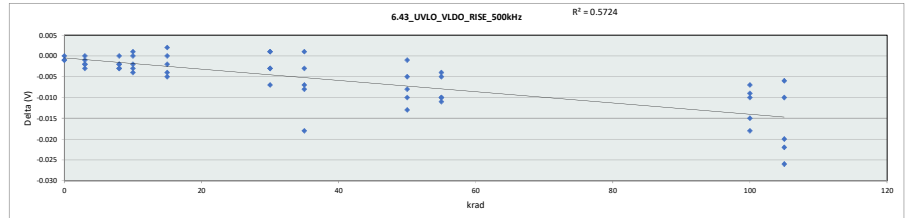
| 6.42_UVLO_VLDO_HYS_200kHz |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                 | 0.158 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit                 | 0.115 | V     |       |       |       |       |       |       |       |       |       |
| krad                      | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                        | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 |
| Min                       | 0.137 | 0.141 | 0.134 | 0.141 | 0.141 | 0.139 | 0.134 | 0.136 | 0.144 | 0.139 | 0.141 |
| Average                   | 0.144 | 0.144 | 0.143 | 0.147 | 0.147 | 0.147 | 0.143 | 0.143 | 0.148 | 0.142 | 0.144 |
| Max                       | 0.148 | 0.148 | 0.150 | 0.151 | 0.151 | 0.152 | 0.147 | 0.147 | 0.151 | 0.145 | 0.149 |
| UL                        | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 |



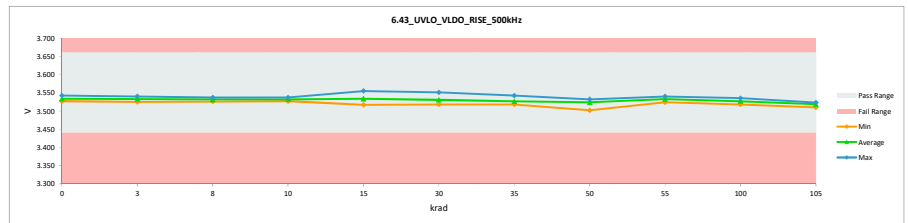
HDR TID Report  
TPS7H5004-SP QMLP

| krad(SI) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.43_UVLO_VLDO_RISE_500kHz |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 3.543   | 3.542    | -0.001 |
| 0                          | 726      | 3.533   | 3.532    | -0.001 |
| 0                          | 791      | 3.527   | 3.527    | 0.000  |
| 3                          | 689      | 3.538   | 3.537    | -0.001 |
| 3                          | 688      | 3.533   | 3.530    | -0.003 |
| 3                          | 700      | 3.533   | 3.533    | 0.000  |
| 3                          | 482      | 3.542   | 3.540    | -0.002 |
| 3                          | 1033     | 3.527   | 3.525    | -0.002 |
| 8                          | 442      | 3.534   | 3.532    | -0.002 |
| 8                          | 699      | 3.539   | 3.537    | -0.002 |
| 8                          | 344      | 3.529   | 3.526    | -0.003 |
| 8                          | 355      | 3.535   | 3.532    | -0.003 |
| 8                          | 790      | 3.531   | 3.531    | 0.000  |
| 10                         | 537      | 3.532   | 3.529    | -0.003 |
| 10                         | 396      | 3.532   | 3.533    | 0.001  |
| 10                         | 521      | 3.539   | 3.537    | -0.002 |
| 10                         | 535      | 3.534   | 3.534    | 0.000  |
| 10                         | 526      | 3.531   | 3.527    | -0.004 |
| 15                         | 540      | 3.555   | 3.555    | 0.000  |
| 15                         | 387      | 3.524   | 3.522    | -0.002 |
| 15                         | 787      | 3.540   | 3.542    | 0.002  |
| 15                         | 1042     | 3.536   | 3.532    | -0.004 |
| 15                         | 483      | 3.522   | 3.517    | -0.005 |
| 30                         | 597      | 3.524   | 3.521    | -0.003 |
| 30                         | 853      | 3.521   | 3.518    | -0.003 |
| 30                         | 416      | 3.528   | 3.529    | 0.001  |
| 30                         | 949      | 3.541   | 3.534    | -0.007 |
| 30                         | 221      | 3.550   | 3.551    | 0.001  |
| 35                         | 538      | 3.534   | 3.527    | -0.007 |
| 35                         | 164      | 3.541   | 3.542    | 0.001  |
| 35                         | 1018     | 3.526   | 3.518    | -0.008 |
| 35                         | 462      | 3.521   | 3.518    | -0.003 |
| 35                         | 1032     | 3.545   | 3.527    | -0.018 |
| 50                         | 566      | 3.537   | 3.527    | -0.010 |
| 50                         | 197      | 3.515   | 3.502    | -0.013 |
| 50                         | 793      | 3.536   | 3.528    | -0.008 |
| 50                         | 802      | 3.537   | 3.532    | -0.005 |
| 50                         | 61       | 3.530   | 3.529    | -0.001 |
| 55                         | 795      | 3.538   | 3.528    | -0.010 |
| 55                         | 921      | 3.544   | 3.539    | -0.005 |
| 55                         | 741      | 3.539   | 3.535    | -0.004 |
| 55                         | 809      | 3.551   | 3.540    | -0.011 |
| 55                         | 804      | 3.534   | 3.524    | -0.010 |
| 100                        | 449      | 3.546   | 3.528    | -0.018 |
| 100                        | 541      | 3.527   | 3.518    | -0.009 |
| 100                        | 476      | 3.542   | 3.535    | -0.007 |
| 100                        | 45       | 3.538   | 3.523    | -0.015 |
| 100                        | 642      | 3.540   | 3.530    | -0.010 |
| 105                        | 1036     | 3.529   | 3.523    | -0.006 |
| 105                        | 1038     | 3.540   | 3.518    | -0.022 |
| 105                        | 203      | 3.543   | 3.523    | -0.020 |
| 105                        | 1029     | 3.536   | 3.510    | -0.026 |
| 105                        | 1027     | 3.529   | 3.519    | -0.010 |
| 105                        | Max      | 3.555   | 3.555    | 0.002  |
| 105                        | Average  | 3.535   | 3.529    | -0.006 |
| 105                        | Min      | 3.515   | 3.502    | -0.026 |
| 105                        | Std Dev  | 0.008   | 0.009    | 0.006  |



| 6.43_UVLO_VLDO_RISE_500kHz |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit                  |       |       |       |       |       |       |       |       |       |       |       |
| krad                       | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                         | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 |
| Min                        | 3.527 | 3.525 | 3.526 | 3.527 | 3.517 | 3.518 | 3.518 | 3.502 | 3.524 | 3.518 | 3.510 |
| Average                    | 3.534 | 3.533 | 3.532 | 3.532 | 3.534 | 3.531 | 3.526 | 3.524 | 3.533 | 3.527 | 3.519 |
| Max                        | 3.542 | 3.540 | 3.537 | 3.537 | 3.555 | 3.551 | 3.542 | 3.532 | 3.540 | 3.535 | 3.523 |
| UL                         | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 |

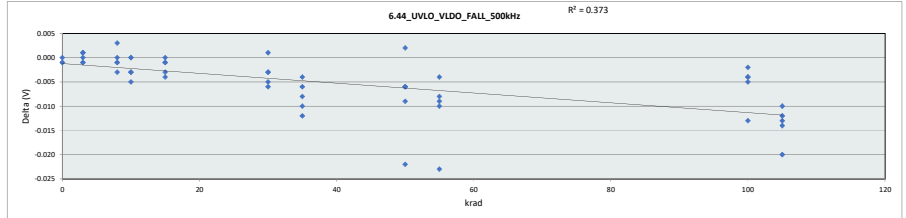


# HDR TID Report

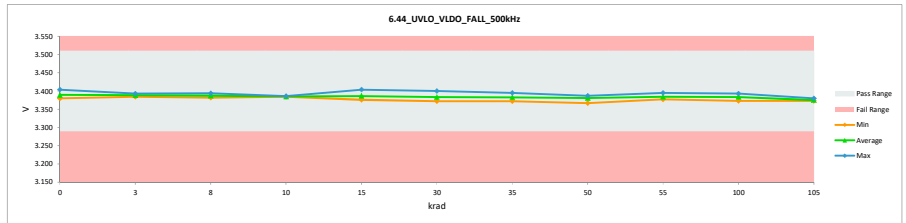
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.44_UVLO_VLDO_FALL_500kHz |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 3.405   | 3.404    | -0.001 |
| 0                          | 726      | 3.385   | 3.384    | -0.001 |
| 0                          | 791      | 3.380   | 3.380    | 0.000  |
| 3                          | 689      | 3.392   | 3.393    | 0.001  |
| 3                          | 688      | 3.383   | 3.384    | 0.001  |
| 3                          | 700      | 3.392   | 3.392    | 0.000  |
| 3                          | 482      | 3.392   | 3.391    | -0.001 |
| 3                          | 1033     | 3.385   | 3.384    | -0.001 |
| 8                          | 442      | 3.384   | 3.383    | -0.001 |
| 8                          | 699      | 3.388   | 3.388    | 0.000  |
| 8                          | 344      | 3.385   | 3.382    | -0.003 |
| 8                          | 355      | 3.387   | 3.390    | 0.003  |
| 8                          | 750      | 3.395   | 3.394    | -0.001 |
| 10                         | 537      | 3.388   | 3.385    | -0.003 |
| 10                         | 396      | 3.384   | 3.384    | 0.000  |
| 10                         | 521      | 3.388   | 3.385    | -0.003 |
| 10                         | 535      | 3.385   | 3.385    | 0.000  |
| 10                         | 526      | 3.391   | 3.386    | -0.005 |
| 15                         | 540      | 3.408   | 3.404    | -0.004 |
| 15                         | 387      | 3.378   | 3.377    | -0.001 |
| 15                         | 787      | 3.393   | 3.392    | -0.001 |
| 15                         | 1042     | 3.386   | 3.383    | -0.003 |
| 15                         | 483      | 3.376   | 3.376    | 0.000  |
| 30                         | 597      | 3.375   | 3.372    | -0.003 |
| 30                         | 853      | 3.375   | 3.372    | -0.003 |
| 30                         | 416      | 3.390   | 3.391    | 0.001  |
| 30                         | 949      | 3.388   | 3.383    | -0.005 |
| 30                         | 221      | 3.406   | 3.400    | -0.006 |
| 35                         | 538      | 3.395   | 3.391    | -0.004 |
| 35                         | 164      | 3.407   | 3.395    | -0.012 |
| 35                         | 1018     | 3.381   | 3.373    | -0.008 |
| 35                         | 462      | 3.378   | 3.372    | -0.006 |
| 35                         | 1032     | 3.393   | 3.383    | -0.010 |
| 50                         | 566      | 3.403   | 3.381    | -0.022 |
| 50                         | 197      | 3.376   | 3.367    | -0.009 |
| 50                         | 793      | 3.390   | 3.384    | -0.006 |
| 50                         | 802      | 3.393   | 3.387    | -0.006 |
| 50                         | 61       | 3.384   | 3.386    | 0.002  |
| 55                         | 795      | 3.400   | 3.377    | -0.023 |
| 55                         | 921      | 3.392   | 3.388    | -0.004 |
| 55                         | 741      | 3.394   | 3.385    | -0.009 |
| 55                         | 809      | 3.403   | 3.395    | -0.008 |
| 55                         | 804      | 3.387   | 3.377    | -0.010 |
| 100                        | 449      | 3.395   | 3.393    | -0.002 |
| 100                        | 541      | 3.382   | 3.378    | -0.004 |
| 100                        | 476      | 3.395   | 3.390    | -0.005 |
| 100                        | 45       | 3.386   | 3.373    | -0.013 |
| 100                        | 642      | 3.389   | 3.385    | -0.004 |
| 105                        | 1036     | 3.386   | 3.373    | -0.013 |
| 105                        | 1038     | 3.388   | 3.376    | -0.012 |
| 105                        | 203      | 3.394   | 3.380    | -0.014 |
| 105                        | 1029     | 3.394   | 3.374    | -0.020 |
| 105                        | 1027     | 3.383   | 3.373    | -0.010 |
| 105                        | Max      | 3.408   | 3.404    | 0.003  |
| 105                        | Average  | 3.389   | 3.384    | -0.005 |
| 105                        | Min      | 3.375   | 3.367    | -0.008 |
| 105                        | Std Dev  | 0.008   | 0.008    | 0.006  |



| 6.44_UVLO_VLDO_FALL_500kHz |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit                  |       |       |       |       |       |       |       |       |       |       |       |
| krad                       | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                         | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 |
| Min                        | 3.380 | 3.384 | 3.382 | 3.384 | 3.376 | 3.372 | 3.372 | 3.367 | 3.377 | 3.373 | 3.373 |
| Average                    | 3.389 | 3.389 | 3.387 | 3.385 | 3.386 | 3.384 | 3.383 | 3.381 | 3.384 | 3.384 | 3.375 |
| Max                        | 3.404 | 3.393 | 3.394 | 3.386 | 3.404 | 3.400 | 3.395 | 3.387 | 3.395 | 3.393 | 3.380 |
| UL                         | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 |

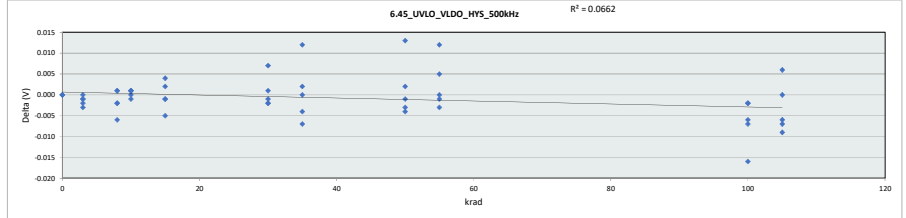


# HDR TID Report

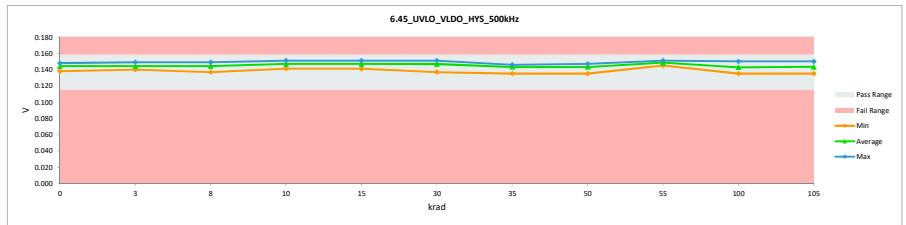
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.45_UVLO_VLDO_HYS_500kHz |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      | V        | V       |          |        |
| Max Limit                 | 0.158    | 0.158   |          |        |
| Min Limit                 | 0.115    | 0.115   |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 0.138   | 0.138    | 0.000  |
| 0                         | 726      | 0.148   | 0.148    | 0.000  |
| 0                         | 791      | 0.147   | 0.147    | 0.000  |
| 3                         | 689      | 0.146   | 0.144    | -0.002 |
| 3                         | 688      | 0.150   | 0.147    | -0.003 |
| 3                         | 700      | 0.140   | 0.140    | 0.000  |
| 3                         | 482      | 0.150   | 0.149    | -0.001 |
| 3                         | 1033     | 0.142   | 0.141    | -0.001 |
| 8                         | 442      | 0.151   | 0.149    | -0.002 |
| 8                         | 699      | 0.151   | 0.149    | -0.002 |
| 8                         | 344      | 0.143   | 0.144    | 0.001  |
| 8                         | 355      | 0.148   | 0.142    | -0.006 |
| 8                         | 750      | 0.136   | 0.137    | 0.001  |
| 10                        | 537      | 0.144   | 0.144    | 0.000  |
| 10                        | 396      | 0.148   | 0.149    | 0.001  |
| 10                        | 521      | 0.152   | 0.151    | -0.001 |
| 10                        | 535      | 0.149   | 0.150    | 0.001  |
| 10                        | 526      | 0.140   | 0.141    | 0.001  |
| 15                        | 540      | 0.147   | 0.151    | 0.004  |
| 15                        | 387      | 0.146   | 0.145    | -0.001 |
| 15                        | 787      | 0.147   | 0.149    | 0.002  |
| 15                        | 1042     | 0.150   | 0.149    | -0.001 |
| 15                        | 483      | 0.146   | 0.141    | -0.005 |
| 30                        | 597      | 0.148   | 0.149    | 0.001  |
| 30                        | 853      | 0.147   | 0.146    | -0.001 |
| 30                        | 416      | 0.139   | 0.137    | -0.002 |
| 30                        | 949      | 0.153   | 0.151    | -0.002 |
| 30                        | 221      | 0.144   | 0.151    | 0.007  |
| 35                        | 538      | 0.139   | 0.135    | -0.004 |
| 35                        | 164      | 0.134   | 0.146    | 0.012  |
| 35                        | 1018     | 0.145   | 0.145    | 0.000  |
| 35                        | 462      | 0.144   | 0.146    | 0.002  |
| 35                        | 1032     | 0.151   | 0.144    | -0.007 |
| 50                        | 566      | 0.134   | 0.147    | 0.013  |
| 50                        | 197      | 0.139   | 0.135    | -0.004 |
| 50                        | 793      | 0.146   | 0.145    | -0.001 |
| 50                        | 802      | 0.144   | 0.146    | 0.002  |
| 50                        | 61       | 0.146   | 0.143    | -0.003 |
| 55                        | 795      | 0.138   | 0.150    | 0.012  |
| 55                        | 921      | 0.152   | 0.151    | -0.001 |
| 55                        | 741      | 0.145   | 0.150    | 0.005  |
| 55                        | 809      | 0.148   | 0.145    | -0.003 |
| 55                        | 804      | 0.147   | 0.147    | 0.000  |
| 100                       | 449      | 0.151   | 0.135    | -0.016 |
| 100                       | 541      | 0.146   | 0.139    | -0.007 |
| 100                       | 476      | 0.147   | 0.145    | -0.002 |
| 100                       | 45       | 0.152   | 0.150    | -0.002 |
| 100                       | 642      | 0.151   | 0.145    | -0.006 |
| 105                       | 1036     | 0.144   | 0.150    | 0.006  |
| 105                       | 1038     | 0.152   | 0.143    | -0.009 |
| 105                       | 203      | 0.149   | 0.143    | -0.006 |
| 105                       | 1029     | 0.142   | 0.135    | -0.007 |
| 105                       | 1027     | 0.146   | 0.146    | 0.000  |
| 105                       | Max      | 0.153   | 0.151    | 0.013  |
| 105                       | Average  | 0.146   | 0.145    | -0.001 |
| 105                       | Min      | 0.134   | 0.135    | -0.016 |
| 105                       | Std Dev  | 0.005   | 0.005    | 0.005  |



| 6.45_UVLO_VLDO_HYS_500kHz |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                 | 0.158 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit                 | 0.115 | V     |       |       |       |       |       |       |       |       |       |
| krad                      | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                        | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 |
| Min                       | 0.138 | 0.140 | 0.137 | 0.141 | 0.141 | 0.137 | 0.135 | 0.135 | 0.145 | 0.135 | 0.135 |
| Average                   | 0.144 | 0.144 | 0.144 | 0.147 | 0.147 | 0.147 | 0.143 | 0.143 | 0.149 | 0.143 | 0.143 |
| Max                       | 0.148 | 0.149 | 0.149 | 0.151 | 0.151 | 0.151 | 0.146 | 0.146 | 0.151 | 0.150 | 0.150 |
| UL                        | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 |

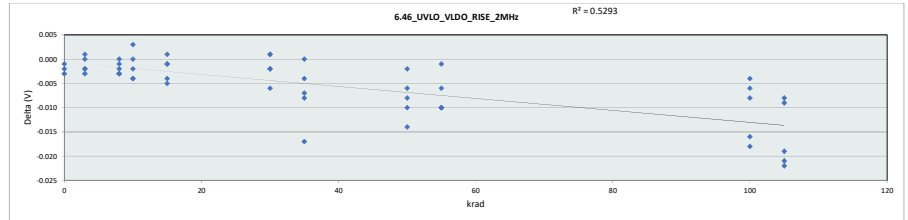


# HDR TID Report

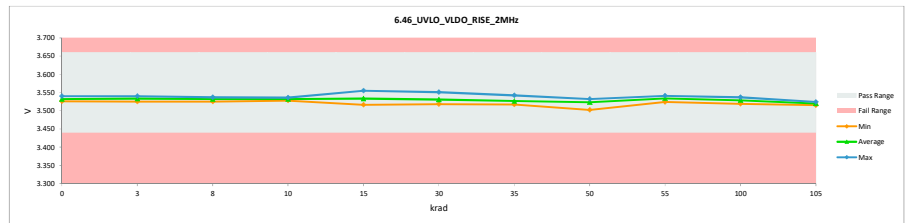
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.46 UVLO_VLDO_RISE_2MHz |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     | V        | V       |          |        |
| Max Limit                | 3.66     | 3.66    |          |        |
| Min Limit                | 3.44     | 3.44    |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 3.542   | 3.540    | -0.002 |
| 0                        | 726      | 3.534   | 3.531    | -0.003 |
| 0                        | 791      | 3.527   | 3.526    | -0.001 |
| 3                        | 689      | 3.537   | 3.537    | 0.000  |
| 3                        | 688      | 3.533   | 3.531    | -0.002 |
| 3                        | 700      | 3.532   | 3.533    | 0.001  |
| 3                        | 482      | 3.542   | 3.540    | -0.002 |
| 3                        | 1033     | 3.526   | 3.525    | -0.003 |
| 8                        | 442      | 3.533   | 3.533    | 0.000  |
| 8                        | 699      | 3.538   | 3.537    | -0.001 |
| 8                        | 344      | 3.528   | 3.525    | -0.003 |
| 8                        | 355      | 3.536   | 3.533    | -0.003 |
| 8                        | 790      | 3.532   | 3.530    | -0.002 |
| 10                       | 537      | 3.531   | 3.529    | -0.002 |
| 10                       | 396      | 3.532   | 3.535    | 0.003  |
| 10                       | 521      | 3.540   | 3.536    | -0.004 |
| 10                       | 535      | 3.534   | 3.534    | 0.000  |
| 10                       | 526      | 3.532   | 3.528    | -0.004 |
| 15                       | 940      | 3.556   | 3.555    | -0.001 |
| 15                       | 387      | 3.524   | 3.523    | -0.001 |
| 15                       | 787      | 3.540   | 3.541    | 0.001  |
| 15                       | 1042     | 3.536   | 3.532    | -0.004 |
| 15                       | 483      | 3.521   | 3.516    | -0.005 |
| 30                       | 597      | 3.523   | 3.521    | -0.002 |
| 30                       | 853      | 3.520   | 3.518    | -0.002 |
| 30                       | 416      | 3.529   | 3.530    | 0.001  |
| 30                       | 949      | 3.540   | 3.534    | -0.006 |
| 30                       | 221      | 3.550   | 3.551    | 0.001  |
| 35                       | 538      | 3.535   | 3.527    | -0.008 |
| 35                       | 164      | 3.542   | 3.542    | 0.000  |
| 35                       | 1018     | 3.526   | 3.519    | -0.007 |
| 35                       | 462      | 3.521   | 3.517    | -0.004 |
| 35                       | 1032     | 3.545   | 3.528    | -0.017 |
| 50                       | 566      | 3.537   | 3.527    | -0.010 |
| 50                       | 197      | 3.516   | 3.502    | -0.014 |
| 50                       | 793      | 3.537   | 3.529    | -0.008 |
| 50                       | 802      | 3.538   | 3.532    | -0.006 |
| 50                       | 61       | 3.530   | 3.528    | -0.002 |
| 55                       | 795      | 3.538   | 3.528    | -0.010 |
| 55                       | 921      | 3.544   | 3.538    | -0.006 |
| 55                       | 741      | 3.538   | 3.537    | -0.001 |
| 55                       | 809      | 3.551   | 3.541    | -0.010 |
| 55                       | 804      | 3.534   | 3.524    | -0.010 |
| 100                      | 449      | 3.546   | 3.528    | -0.018 |
| 100                      | 541      | 3.527   | 3.519    | -0.008 |
| 100                      | 476      | 3.543   | 3.537    | -0.006 |
| 100                      | 45       | 3.539   | 3.523    | -0.016 |
| 100                      | 642      | 3.540   | 3.536    | -0.004 |
| 105                      | 1036     | 3.530   | 3.522    | -0.008 |
| 105                      | 1038     | 3.540   | 3.519    | -0.021 |
| 105                      | 203      | 3.543   | 3.524    | -0.019 |
| 105                      | 1029     | 3.537   | 3.515    | -0.022 |
| 105                      | 1027     | 3.529   | 3.520    | -0.009 |
| 105                      | Max      | 3.556   | 3.555    | 0.003  |
| 105                      | Average  | 3.535   | 3.530    | -0.005 |
| 105                      | Min      | 3.516   | 3.502    | -0.022 |
| 105                      | Std Dev  | 0.008   | 0.009    | 0.006  |



| 6.46_UVLO_VLDO_RISE_2MHz |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                |       |       |       |       |       |       |       |       |       |       |       |
| Tester                   |       |       |       |       |       |       |       |       |       |       |       |
| Test Number              |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                | 3.66  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit                | 3.44  | V     |       |       |       |       |       |       |       |       |       |
| krad                     |       | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                       | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 | 3.440 |
| Min                      | 3.526 | 3.525 | 3.525 | 3.528 | 3.516 | 3.518 | 3.517 | 3.502 | 3.524 | 3.519 | 3.515 |
| Average                  | 3.532 | 3.533 | 3.532 | 3.532 | 3.533 | 3.531 | 3.527 | 3.524 | 3.534 | 3.529 | 3.520 |
| Max                      | 3.540 | 3.540 | 3.537 | 3.536 | 3.555 | 3.551 | 3.542 | 3.532 | 3.541 | 3.537 | 3.524 |
| UL                       | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 | 3.660 |

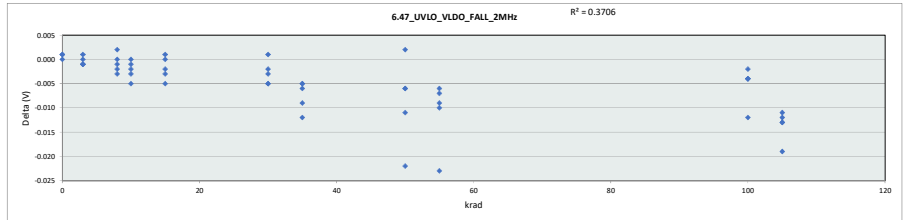


# HDR TID Report

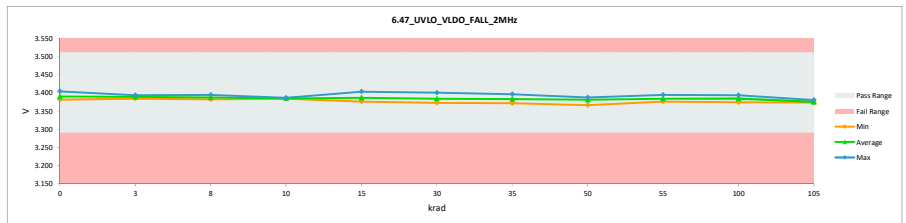
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.47_UVLO_VLDO_FALL_2MHz |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 3.404   | 3.404    | 0.000  |
| 0                        | 726      | 3.384   | 3.385    | 0.001  |
| 0                        | 791      | 3.380   | 3.381    | 0.001  |
| 3                        | 689      | 3.392   | 3.393    | 0.001  |
| 3                        | 688      | 3.384   | 3.384    | 0.000  |
| 3                        | 700      | 3.393   | 3.392    | -0.001 |
| 3                        | 482      | 3.392   | 3.391    | -0.001 |
| 3                        | 1033     | 3.385   | 3.384    | -0.001 |
| 8                        | 442      | 3.383   | 3.383    | 0.000  |
| 8                        | 699      | 3.388   | 3.387    | -0.001 |
| 8                        | 344      | 3.385   | 3.382    | -0.003 |
| 8                        | 355      | 3.388   | 3.390    | 0.002  |
| 8                        | 750      | 3.396   | 3.394    | -0.002 |
| 10                       | 537      | 3.387   | 3.384    | -0.003 |
| 10                       | 396      | 3.384   | 3.384    | 0.000  |
| 10                       | 521      | 3.387   | 3.385    | -0.002 |
| 10                       | 535      | 3.386   | 3.385    | -0.001 |
| 10                       | 526      | 3.391   | 3.386    | -0.005 |
| 15                       | 540      | 3.408   | 3.403    | -0.005 |
| 15                       | 387      | 3.377   | 3.378    | 0.001  |
| 15                       | 787      | 3.394   | 3.392    | -0.002 |
| 15                       | 1042     | 3.386   | 3.383    | -0.003 |
| 15                       | 483      | 3.376   | 3.376    | 0.000  |
| 30                       | 597      | 3.374   | 3.372    | -0.002 |
| 30                       | 853      | 3.376   | 3.373    | -0.003 |
| 30                       | 416      | 3.389   | 3.390    | 0.001  |
| 30                       | 949      | 3.388   | 3.383    | -0.005 |
| 30                       | 221      | 3.405   | 3.400    | -0.005 |
| 35                       | 538      | 3.395   | 3.390    | -0.005 |
| 35                       | 164      | 3.405   | 3.396    | -0.009 |
| 35                       | 1018     | 3.381   | 3.376    | -0.005 |
| 35                       | 462      | 3.377   | 3.371    | -0.006 |
| 35                       | 1032     | 3.394   | 3.382    | -0.012 |
| 50                       | 566      | 3.404   | 3.382    | -0.022 |
| 50                       | 197      | 3.377   | 3.366    | -0.011 |
| 50                       | 793      | 3.389   | 3.383    | -0.006 |
| 50                       | 802      | 3.392   | 3.387    | -0.005 |
| 50                       | 61       | 3.384   | 3.386    | 0.002  |
| 55                       | 795      | 3.400   | 3.377    | -0.023 |
| 55                       | 921      | 3.392   | 3.386    | -0.006 |
| 55                       | 741      | 3.394   | 3.385    | -0.009 |
| 55                       | 809      | 3.401   | 3.394    | -0.007 |
| 55                       | 804      | 3.386   | 3.376    | -0.010 |
| 100                      | 449      | 3.395   | 3.393    | -0.002 |
| 100                      | 541      | 3.381   | 3.377    | -0.004 |
| 100                      | 476      | 3.395   | 3.391    | -0.004 |
| 100                      | 45       | 3.386   | 3.374    | -0.012 |
| 100                      | 642      | 3.389   | 3.385    | -0.004 |
| 105                      | 1036     | 3.386   | 3.373    | -0.013 |
| 105                      | 1038     | 3.388   | 3.376    | -0.012 |
| 105                      | 203      | 3.393   | 3.380    | -0.013 |
| 105                      | 1029     | 3.393   | 3.374    | -0.019 |
| 105                      | 1027     | 3.384   | 3.373    | -0.011 |
| 105                      | Max      | 3.408   | 3.404    | 0.002  |
| 105                      | Average  | 3.389   | 3.384    | -0.005 |
| 105                      | Min      | 3.374   | 3.366    | -0.023 |
| 105                      | Std Dev  | 0.008   | 0.008    | 0.006  |



| 6.47_UVLO_VLDO_FALL_2MHz |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                |       |       |       |       |       |       |       |       |       |       |       |
| Tester                   |       |       |       |       |       |       |       |       |       |       |       |
| Test Number              |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                | 3.51  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit                | 3.29  | V     |       |       |       |       |       |       |       |       |       |
| krad                     | 0     | 8     |       | 10    |       | 15    |       | 30    |       | 55    |       |
| LL                       | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 |
| Min                      | 3.381 | 3.384 | 3.382 | 3.384 | 3.376 | 3.372 | 3.371 | 3.366 | 3.376 | 3.374 | 3.373 |
| Average                  | 3.390 | 3.389 | 3.387 | 3.385 | 3.386 | 3.384 | 3.383 | 3.381 | 3.384 | 3.384 | 3.375 |
| Max                      | 3.404 | 3.393 | 3.394 | 3.386 | 3.403 | 3.400 | 3.396 | 3.387 | 3.394 | 3.393 | 3.380 |
| UL                       | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 | 3.510 |

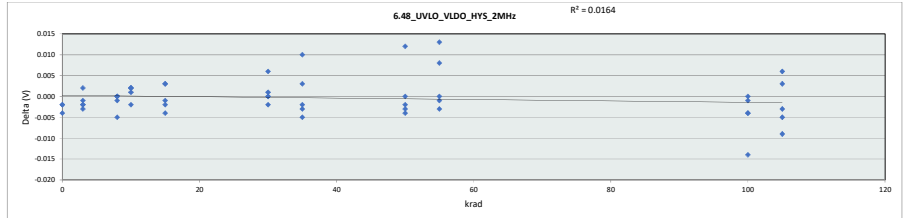


# HDR TID Report

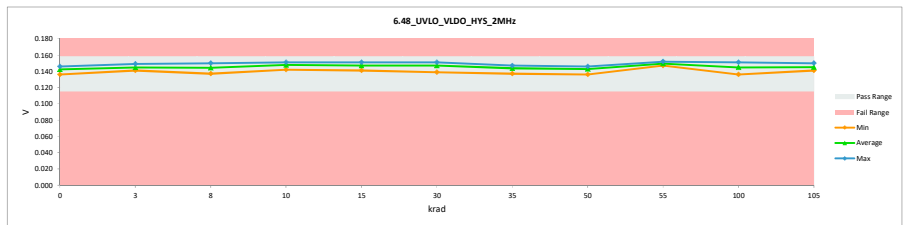
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 6.48_UVLO_VLDO_HYS_2MHz |          |         |          |        |
|-------------------------|----------|---------|----------|--------|
| Test Site               |          |         |          |        |
| Tester                  |          |         |          |        |
| Test Number             |          |         |          |        |
| Unit                    | V        | V       |          |        |
| Max Limit               | 0.158    | 0.158   |          |        |
| Min Limit               | 0.115    | 0.115   |          |        |
| krad                    | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                       | 552      | 0.138   | 0.136    | -0.002 |
| 0                       | 726      | 0.150   | 0.146    | -0.004 |
| 0                       | 791      | 0.147   | 0.145    | -0.002 |
| 3                       | 689      | 0.146   | 0.144    | -0.002 |
| 3                       | 688      | 0.150   | 0.147    | -0.003 |
| 3                       | 700      | 0.140   | 0.142    | 0.002  |
| 3                       | 482      | 0.150   | 0.149    | -0.001 |
| 3                       | 1033     | 0.145   | 0.141    | -0.002 |
| 8                       | 442      | 0.150   | 0.149    | -0.001 |
| 8                       | 699      | 0.150   | 0.150    | 0.000  |
| 8                       | 344      | 0.143   | 0.143    | 0.000  |
| 8                       | 355      | 0.148   | 0.143    | -0.005 |
| 8                       | 790      | 0.137   | 0.137    | 0.000  |
| 10                      | 537      | 0.146   | 0.146    | 0.002  |
| 10                      | 396      | 0.148   | 0.150    | 0.002  |
| 10                      | 521      | 0.153   | 0.151    | -0.002 |
| 10                      | 535      | 0.148   | 0.150    | 0.002  |
| 10                      | 526      | 0.141   | 0.142    | 0.001  |
| 15                      | 540      | 0.148   | 0.151    | 0.003  |
| 15                      | 387      | 0.146   | 0.145    | -0.001 |
| 15                      | 787      | 0.146   | 0.149    | 0.003  |
| 15                      | 1042     | 0.151   | 0.149    | -0.002 |
| 15                      | 483      | 0.145   | 0.141    | -0.004 |
| 30                      | 597      | 0.149   | 0.149    | 0.000  |
| 30                      | 853      | 0.144   | 0.145    | 0.001  |
| 30                      | 416      | 0.139   | 0.139    | 0.000  |
| 30                      | 949      | 0.153   | 0.151    | -0.002 |
| 30                      | 221      | 0.145   | 0.151    | 0.006  |
| 35                      | 538      | 0.140   | 0.137    | -0.003 |
| 35                      | 164      | 0.136   | 0.146    | 0.010  |
| 35                      | 1018     | 0.145   | 0.143    | -0.002 |
| 35                      | 462      | 0.144   | 0.147    | 0.003  |
| 35                      | 1032     | 0.151   | 0.146    | -0.005 |
| 50                      | 566      | 0.133   | 0.145    | 0.012  |
| 50                      | 197      | 0.139   | 0.136    | -0.003 |
| 50                      | 793      | 0.148   | 0.146    | -0.002 |
| 50                      | 802      | 0.145   | 0.145    | 0.000  |
| 50                      | 61       | 0.146   | 0.142    | -0.004 |
| 55                      | 795      | 0.138   | 0.151    | 0.013  |
| 55                      | 921      | 0.151   | 0.151    | 0.000  |
| 55                      | 741      | 0.144   | 0.152    | 0.008  |
| 55                      | 809      | 0.150   | 0.147    | -0.003 |
| 55                      | 804      | 0.148   | 0.147    | -0.001 |
| 100                     | 449      | 0.150   | 0.136    | -0.014 |
| 100                     | 541      | 0.146   | 0.142    | -0.004 |
| 100                     | 476      | 0.147   | 0.146    | -0.001 |
| 100                     | 45       | 0.153   | 0.149    | -0.004 |
| 100                     | 642      | 0.151   | 0.151    | 0.000  |
| 105                     | 1036     | 0.144   | 0.150    | 0.006  |
| 105                     | 1038     | 0.152   | 0.143    | -0.009 |
| 105                     | 203      | 0.149   | 0.144    | -0.005 |
| 105                     | 1029     | 0.144   | 0.141    | -0.003 |
| 105                     | 1027     | 0.145   | 0.148    | 0.003  |
| 105                     | Max      | 0.153   | 0.152    | 0.013  |
| 105                     | Average  | 0.146   | 0.146    | 0.000  |
| 105                     | Min      | 0.133   | 0.136    | -0.014 |
| 105                     | Std Dev  | 0.005   | 0.004    | 0.005  |



| 6.48_UVLO_VLDO_HYS_2MHz |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site               |       |       |       |       |       |       |       |       |       |       |       |
| Tester                  |       |       |       |       |       |       |       |       |       |       |       |
| Test Number             |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit               | 0.158 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit               | 0.115 | V     |       |       |       |       |       |       |       |       |       |
| krad                    | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                      | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 |
| Min                     | 0.136 | 0.141 | 0.137 | 0.142 | 0.141 | 0.139 | 0.137 | 0.136 | 0.147 | 0.136 | 0.141 |
| Average                 | 0.142 | 0.145 | 0.144 | 0.148 | 0.147 | 0.147 | 0.144 | 0.143 | 0.150 | 0.145 | 0.145 |
| Max                     | 0.146 | 0.149 | 0.150 | 0.151 | 0.151 | 0.151 | 0.147 | 0.146 | 0.152 | 0.151 | 0.150 |
| UL                      | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 | 0.158 |

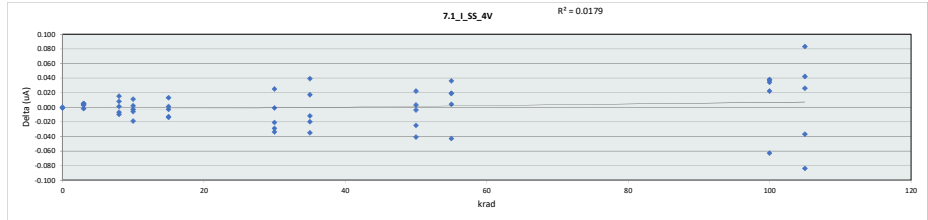


# HDR TID Report

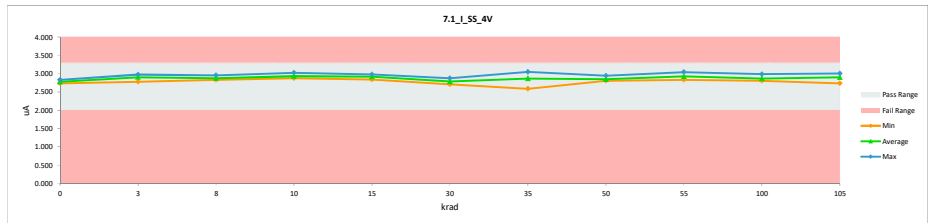
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 7.1_I_SS_4V |          |         |          |        |
|-------------|----------|---------|----------|--------|
| Test Site   |          |         |          |        |
| Tester      |          |         |          |        |
| Test Number |          |         |          |        |
| Unit        |          |         |          |        |
| Max Limit   |          |         |          |        |
| Min Limit   |          |         |          |        |
| krad        | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0           | 552      | 2.775   | 2.775    | 0.000  |
| 0           | 726      | 2.832   | 2.831    | -0.001 |
| 0           | 791      | 2.735   | 2.734    | -0.001 |
| 3           | 689      | 2.898   | 2.903    | 0.005  |
| 3           | 688      | 2.884   | 2.882    | -0.002 |
| 3           | 700      | 2.973   | 2.976    | 0.003  |
| 3           | 482      | 2.952   | 2.955    | 0.003  |
| 3           | 1033     | 2.778   | 2.778    | 0.005  |
| 8           | 442      | 2.854   | 2.862    | 0.008  |
| 8           | 699      | 2.843   | 2.836    | -0.007 |
| 8           | 344      | 2.966   | 2.956    | -0.010 |
| 8           | 355      | 2.863   | 2.878    | 0.015  |
| 8           | 750      | 2.832   | 2.833    | 0.001  |
| 10          | 537      | 2.872   | 2.883    | 0.011  |
| 10          | 396      | 2.881   | 2.875    | -0.006 |
| 10          | 521      | 2.894   | 2.875    | -0.019 |
| 10          | 535      | 3.028   | 3.025    | -0.003 |
| 10          | 526      | 2.992   | 2.994    | 0.002  |
| 15          | 540      | 2.907   | 2.893    | -0.014 |
| 15          | 387      | 2.916   | 2.913    | -0.003 |
| 15          | 787      | 2.957   | 2.958    | 0.001  |
| 15          | 1042     | 2.992   | 2.979    | -0.013 |
| 15          | 483      | 2.826   | 2.839    | 0.013  |
| 30          | 597      | 2.804   | 2.783    | -0.021 |
| 30          | 853      | 2.909   | 2.875    | -0.034 |
| 30          | 416      | 2.728   | 2.753    | 0.025  |
| 30          | 949      | 2.737   | 2.708    | -0.029 |
| 30          | 221      | 2.809   | 2.808    | -0.001 |
| 35          | 538      | 2.953   | 2.970    | 0.017  |
| 35          | 164      | 2.607   | 2.587    | -0.020 |
| 35          | 1018     | 3.006   | 3.045    | 0.039  |
| 35          | 462      | 2.787   | 2.775    | -0.012 |
| 35          | 1032     | 3.004   | 2.969    | -0.035 |
| 50          | 566      | 2.867   | 2.826    | -0.041 |
| 50          | 197      | 2.860   | 2.835    | -0.025 |
| 50          | 793      | 2.831   | 2.834    | 0.003  |
| 50          | 802      | 2.808   | 2.804    | -0.004 |
| 50          | 61       | 2.920   | 2.942    | 0.022  |
| 55          | 795      | 2.840   | 2.844    | 0.004  |
| 55          | 921      | 2.995   | 2.952    | -0.043 |
| 55          | 741      | 2.815   | 2.834    | 0.019  |
| 55          | 809      | 3.025   | 3.044    | 0.019  |
| 55          | 804      | 2.908   | 2.944    | 0.036  |
| 100         | 449      | 2.793   | 2.831    | 0.038  |
| 100         | 541      | 2.839   | 2.861    | 0.022  |
| 100         | 476      | 2.773   | 2.807    | 0.034  |
| 100         | 45       | 2.896   | 2.833    | -0.063 |
| 100         | 642      | 2.949   | 2.986    | 0.037  |
| 105         | 1036     | 2.867   | 2.950    | 0.083  |
| 105         | 1038     | 2.980   | 2.896    | -0.084 |
| 105         | 203      | 2.865   | 2.907    | 0.042  |
| 105         | 1029     | 2.773   | 2.736    | -0.037 |
| 105         | 1027     | 2.977   | 3.003    | 0.026  |
| 105         | Max      | 3.028   | 3.045    | 0.083  |
| 105         | Average  | 2.875   | 2.875    | 0.000  |
| 105         | Min      | 2.607   | 2.587    | -0.084 |
| 105         | Std Dev  | 0.089   | 0.092    | 0.028  |



| 7.1_I_SS_4V                                                  |         |       |       |       |       |       |       |       |       |       |       |
|--------------------------------------------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |         |       |       |       |       |       |       |       |       |       |       |
|                                                              |         |       |       |       |       |       |       |       |       |       |       |
|                                                              |         |       |       |       |       |       |       |       |       |       |       |
|                                                              | 3.29 uA |       |       |       |       |       |       |       |       |       |       |
|                                                              | 2.01 uA |       |       |       |       |       |       |       |       |       |       |
| krad                                                         | 0       | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                                                           | 2.010   | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 |
| Min                                                          | 2.734   | 2.778 | 2.833 | 2.875 | 2.839 | 2.708 | 2.587 | 2.804 | 2.834 | 2.807 | 2.736 |
| Average                                                      | 2.780   | 2.899 | 2.873 | 2.930 | 2.916 | 2.785 | 2.869 | 2.848 | 2.924 | 2.864 | 2.898 |
| Max                                                          | 2.831   | 2.976 | 2.956 | 3.025 | 2.979 | 2.875 | 3.045 | 2.942 | 3.044 | 2.986 | 3.003 |
| UL                                                           | 3.290   | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 |

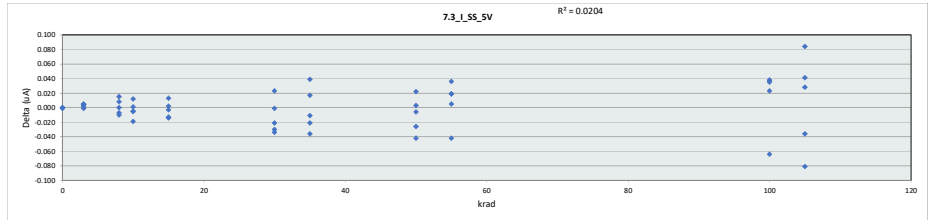


# HDR TID Report

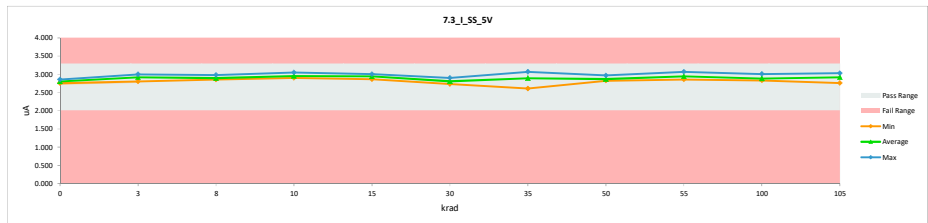
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 7.3_I_SS_5V |          |         |          |        |
|-------------|----------|---------|----------|--------|
| Test Site   |          |         |          |        |
| Tester      |          |         |          |        |
| Test Number |          |         |          |        |
| Unit        |          |         |          |        |
| Max Limit   |          |         |          |        |
| Min Limit   |          |         |          |        |
| krad        | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0           | 552      | 2.797   | 2.797    | 0.000  |
| 0           | 726      | 2.855   | 2.855    | 0.000  |
| 0           | 791      | 2.756   | 2.755    | -0.001 |
| 3           | 689      | 2.922   | 2.926    | 0.004  |
| 3           | 688      | 2.908   | 2.907    | -0.001 |
| 3           | 700      | 2.997   | 2.999    | 0.002  |
| 3           | 482      | 2.976   | 2.980    | 0.004  |
| 3           | 1033     | 2.796   | 2.801    | 0.005  |
| 8           | 442      | 2.876   | 2.884    | 0.008  |
| 8           | 699      | 2.866   | 2.859    | -0.007 |
| 8           | 344      | 2.989   | 2.979    | -0.010 |
| 8           | 355      | 2.885   | 2.900    | 0.015  |
| 8           | 750      | 2.853   | 2.853    | 0.000  |
| 10          | 537      | 2.894   | 2.906    | 0.012  |
| 10          | 396      | 2.904   | 2.899    | -0.005 |
| 10          | 521      | 2.917   | 2.898    | -0.019 |
| 10          | 535      | 3.054   | 3.049    | -0.005 |
| 10          | 526      | 3.017   | 3.018    | 0.001  |
| 15          | 540      | 2.931   | 2.917    | -0.014 |
| 15          | 387      | 2.938   | 2.935    | -0.003 |
| 15          | 787      | 2.982   | 2.984    | 0.002  |
| 15          | 1042     | 3.015   | 3.002    | -0.013 |
| 15          | 483      | 2.849   | 2.862    | 0.013  |
| 30          | 597      | 2.825   | 2.804    | -0.021 |
| 30          | 853      | 2.933   | 2.899    | -0.034 |
| 30          | 416      | 2.751   | 2.774    | 0.023  |
| 30          | 949      | 2.760   | 2.730    | -0.030 |
| 30          | 221      | 2.832   | 2.831    | -0.001 |
| 35          | 538      | 2.977   | 2.994    | 0.017  |
| 35          | 164      | 2.628   | 2.607    | -0.021 |
| 35          | 1018     | 3.030   | 3.069    | 0.039  |
| 35          | 462      | 2.808   | 2.797    | -0.011 |
| 35          | 1032     | 3.029   | 2.993    | -0.036 |
| 50          | 566      | 2.891   | 2.849    | -0.042 |
| 50          | 197      | 2.882   | 2.856    | -0.026 |
| 50          | 793      | 2.855   | 2.858    | 0.003  |
| 50          | 802      | 2.830   | 2.824    | -0.006 |
| 50          | 61       | 2.944   | 2.966    | 0.022  |
| 55          | 795      | 2.861   | 2.866    | 0.005  |
| 55          | 921      | 3.018   | 2.976    | -0.042 |
| 55          | 741      | 2.837   | 2.856    | 0.019  |
| 55          | 809      | 3.049   | 3.068    | 0.019  |
| 55          | 804      | 2.930   | 2.966    | 0.036  |
| 100         | 449      | 2.815   | 2.853    | 0.038  |
| 100         | 541      | 2.861   | 2.884    | 0.023  |
| 100         | 476      | 2.794   | 2.829    | 0.035  |
| 100         | 45       | 2.920   | 2.856    | -0.064 |
| 100         | 642      | 2.972   | 3.009    | 0.037  |
| 105         | 1036     | 2.890   | 2.974    | 0.084  |
| 105         | 1038     | 3.003   | 2.922    | -0.081 |
| 105         | 203      | 2.889   | 2.930    | 0.041  |
| 105         | 1029     | 2.795   | 2.759    | -0.036 |
| 105         | 1027     | 3.001   | 3.029    | 0.028  |
| 105         | Max      | 3.054   | 3.069    | 0.084  |
| 105         | Average  | 2.898   | 2.898    | 0.000  |
| 105         | Min      | 2.628   | 2.607    | -0.081 |
| 105         | Std Dev  | 0.090   | 0.093    | 0.028  |



| 7.3_I_SS_5V |       |       |       |       |       |       |       |       |       |       |       |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site   |       |       |       |       |       |       |       |       |       |       |       |
| Tester      |       |       |       |       |       |       |       |       |       |       |       |
| Test Number |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit   | 3.29  | uA    |       |       |       |       |       |       |       |       |       |
| Min Limit   | 2.01  | uA    |       |       |       |       |       |       |       |       |       |
| krad        | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 |
| Min         | 2.755 | 2.801 | 2.853 | 2.898 | 2.862 | 2.730 | 2.607 | 2.824 | 2.856 | 2.829 | 2.759 |
| Average     | 2.802 | 2.923 | 2.895 | 2.954 | 2.940 | 2.808 | 2.892 | 2.871 | 2.946 | 2.886 | 2.923 |
| Max         | 2.855 | 2.999 | 2.979 | 3.049 | 3.002 | 2.899 | 3.069 | 2.966 | 3.068 | 3.009 | 3.029 |
| UL          | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 |

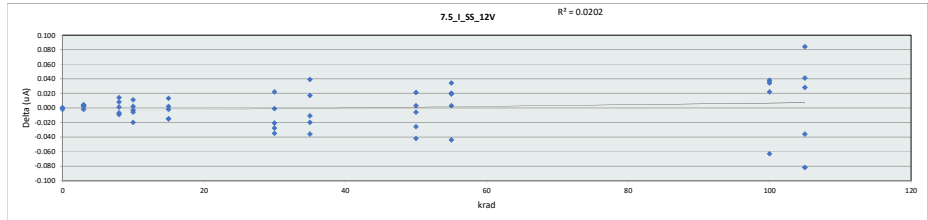


# HDR TID Report

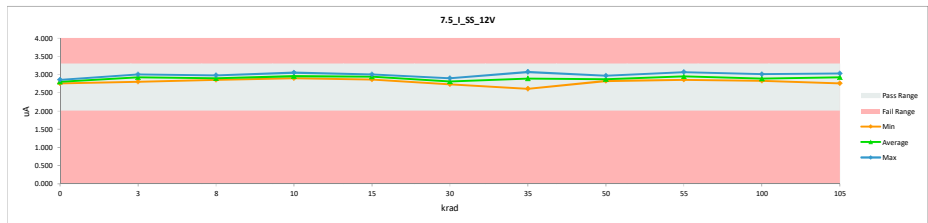
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 7.5_I_SS_12V |          |         |          |        |
|--------------|----------|---------|----------|--------|
| Test Site    |          |         |          |        |
| Tester       |          |         |          |        |
| Test Number  |          |         |          |        |
| Unit         |          |         |          |        |
| Max Limit    |          |         |          |        |
| Min Limit    |          |         |          |        |
| krad         | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0            | 552      | 2.797   | 2.797    | 0.000  |
| 0            | 726      | 2.855   | 2.855    | 0.000  |
| 0            | 791      | 2.757   | 2.755    | -0.002 |
| 3            | 689      | 2.923   | 2.926    | 0.003  |
| 3            | 688      | 2.910   | 2.908    | -0.002 |
| 3            | 700      | 2.999   | 3.001    | 0.002  |
| 3            | 482      | 2.977   | 2.981    | 0.004  |
| 3            | 1033     | 2.907   | 2.801    | 0.004  |
| 8            | 442      | 2.877   | 2.885    | 0.008  |
| 8            | 699      | 2.867   | 2.860    | -0.007 |
| 8            | 344      | 2.989   | 2.980    | -0.009 |
| 8            | 355      | 2.886   | 2.900    | 0.014  |
| 8            | 750      | 2.853   | 2.854    | 0.001  |
| 10           | 537      | 2.894   | 2.905    | 0.011  |
| 10           | 396      | 2.904   | 2.898    | -0.006 |
| 10           | 521      | 2.918   | 2.898    | -0.020 |
| 10           | 535      | 3.054   | 3.051    | -0.003 |
| 10           | 526      | 3.018   | 3.020    | 0.002  |
| 15           | 540      | 2.932   | 2.917    | -0.015 |
| 15           | 387      | 2.938   | 2.936    | -0.002 |
| 15           | 787      | 2.984   | 2.986    | 0.002  |
| 15           | 1042     | 3.016   | 3.001    | -0.015 |
| 15           | 483      | 2.850   | 2.863    | 0.013  |
| 30           | 597      | 2.825   | 2.804    | -0.021 |
| 30           | 853      | 2.834   | 2.899    | -0.035 |
| 30           | 416      | 2.751   | 2.773    | 0.022  |
| 30           | 949      | 2.760   | 2.732    | -0.028 |
| 30           | 221      | 2.833   | 2.832    | -0.001 |
| 35           | 538      | 2.976   | 2.993    | 0.017  |
| 35           | 164      | 2.628   | 2.608    | -0.020 |
| 35           | 1018     | 3.030   | 3.069    | 0.039  |
| 35           | 462      | 2.808   | 2.797    | -0.011 |
| 35           | 1032     | 3.030   | 2.994    | -0.036 |
| 50           | 566      | 2.891   | 2.849    | -0.042 |
| 50           | 197      | 2.883   | 2.857    | -0.026 |
| 50           | 793      | 2.856   | 2.859    | 0.003  |
| 50           | 802      | 2.830   | 2.824    | -0.006 |
| 50           | 61       | 2.944   | 2.965    | 0.021  |
| 55           | 795      | 2.863   | 2.866    | 0.003  |
| 55           | 921      | 3.020   | 2.976    | -0.044 |
| 55           | 741      | 2.837   | 2.857    | 0.020  |
| 55           | 809      | 3.049   | 3.068    | 0.019  |
| 55           | 804      | 2.931   | 2.965    | 0.034  |
| 100          | 449      | 2.815   | 2.852    | 0.037  |
| 100          | 541      | 2.862   | 2.884    | 0.022  |
| 100          | 476      | 2.794   | 2.828    | 0.034  |
| 100          | 45       | 2.920   | 2.857    | -0.063 |
| 100          | 642      | 2.972   | 3.010    | 0.038  |
| 105          | 1036     | 2.890   | 2.974    | 0.084  |
| 105          | 1038     | 3.004   | 2.922    | -0.082 |
| 105          | 203      | 2.890   | 2.931    | 0.041  |
| 105          | 1029     | 2.796   | 2.760    | -0.036 |
| 105          | 1027     | 3.061   | 3.029    | 0.028  |
| 105          | Max      | 3.054   | 3.069    | 0.084  |
| 105          | Average  | 2.898   | 2.898    | 0.000  |
| 105          | Min      | 2.628   | 2.608    | -0.082 |
| 105          | Std Dev  | 0.090   | 0.093    | 0.028  |



| 7.5 I SS 12V |              |       |       |       |       |       |       |       |       |       |       |
|--------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site    |              |       |       |       |       |       |       |       |       |       |       |
| Tester       |              |       |       |       |       |       |       |       |       |       |       |
| Test Number  |              |       |       |       |       |       |       |       |       |       |       |
| Max Limit    | 3.29      uA |       |       |       |       |       |       |       |       |       |       |
| Min Limit    | 2.01      uA |       |       |       |       |       |       |       |       |       |       |
| krad         | 0            | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL           | 2.010        | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 |
| Min          | 2.755        | 2.801 | 2.854 | 2.898 | 2.863 | 2.732 | 2.608 | 2.824 | 2.857 | 2.828 | 2.760 |
| Average      | 2.802        | 2.923 | 2.896 | 2.954 | 2.941 | 2.808 | 2.892 | 2.871 | 2.946 | 2.886 | 2.923 |
| Max          | 2.855        | 3.001 | 2.980 | 3.051 | 3.001 | 2.899 | 3.069 | 2.965 | 3.068 | 3.010 | 3.029 |
| UL           | 3.290        | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 |

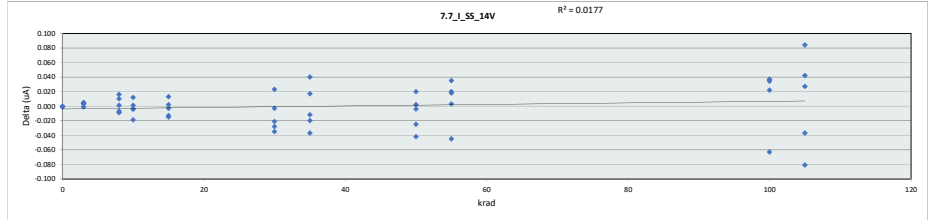


# HDR TID Report

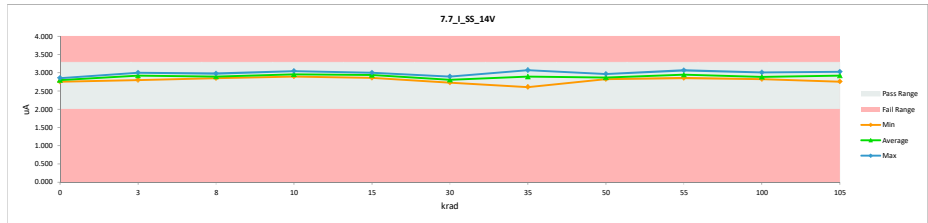
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 7.7_I_SS_14V |          |         |          |        |
|--------------|----------|---------|----------|--------|
| Test Site    |          |         |          |        |
| Tester       |          |         |          |        |
| Test Number  |          |         |          |        |
| Unit         | uA       | uA      |          |        |
| Max Limit    | 3.29     | 3.29    |          |        |
| Min Limit    | 2.01     | 2.01    |          |        |
| krad         | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0            | 552      | 2.798   | 2.797    | -0.001 |
| 0            | 726      | 2.856   | 2.856    | 0.000  |
| 0            | 791      | 2.757   | 2.756    | -0.001 |
| 3            | 689      | 2.922   | 2.926    | 0.004  |
| 3            | 688      | 2.909   | 2.908    | -0.001 |
| 3            | 700      | 2.999   | 3.002    | 0.003  |
| 3            | 482      | 2.978   | 2.982    | 0.004  |
| 3            | 1033     | 2.796   | 2.801    | 0.005  |
| 8            | 442      | 2.876   | 2.886    | 0.010  |
| 8            | 699      | 2.866   | 2.859    | -0.007 |
| 8            | 344      | 2.989   | 2.980    | -0.009 |
| 8            | 355      | 2.886   | 2.902    | 0.016  |
| 8            | 750      | 2.853   | 2.854    | 0.001  |
| 10           | 537      | 2.906   | 2.906    | 0.012  |
| 10           | 396      | 2.904   | 2.900    | -0.004 |
| 10           | 521      | 2.918   | 2.899    | -0.019 |
| 10           | 535      | 3.054   | 3.050    | -0.004 |
| 10           | 526      | 3.018   | 3.019    | 0.001  |
| 15           | 540      | 2.933   | 2.918    | -0.015 |
| 15           | 387      | 2.939   | 2.936    | -0.003 |
| 15           | 787      | 2.984   | 2.986    | 0.002  |
| 15           | 1042     | 3.015   | 3.002    | -0.013 |
| 15           | 483      | 2.851   | 2.864    | 0.013  |
| 30           | 597      | 2.825   | 2.804    | -0.021 |
| 30           | 853      | 2.834   | 2.899    | -0.035 |
| 30           | 416      | 2.752   | 2.775    | 0.023  |
| 30           | 949      | 2.760   | 2.732    | -0.028 |
| 30           | 221      | 2.834   | 2.831    | -0.003 |
| 35           | 538      | 2.976   | 2.993    | 0.017  |
| 35           | 164      | 2.629   | 2.609    | -0.020 |
| 35           | 1018     | 3.030   | 3.070    | 0.040  |
| 35           | 462      | 2.808   | 2.796    | -0.012 |
| 35           | 1032     | 3.031   | 2.994    | -0.037 |
| 50           | 566      | 2.892   | 2.850    | -0.042 |
| 50           | 197      | 2.883   | 2.858    | -0.025 |
| 50           | 793      | 2.856   | 2.858    | 0.002  |
| 50           | 802      | 2.829   | 2.825    | -0.004 |
| 50           | 61       | 2.946   | 2.966    | 0.020  |
| 55           | 795      | 2.864   | 2.867    | 0.003  |
| 55           | 921      | 3.021   | 2.976    | -0.045 |
| 55           | 741      | 2.837   | 2.857    | 0.020  |
| 55           | 809      | 3.050   | 3.068    | 0.018  |
| 55           | 804      | 2.930   | 2.965    | 0.035  |
| 100          | 449      | 2.816   | 2.853    | 0.037  |
| 100          | 541      | 2.862   | 2.884    | 0.022  |
| 100          | 476      | 2.795   | 2.829    | 0.034  |
| 100          | 45       | 2.921   | 2.858    | -0.063 |
| 100          | 642      | 2.973   | 3.009    | 0.036  |
| 105          | 1036     | 2.890   | 2.974    | 0.084  |
| 105          | 1038     | 3.004   | 2.923    | -0.081 |
| 105          | 203      | 2.889   | 2.931    | 0.042  |
| 105          | 1029     | 2.797   | 2.760    | -0.037 |
| 105          | 1027     | 3.002   | 3.029    | 0.027  |
| 105          | Max      | 3.054   | 3.070    | 0.084  |
| 105          | Average  | 2.899   | 2.899    | 0.000  |
| 105          | Min      | 2.629   | 2.609    | -0.081 |
| 105          | Std Dev  | 0.090   | 0.093    | 0.028  |



| 7.7_I_SS_14V |       |       |       |       |       |       |       |       |       |       |       |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site    |       |       |       |       |       |       |       |       |       |       |       |
| Tester       |       |       |       |       |       |       |       |       |       |       |       |
| Test Number  |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit    | 3.29  | uA    |       |       |       |       |       |       |       |       |       |
| Min Limit    | 2.01  | uA    |       |       |       |       |       |       |       |       |       |
| krad         | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL           | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 | 2.010 |
| Min          | 2.756 | 2.801 | 2.854 | 2.899 | 2.864 | 2.732 | 2.609 | 2.825 | 2.857 | 2.829 | 2.760 |
| Average      | 2.803 | 2.924 | 2.896 | 2.955 | 2.941 | 2.808 | 2.892 | 2.871 | 2.947 | 2.887 | 2.923 |
| Max          | 2.856 | 3.002 | 2.980 | 3.050 | 3.002 | 2.899 | 3.070 | 2.966 | 3.068 | 3.009 | 3.029 |
| UL           | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 | 3.290 |

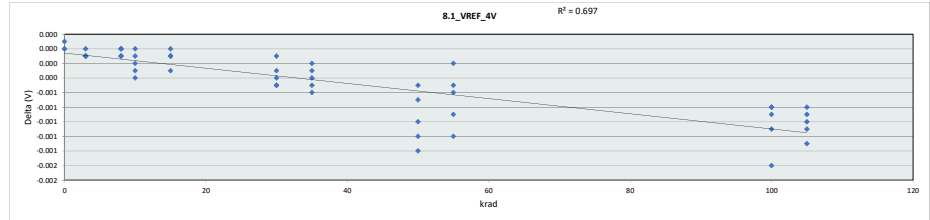


# HDR TID Report

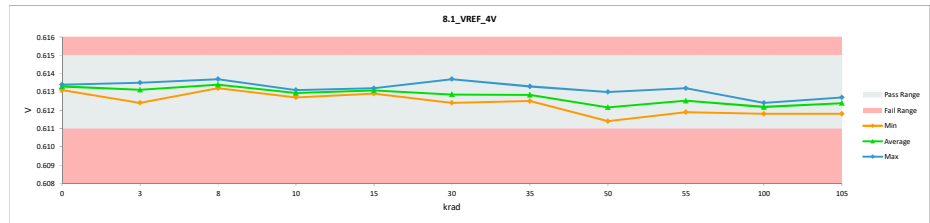
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.1_VREF_4V |          |         |          |        |
|-------------|----------|---------|----------|--------|
| Test Site   |          |         |          |        |
| Tester      |          |         |          |        |
| Test Number |          |         |          |        |
| Unit        | V        | V       |          |        |
| Max Limit   | 0.615    | 0.615   |          |        |
| Min Limit   | 0.611    | 0.611   |          |        |
| krad        | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0           | 552      | 0.613   | 0.613    | 0.000  |
| 0           | 726      | 0.613   | 0.613    | 0.000  |
| 0           | 791      | 0.613   | 0.613    | 0.000  |
| 3           | 689      | 0.614   | 0.613    | 0.000  |
| 3           | 688      | 0.613   | 0.613    | 0.000  |
| 3           | 700      | 0.612   | 0.612    | 0.000  |
| 3           | 482      | 0.613   | 0.613    | 0.000  |
| 3           | 1033     | 0.613   | 0.613    | 0.000  |
| 8           | 442      | 0.614   | 0.614    | 0.000  |
| 8           | 699      | 0.614   | 0.614    | 0.000  |
| 8           | 344      | 0.613   | 0.613    | 0.000  |
| 8           | 355      | 0.613   | 0.613    | 0.000  |
| 8           | 790      | 0.613   | 0.613    | 0.000  |
| 10          | 537      | 0.613   | 0.613    | 0.000  |
| 10          | 396      | 0.613   | 0.613    | 0.000  |
| 10          | 521      | 0.613   | 0.613    | 0.000  |
| 10          | 535      | 0.613   | 0.613    | 0.000  |
| 10          | 526      | 0.613   | 0.613    | 0.000  |
| 15          | 540      | 0.613   | 0.613    | 0.000  |
| 15          | 387      | 0.613   | 0.613    | 0.000  |
| 15          | 787      | 0.613   | 0.613    | 0.000  |
| 15          | 1042     | 0.613   | 0.613    | 0.000  |
| 15          | 483      | 0.613   | 0.613    | 0.000  |
| 30          | 597      | 0.614   | 0.614    | 0.000  |
| 30          | 853      | 0.613   | 0.613    | 0.000  |
| 30          | 416      | 0.613   | 0.612    | 0.000  |
| 30          | 949      | 0.613   | 0.613    | 0.000  |
| 30          | 221      | 0.613   | 0.613    | 0.000  |
| 35          | 538      | 0.613   | 0.613    | 0.000  |
| 35          | 164      | 0.614   | 0.613    | 0.000  |
| 35          | 1018     | 0.613   | 0.613    | 0.000  |
| 35          | 462      | 0.613   | 0.613    | 0.000  |
| 35          | 1032     | 0.613   | 0.613    | -0.001 |
| 50          | 566      | 0.612   | 0.611    | -0.001 |
| 50          | 197      | 0.613   | 0.612    | -0.001 |
| 50          | 793      | 0.613   | 0.613    | 0.000  |
| 50          | 802      | 0.613   | 0.612    | -0.001 |
| 50          | 61       | 0.614   | 0.613    | -0.001 |
| 55          | 795      | 0.613   | 0.613    | -0.001 |
| 55          | 921      | 0.613   | 0.612    | -0.001 |
| 55          | 741      | 0.613   | 0.613    | 0.000  |
| 55          | 809      | 0.614   | 0.613    | 0.000  |
| 55          | 804      | 0.613   | 0.612    | -0.001 |
| 100         | 449      | 0.613   | 0.612    | -0.001 |
| 100         | 541      | 0.613   | 0.612    | -0.001 |
| 100         | 476      | 0.613   | 0.612    | -0.001 |
| 100         | 45       | 0.614   | 0.612    | -0.002 |
| 100         | 642      | 0.613   | 0.612    | -0.001 |
| 105         | 1036     | 0.613   | 0.612    | -0.001 |
| 105         | 1038     | 0.614   | 0.613    | -0.001 |
| 105         | 203      | 0.613   | 0.613    | -0.001 |
| 105         | 1029     | 0.613   | 0.612    | -0.001 |
| 105         | 1027     | 0.614   | 0.613    | -0.001 |
| 105         | Max      | 0.614   | 0.614    | 0.000  |
| 105         | Average  | 0.613   | 0.613    | 0.000  |
| 105         | Min      | 0.612   | 0.611    | -0.002 |
| 105         | Std Dev  | 0.000   | 0.001    | 0.000  |



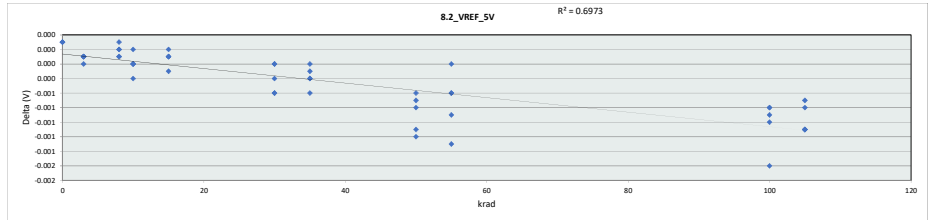
| 8.1_VREF_4V |       |       |       |       |       |       |       |       |       |       |       |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site   |       |       |       |       |       |       |       |       |       |       |       |
| Tester      |       |       |       |       |       |       |       |       |       |       |       |
| Test Number |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit   | 0.615 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit   | 0.611 | V     |       |       |       |       |       |       |       |       |       |
| krad        | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 |
| Min         | 0.613 | 0.612 | 0.613 | 0.613 | 0.613 | 0.612 | 0.613 | 0.611 | 0.612 | 0.612 | 0.612 |
| Average     | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.612 | 0.613 | 0.612 | 0.612 |
| Max         | 0.613 | 0.614 | 0.614 | 0.613 | 0.613 | 0.614 | 0.613 | 0.613 | 0.613 | 0.612 | 0.613 |
| UL          | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 |



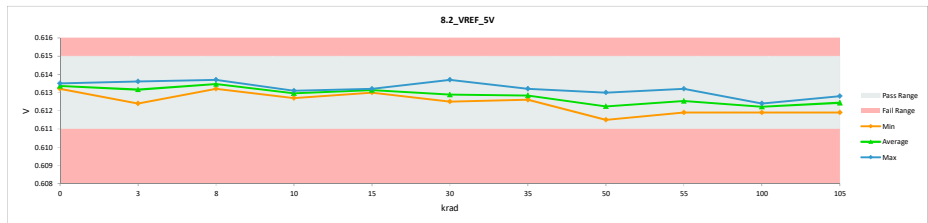
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.2_VREF_SV |          |         |          |        |
|-------------|----------|---------|----------|--------|
| Test Site   |          |         |          |        |
| Tester      |          |         |          |        |
| Test Number |          |         |          |        |
| Unit        |          |         |          |        |
| Max Limit   |          |         |          |        |
| Min Limit   |          |         |          |        |
| krad        | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0           | 552      | 0.613   | 0.613    | 0.000  |
| 0           | 726      | 0.613   | 0.613    | 0.000  |
| 0           | 791      | 0.613   | 0.613    | 0.000  |
| 3           | 689      | 0.614   | 0.614    | 0.000  |
| 3           | 688      | 0.614   | 0.613    | 0.000  |
| 3           | 700      | 0.613   | 0.612    | 0.000  |
| 3           | 482      | 0.613   | 0.613    | 0.000  |
| 3           | 1033     | 0.613   | 0.613    | 0.000  |
| 8           | 442      | 0.614   | 0.614    | 0.000  |
| 8           | 699      | 0.614   | 0.614    | 0.000  |
| 8           | 344      | 0.613   | 0.613    | 0.000  |
| 8           | 355      | 0.613   | 0.613    | 0.000  |
| 8           | 790      | 0.613   | 0.613    | 0.000  |
| 10          | 537      | 0.613   | 0.613    | 0.000  |
| 10          | 396      | 0.613   | 0.613    | 0.000  |
| 10          | 521      | 0.613   | 0.613    | 0.000  |
| 10          | 535      | 0.613   | 0.613    | 0.000  |
| 10          | 526      | 0.613   | 0.613    | 0.000  |
| 15          | 540      | 0.613   | 0.613    | 0.000  |
| 15          | 387      | 0.613   | 0.613    | 0.000  |
| 15          | 787      | 0.613   | 0.613    | 0.000  |
| 15          | 1042     | 0.613   | 0.613    | 0.000  |
| 15          | 483      | 0.613   | 0.613    | 0.000  |
| 30          | 597      | 0.614   | 0.614    | 0.000  |
| 30          | 853      | 0.613   | 0.613    | -0.001 |
| 30          | 416      | 0.613   | 0.613    | 0.000  |
| 30          | 949      | 0.614   | 0.613    | 0.000  |
| 30          | 221      | 0.613   | 0.613    | -0.001 |
| 35          | 538      | 0.613   | 0.613    | 0.000  |
| 35          | 164      | 0.614   | 0.613    | 0.000  |
| 35          | 1018     | 0.613   | 0.613    | 0.000  |
| 35          | 462      | 0.613   | 0.613    | 0.000  |
| 35          | 1032     | 0.613   | 0.613    | -0.001 |
| 50          | 566      | 0.612   | 0.612    | -0.001 |
| 50          | 197      | 0.613   | 0.612    | -0.001 |
| 50          | 793      | 0.613   | 0.613    | -0.001 |
| 50          | 802      | 0.613   | 0.612    | -0.001 |
| 50          | 61       | 0.614   | 0.613    | -0.001 |
| 55          | 795      | 0.613   | 0.613    | -0.001 |
| 55          | 921      | 0.614   | 0.612    | -0.001 |
| 55          | 741      | 0.613   | 0.613    | 0.000  |
| 55          | 809      | 0.614   | 0.613    | -0.001 |
| 55          | 804      | 0.613   | 0.612    | -0.001 |
| 100         | 449      | 0.613   | 0.612    | -0.001 |
| 100         | 541      | 0.613   | 0.612    | -0.001 |
| 100         | 476      | 0.613   | 0.612    | -0.001 |
| 100         | 45       | 0.614   | 0.612    | -0.002 |
| 100         | 642      | 0.613   | 0.612    | -0.001 |
| 105         | 1036     | 0.613   | 0.613    | -0.001 |
| 105         | 1038     | 0.614   | 0.613    | -0.001 |
| 105         | 203      | 0.614   | 0.613    | -0.001 |
| 105         | 1029     | 0.613   | 0.612    | -0.001 |
| 105         | 1027     | 0.614   | 0.613    | -0.001 |
| 105         | Max      | 0.614   | 0.614    | 0.000  |
| 105         | Average  | 0.613   | 0.613    | 0.000  |
| 105         | Min      | 0.612   | 0.612    | -0.002 |
| 105         | Std Dev  | 0.000   | 0.001    | 0.000  |



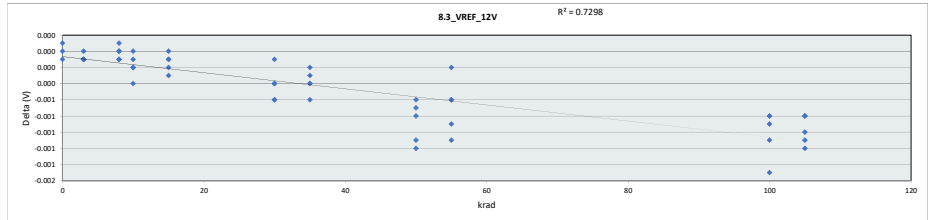
| 8.2_VREF_SV |       |       |       |       |       |       |       |       |       |       |       |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site   |       |       |       |       |       |       |       |       |       |       |       |
| Tester      |       |       |       |       |       |       |       |       |       |       |       |
| Test Number |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit   |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit   |       |       |       |       |       |       |       |       |       |       |       |
| krad        | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 |
| Min         | 0.613 | 0.612 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.612 | 0.612 | 0.612 | 0.612 |
| Average     | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.612 | 0.613 | 0.612 | 0.612 |
| Max         | 0.614 | 0.614 | 0.614 | 0.613 | 0.613 | 0.614 | 0.613 | 0.613 | 0.613 | 0.612 | 0.613 |
| UL          | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 |



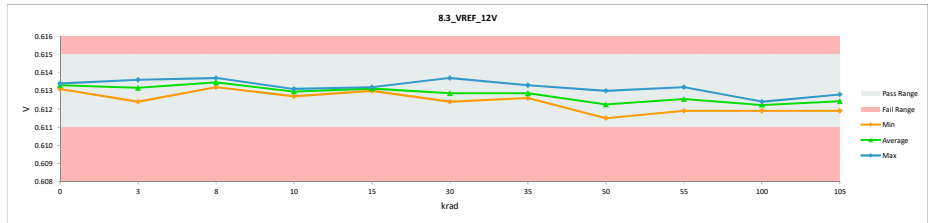
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.3_VREF_12V |          |         |          |        |
|--------------|----------|---------|----------|--------|
| Test Site    |          |         |          |        |
| Tester       |          |         |          |        |
| Test Number  |          |         |          |        |
| Unit         | V        | V       |          |        |
| Max Limit    | 0.615    | 0.615   |          |        |
| Min Limit    | 0.611    | 0.611   |          |        |
| krad         | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0            | 552      | 0.613   | 0.613    | 0.000  |
| 0            | 726      | 0.613   | 0.613    | 0.000  |
| 0            | 791      | 0.613   | 0.613    | 0.000  |
| 3            | 689      | 0.614   | 0.614    | 0.000  |
| 3            | 688      | 0.613   | 0.613    | 0.000  |
| 3            | 700      | 0.612   | 0.612    | 0.000  |
| 3            | 482      | 0.613   | 0.613    | 0.000  |
| 3            | 1033     | 0.613   | 0.613    | 0.000  |
| 8            | 442      | 0.614   | 0.614    | 0.000  |
| 8            | 699      | 0.614   | 0.614    | 0.000  |
| 8            | 344      | 0.613   | 0.613    | 0.000  |
| 8            | 355      | 0.613   | 0.613    | 0.000  |
| 8            | 790      | 0.613   | 0.613    | 0.000  |
| 10           | 537      | 0.613   | 0.613    | 0.000  |
| 10           | 396      | 0.613   | 0.613    | 0.000  |
| 10           | 521      | 0.613   | 0.613    | 0.000  |
| 10           | 535      | 0.613   | 0.613    | 0.000  |
| 10           | 526      | 0.613   | 0.613    | 0.000  |
| 15           | 540      | 0.613   | 0.613    | 0.000  |
| 15           | 387      | 0.613   | 0.613    | 0.000  |
| 15           | 787      | 0.613   | 0.613    | 0.000  |
| 15           | 1042     | 0.613   | 0.613    | 0.000  |
| 15           | 483      | 0.613   | 0.613    | 0.000  |
| 30           | 597      | 0.614   | 0.614    | 0.000  |
| 30           | 853      | 0.613   | 0.613    | -0.001 |
| 30           | 416      | 0.613   | 0.612    | 0.000  |
| 30           | 949      | 0.614   | 0.613    | 0.000  |
| 30           | 221      | 0.613   | 0.613    | -0.001 |
| 35           | 538      | 0.613   | 0.613    | 0.000  |
| 35           | 164      | 0.614   | 0.613    | 0.000  |
| 35           | 1018     | 0.613   | 0.613    | 0.000  |
| 35           | 462      | 0.613   | 0.613    | 0.000  |
| 35           | 1032     | 0.613   | 0.613    | -0.001 |
| 50           | 566      | 0.612   | 0.612    | -0.001 |
| 50           | 197      | 0.613   | 0.612    | -0.001 |
| 50           | 793      | 0.613   | 0.613    | -0.001 |
| 50           | 802      | 0.613   | 0.612    | -0.001 |
| 50           | 61       | 0.614   | 0.613    | -0.001 |
| 55           | 795      | 0.613   | 0.613    | -0.001 |
| 55           | 921      | 0.613   | 0.612    | -0.001 |
| 55           | 741      | 0.613   | 0.613    | 0.000  |
| 55           | 809      | 0.614   | 0.613    | -0.001 |
| 55           | 804      | 0.613   | 0.612    | -0.001 |
| 100          | 449      | 0.613   | 0.612    | -0.001 |
| 100          | 541      | 0.613   | 0.612    | -0.001 |
| 100          | 476      | 0.613   | 0.612    | -0.001 |
| 100          | 45       | 0.614   | 0.612    | -0.002 |
| 100          | 642      | 0.613   | 0.612    | -0.001 |
| 105          | 1036     | 0.613   | 0.612    | -0.001 |
| 105          | 1038     | 0.614   | 0.613    | -0.001 |
| 105          | 203      | 0.613   | 0.613    | -0.001 |
| 105          | 1029     | 0.613   | 0.612    | -0.001 |
| 105          | 1027     | 0.614   | 0.613    | -0.001 |
| 105          | Max      | 0.614   | 0.614    | 0.000  |
| 105          | Average  | 0.613   | 0.613    | 0.000  |
| 105          | Min      | 0.612   | 0.612    | -0.002 |
| 105          | Std Dev  | 0.000   | 0.001    | 0.000  |



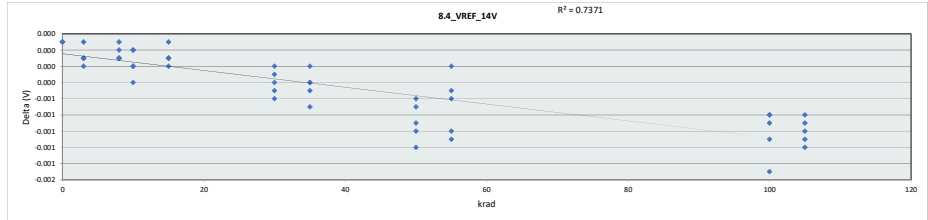
| 8.3_VREF_12V |       |       |       |       |       |       |       |       |       |       |       |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site    |       |       |       |       |       |       |       |       |       |       |       |
| Tester       |       |       |       |       |       |       |       |       |       |       |       |
| Test Number  |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit    | 0.615 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit    | 0.611 | V     |       |       |       |       |       |       |       |       |       |
| krad         | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL           | 0.611 | 0.611 | 0.611 | 0.613 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 |
| Min          | 0.613 | 0.612 | 0.613 | 0.613 | 0.613 | 0.613 | 0.612 | 0.613 | 0.612 | 0.612 | 0.612 |
| Average      | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.612 | 0.613 | 0.612 | 0.612 |
| Max          | 0.613 | 0.614 | 0.614 | 0.613 | 0.613 | 0.613 | 0.614 | 0.613 | 0.613 | 0.613 | 0.613 |
| UL           | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 |



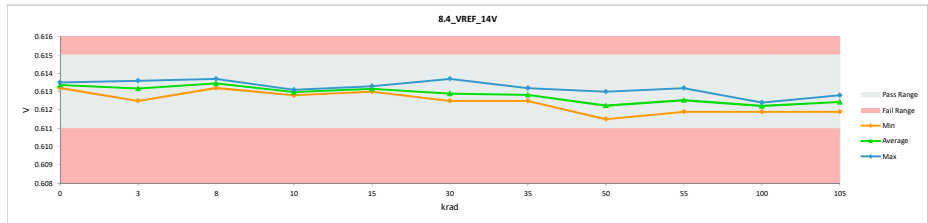
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.4_VREF_14V |          |         |          |        |
|--------------|----------|---------|----------|--------|
| Test Site    |          |         |          |        |
| Tester       |          |         |          |        |
| Test Number  |          |         |          |        |
| Unit         |          |         |          |        |
| Max Limit    |          |         |          |        |
| Min Limit    |          |         |          |        |
| krad         | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0            | 552      | 0.613   | 0.613    | 0.000  |
| 0            | 726      | 0.613   | 0.613    | 0.000  |
| 0            | 791      | 0.613   | 0.613    | 0.000  |
| 3            | 689      | 0.614   | 0.614    | 0.000  |
| 3            | 688      | 0.614   | 0.613    | 0.000  |
| 3            | 700      | 0.612   | 0.613    | 0.000  |
| 3            | 482      | 0.613   | 0.613    | 0.000  |
| 3            | 1033     | 0.613   | 0.613    | 0.000  |
| 8            | 442      | 0.614   | 0.614    | 0.000  |
| 8            | 699      | 0.614   | 0.614    | 0.000  |
| 8            | 344      | 0.613   | 0.613    | 0.000  |
| 8            | 355      | 0.613   | 0.613    | 0.000  |
| 8            | 750      | 0.613   | 0.613    | 0.000  |
| 10           | 537      | 0.613   | 0.613    | 0.000  |
| 10           | 396      | 0.613   | 0.613    | 0.000  |
| 10           | 521      | 0.613   | 0.613    | 0.000  |
| 10           | 535      | 0.613   | 0.613    | 0.000  |
| 10           | 526      | 0.613   | 0.613    | 0.000  |
| 15           | 540      | 0.613   | 0.613    | 0.000  |
| 15           | 387      | 0.613   | 0.613    | 0.000  |
| 15           | 787      | 0.613   | 0.613    | 0.000  |
| 15           | 1042     | 0.613   | 0.613    | 0.000  |
| 15           | 483      | 0.613   | 0.613    | 0.000  |
| 30           | 597      | 0.614   | 0.614    | 0.000  |
| 30           | 853      | 0.613   | 0.613    | -0.001 |
| 30           | 416      | 0.613   | 0.613    | 0.000  |
| 30           | 949      | 0.614   | 0.613    | 0.000  |
| 30           | 221      | 0.613   | 0.613    | 0.000  |
| 35           | 538      | 0.613   | 0.613    | 0.000  |
| 35           | 164      | 0.614   | 0.613    | 0.000  |
| 35           | 1018     | 0.613   | 0.613    | 0.000  |
| 35           | 462      | 0.613   | 0.613    | 0.000  |
| 35           | 1032     | 0.613   | 0.613    | -0.001 |
| 50           | 566      | 0.612   | 0.612    | -0.001 |
| 50           | 197      | 0.613   | 0.612    | -0.001 |
| 50           | 793      | 0.613   | 0.613    | -0.001 |
| 50           | 802      | 0.613   | 0.612    | -0.001 |
| 50           | 61       | 0.614   | 0.613    | -0.001 |
| 55           | 795      | 0.613   | 0.613    | -0.001 |
| 55           | 921      | 0.613   | 0.612    | -0.001 |
| 55           | 741      | 0.613   | 0.613    | 0.000  |
| 55           | 809      | 0.614   | 0.613    | 0.000  |
| 55           | 804      | 0.613   | 0.612    | -0.001 |
| 100          | 449      | 0.613   | 0.612    | -0.001 |
| 100          | 541      | 0.613   | 0.612    | -0.001 |
| 100          | 476      | 0.613   | 0.612    | -0.001 |
| 100          | 45       | 0.614   | 0.612    | -0.002 |
| 100          | 642      | 0.613   | 0.612    | -0.001 |
| 105          | 1036     | 0.613   | 0.612    | -0.001 |
| 105          | 1038     | 0.614   | 0.613    | -0.001 |
| 105          | 203      | 0.614   | 0.613    | -0.001 |
| 105          | 1029     | 0.613   | 0.612    | -0.001 |
| 105          | 1027     | 0.614   | 0.613    | -0.001 |
| 105          | Max      | 0.614   | 0.614    | 0.000  |
| 105          | Average  | 0.613   | 0.613    | 0.000  |
| 105          | Min      | 0.612   | 0.612    | -0.002 |
| 105          | Std Dev  | 0.000   | 0.001    | 0.000  |



| 8.4_VREF_14V |       |       |       |       |       |       |       |       |       |       |       |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site    |       |       |       |       |       |       |       |       |       |       |       |
| Tester       |       |       |       |       |       |       |       |       |       |       |       |
| Test Number  |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit    | 0.615 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit    | 0.611 | V     |       |       |       |       |       |       |       |       |       |
| krad         | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL           | 0.611 | 0.611 | 0.611 | 0.613 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 |
| Min          | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.612 | 0.612 | 0.612 | 0.612 |
| Average      | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.613 | 0.612 | 0.613 | 0.612 | 0.612 |
| Max          | 0.614 | 0.614 | 0.614 | 0.613 | 0.613 | 0.614 | 0.613 | 0.613 | 0.613 | 0.612 | 0.613 |
| UL           | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 | 0.615 |

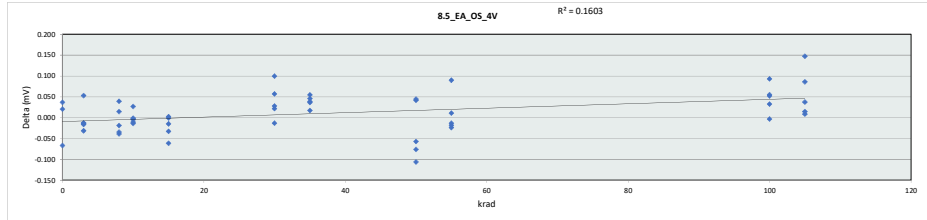


# HDR TID Report

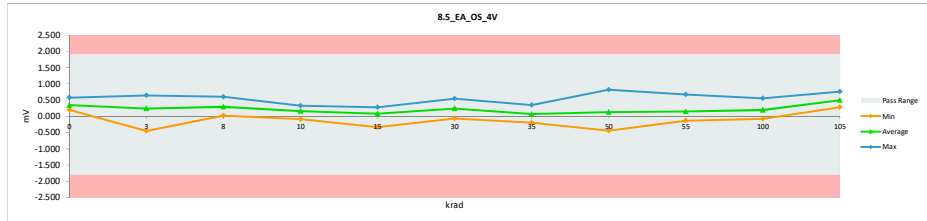
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.5_EA_OS_4V |          |         |          |        |
|--------------|----------|---------|----------|--------|
| Test Site    |          |         |          |        |
| Tester       |          |         |          |        |
| Test Number  |          |         |          |        |
| Unit         | mV       | mV      |          |        |
| Max Limit    | 1.9      | 1.9     |          |        |
| Min Limit    | -1.8     | -1.8    |          |        |
| krad         | Serial # | PRE HDR | POST HDR | Delta  |
| 0            | 552      | 0.324   | 0.257    | -0.067 |
| 0            | 726      | 0.556   | 0.577    | 0.020  |
| 0            | 791      | 0.165   | 0.201    | 0.037  |
| 3            | 689      | 0.591   | 0.644    | 0.053  |
| 3            | 688      | 0.458   | 0.445    | -0.013 |
| 3            | 700      | -0.435  | -0.451   | -0.016 |
| 3            | 482      | 0.407   | 0.376    | -0.032 |
| 3            | 1033     | 0.206   | 0.191    | -0.014 |
| 8            | 442      | 0.452   | 0.417    | -0.035 |
| 8            | 699      | 0.585   | 0.599    | 0.015  |
| 8            | 344      | 0.224   | 0.263    | 0.039  |
| 8            | 355      | 0.061   | 0.022    | -0.039 |
| 8            | 750      | 0.177   | 0.158    | -0.019 |
| 10           | 537      | -0.084  | -0.089   | -0.005 |
| 10           | 396      | 0.139   | 0.166    | 0.027  |
| 10           | 521      | 0.336   | 0.325    | -0.011 |
| 10           | 535      | 0.149   | 0.147    | -0.002 |
| 10           | 526      | 0.284   | 0.269    | -0.014 |
| 15           | 540      | -0.319  | -0.334   | -0.015 |
| 15           | 387      | 0.197   | 0.135    | -0.062 |
| 15           | 787      | 0.083   | 0.050    | -0.033 |
| 15           | 1042     | 0.278   | 0.277    | -0.001 |
| 15           | 483      | 0.257   | 0.259    | 0.002  |
| 30           | 597      | 0.524   | 0.545    | 0.022  |
| 30           | 853      | 0.225   | 0.212    | -0.014 |
| 30           | 416      | -0.119  | -0.062   | 0.057  |
| 30           | 949      | 0.177   | 0.205    | 0.028  |
| 30           | 221      | 0.222   | 0.321    | 0.099  |
| 35           | 538      | 0.011   | 0.050    | 0.038  |
| 35           | 164      | 0.304   | 0.349    | 0.046  |
| 35           | 1018     | -0.236  | -0.200   | 0.036  |
| 35           | 462      | 0.050   | 0.104    | 0.054  |
| 35           | 1032     | 0.026   | 0.043    | 0.017  |
| 50           | 566      | -0.483  | -0.442   | 0.042  |
| 50           | 197      | 0.432   | 0.355    | -0.077 |
| 50           | 793      | -0.006  | 0.038    | 0.044  |
| 50           | 802      | -0.002  | -0.108   | -0.107 |
| 50           | 61       | 0.877   | 0.819    | -0.058 |
| 55           | 795      | -0.226  | -0.137   | 0.090  |
| 55           | 921      | 0.205   | 0.186    | -0.019 |
| 55           | 741      | 0.135   | 0.122    | -0.014 |
| 55           | 809      | 0.663   | 0.674    | 0.011  |
| 55           | 804      | -0.075  | -0.100   | -0.024 |
| 100          | 449      | -0.166  | -0.073   | 0.093  |
| 100          | 541      | 0.206   | 0.257    | 0.052  |
| 100          | 476      | -0.060  | -0.028   | 0.032  |
| 100          | 45       | 0.560   | 0.557    | -0.003 |
| 100          | 642      | 0.212   | 0.266    | 0.055  |
| 105          | 1036     | 0.196   | 0.282    | 0.086  |
| 105          | 1038     | 0.747   | 0.761    | 0.014  |
| 105          | 203      | 0.449   | 0.486    | 0.037  |
| 105          | 1029     | 0.273   | 0.281    | 0.008  |
| 105          | 1027     | 0.505   | 0.652    | 0.147  |
| 105          | Max      | 0.877   | 0.819    | 0.147  |
| 105          | Average  | 0.202   | 0.214    | 0.011  |
| 105          | Min      | -0.483  | -0.451   | -0.107 |
| 105          | Std Dev  | 0.287   | 0.285    | 0.047  |



| 8.5_EA_OS_4V |        |        |        |        |        |        |        |        |        |        |        |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site    |        |        |        |        |        |        |        |        |        |        |        |
| Tester       |        |        |        |        |        |        |        |        |        |        |        |
| Test Number  |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit    | 1.9    | mV     |        |        |        |        |        |        |        |        |        |
| Min Limit    | -1.8   | mV     |        |        |        |        |        |        |        |        |        |
| krad         | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL           | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 |
| Min          | 0.201  | -0.451 | 0.022  | -0.089 | -0.334 | -0.062 | -0.200 | -0.442 | -0.137 | -0.074 | 0.281  |
| Average      | 0.345  | 0.241  | 0.292  | 0.164  | 0.077  | 0.244  | 0.069  | 0.133  | 0.149  | 0.196  | 0.493  |
| Max          | 0.577  | 0.644  | 0.599  | 0.325  | 0.277  | 0.545  | 0.349  | 0.819  | 0.674  | 0.557  | 0.761  |
| UL           | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  |

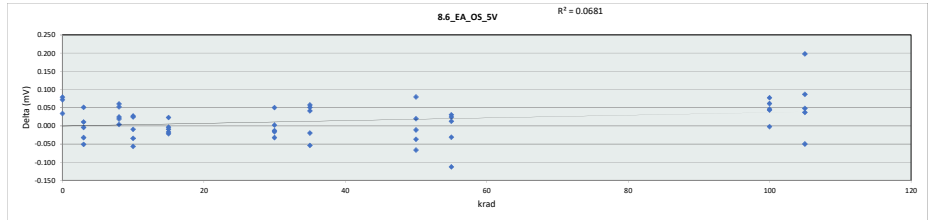


# HDR TID Report

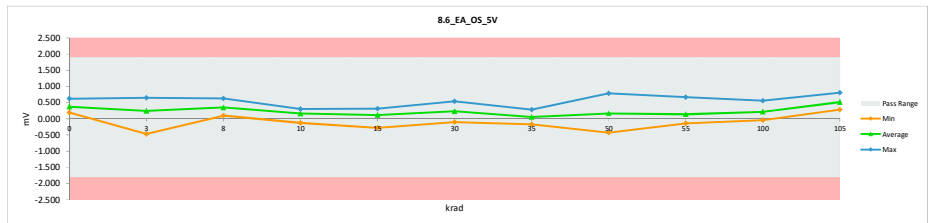
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.6_EA_OS_5V |          |         |          |        |
|--------------|----------|---------|----------|--------|
| Test Site    |          |         |          |        |
| Tester       |          |         |          |        |
| Test Number  |          |         |          |        |
| Unit         | mV       | mV      |          |        |
| Max Limit    | 1.9      | 1.9     |          |        |
| Min Limit    | -1.8     | -1.8    |          |        |
| krad         | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0            | 552      | 0.242   | 0.314    | 0.072  |
| 0            | 726      | 0.546   | 0.625    | 0.079  |
| 0            | 791      | 0.159   | 0.193    | 0.034  |
| 3            | 689      | 0.639   | 0.650    | 0.010  |
| 3            | 688      | 0.460   | 0.409    | -0.051 |
| 3            | 700      | -0.435  | -0.468   | -0.033 |
| 3            | 482      | 0.429   | 0.424    | -0.005 |
| 3            | 1033     | 0.214   | 0.214    | 0.051  |
| 8            | 442      | 0.504   | 0.508    | 0.004  |
| 8            | 699      | 0.576   | 0.627    | 0.052  |
| 8            | 344      | 0.284   | 0.303    | 0.019  |
| 8            | 355      | 0.079   | 0.104    | 0.024  |
| 8            | 750      | 0.145   | 0.205    | 0.060  |
| 10           | 537      | -0.068  | -0.125   | -0.057 |
| 10           | 396      | 0.127   | 0.154    | 0.027  |
| 10           | 521      | 0.339   | 0.304    | -0.035 |
| 10           | 535      | 0.205   | 0.195    | -0.010 |
| 10           | 526      | 0.264   | 0.288    | 0.024  |
| 15           | 540      | -0.262  | -0.279   | -0.017 |
| 15           | 387      | 0.189   | 0.179    | -0.010 |
| 15           | 787      | 0.070   | 0.093    | 0.023  |
| 15           | 1042     | 0.277   | 0.273    | -0.004 |
| 15           | 483      | 0.334   | 0.313    | -0.022 |
| 30           | 597      | 0.573   | 0.540    | -0.033 |
| 30           | 853      | 0.220   | 0.222    | 0.002  |
| 30           | 416      | -0.152  | -0.102   | 0.050  |
| 30           | 949      | 0.227   | 0.211    | -0.016 |
| 30           | 221      | 0.304   | 0.291    | -0.014 |
| 35           | 538      | -0.009  | 0.032    | 0.041  |
| 35           | 164      | 0.338   | 0.284    | -0.054 |
| 35           | 1018     | -0.230  | -0.172   | 0.057  |
| 35           | 462      | 0.049   | 0.100    | 0.051  |
| 35           | 1032     | 0.064   | 0.044    | -0.020 |
| 50           | 566      | -0.505  | -0.426   | 0.079  |
| 50           | 197      | 0.435   | 0.423    | -0.011 |
| 50           | 793      | 0.044   | 0.064    | 0.020  |
| 50           | 802      | 0.026   | -0.011   | -0.037 |
| 50           | 61       | 0.854   | 0.787    | -0.067 |
| 55           | 795      | -0.164  | -0.140   | 0.024  |
| 55           | 921      | 0.227   | 0.114    | -0.113 |
| 55           | 741      | 0.155   | 0.185    | 0.030  |
| 55           | 809      | 0.702   | 0.671    | -0.031 |
| 55           | 804      | -0.124  | -0.112   | 0.012  |
| 100          | 449      | -0.101  | -0.040   | 0.061  |
| 100          | 541      | 0.213   | 0.290    | 0.077  |
| 100          | 476      | -0.057  | -0.013   | 0.043  |
| 100          | 45       | 0.563   | 0.561    | -0.002 |
| 100          | 642      | 0.248   | 0.294    | 0.046  |
| 105          | 1036     | 0.239   | 0.287    | 0.048  |
| 105          | 1038     | 0.772   | 0.809    | 0.037  |
| 105          | 203      | 0.521   | 0.470    | -0.050 |
| 105          | 1029     | 0.253   | 0.340    | 0.087  |
| 105          | 1027     | 0.488   | 0.685    | 0.198  |
| 105          | Max      | 0.854   | 0.809    | 0.198  |
| 105          | Average  | 0.216   | 0.230    | 0.014  |
| 105          | Min      | -0.505  | -0.468   | -0.113 |
| 105          | Std Dev  | 0.289   | 0.286    | 0.050  |



| 8.6_EA_OS_5V |        |        |        |        |        |        |        |        |        |        |        |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site    |        |        |        |        |        |        |        |        |        |        |        |
| Tester       |        |        |        |        |        |        |        |        |        |        |        |
| Test Number  |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit    | 1.9    | mV     |        |        |        |        |        |        |        |        |        |
| Min Limit    | -1.8   | mV     |        |        |        |        |        |        |        |        |        |
| krad         | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL           | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 |
| Min          | 0.193  | -0.468 | 0.104  | -0.125 | -0.279 | -0.102 | -0.173 | -0.426 | -0.140 | -0.040 | 0.287  |
| Average      | 0.377  | 0.246  | 0.349  | 0.163  | 0.116  | 0.232  | 0.057  | 0.167  | 0.144  | 0.218  | 0.518  |
| Max          | 0.625  | 0.650  | 0.628  | 0.304  | 0.313  | 0.541  | 0.284  | 0.787  | 0.671  | 0.561  | 0.809  |
| UL           | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  |

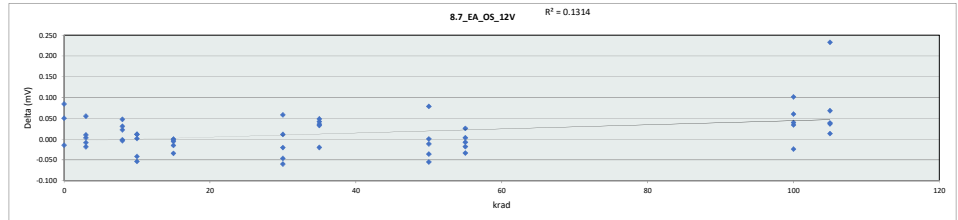


# HDR TID Report

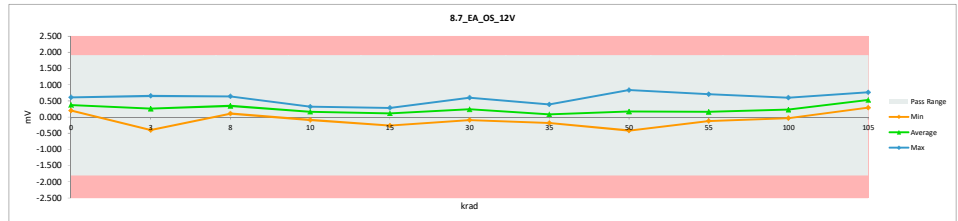
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.7_EA_OS_12V |          |         |          |        |
|---------------|----------|---------|----------|--------|
| Test Site     |          |         |          |        |
| Tester        |          |         |          |        |
| Test Number   |          |         |          |        |
| Unit          | mV       | mV      |          |        |
| Max Limit     | 1.9      | 1.9     |          |        |
| Min Limit     | -1.8     | -1.8    |          |        |
| krad          | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0             | 552      | 0.255   | 0.304    | 0.050  |
| 0             | 726      | 0.626   | 0.611    | -0.015 |
| 0             | 791      | 0.116   | 0.200    | 0.084  |
| 3             | 689      | 0.645   | 0.655    | 0.010  |
| 3             | 688      | 0.449   | 0.430    | -0.019 |
| 3             | 700      | -0.459  | -0.404   | 0.055  |
| 3             | 482      | 0.423   | 0.425    | 0.003  |
| 3             | 1033     | 0.194   | -0.009   | -0.203 |
| 8             | 442      | 0.500   | 0.496    | -0.004 |
| 8             | 699      | 0.593   | 0.640    | 0.047  |
| 8             | 344      | 0.280   | 0.278    | -0.002 |
| 8             | 355      | 0.078   | 0.109    | 0.031  |
| 8             | 750      | 0.186   | 0.208    | 0.022  |
| 10            | 537      | -0.099  | -0.087   | 0.012  |
| 10            | 396      | 0.131   | 0.142    | 0.011  |
| 10            | 521      | 0.365   | 0.323    | -0.042 |
| 10            | 535      | 0.218   | 0.219    | 0.001  |
| 10            | 526      | 0.297   | 0.243    | -0.054 |
| 15            | 540      | -0.262  | -0.264   | -0.002 |
| 15            | 387      | 0.200   | 0.185    | -0.016 |
| 15            | 787      | 0.074   | 0.074    | 0.000  |
| 15            | 1042     | 0.282   | 0.276    | -0.006 |
| 15            | 483      | 0.319   | 0.285    | -0.035 |
| 30            | 597      | 0.543   | 0.601    | 0.058  |
| 30            | 853      | 0.244   | 0.223    | -0.021 |
| 30            | 416      | -0.102  | -0.091   | 0.011  |
| 30            | 949      | 0.243   | 0.183    | -0.060 |
| 30            | 221      | 0.326   | 0.279    | -0.046 |
| 35            | 538      | 0.011   | 0.053    | 0.042  |
| 35            | 164      | 0.343   | 0.391    | 0.048  |
| 35            | 1018     | -0.220  | -0.184   | 0.036  |
| 35            | 462      | 0.073   | 0.106    | 0.033  |
| 35            | 1032     | 0.067   | 0.047    | -0.020 |
| 50            | 566      | -0.494  | -0.415   | 0.078  |
| 50            | 197      | 0.437   | 0.425    | -0.012 |
| 50            | 793      | 0.061   | 0.006    | -0.055 |
| 50            | 802      | 0.008   | 0.008    | 0.000  |
| 50            | 61       | 0.870   | 0.834    | -0.036 |
| 55            | 795      | -0.149  | -0.123   | 0.026  |
| 55            | 921      | 0.188   | 0.169    | -0.018 |
| 55            | 741      | 0.158   | 0.124    | -0.034 |
| 55            | 809      | 0.715   | 0.707    | -0.008 |
| 55            | 804      | -0.073  | -0.070   | 0.003  |
| 100           | 449      | -0.093  | -0.033   | 0.060  |
| 100           | 541      | 0.198   | 0.299    | 0.101  |
| 100           | 476      | -0.051  | -0.017   | 0.034  |
| 100           | 45       | 0.622   | 0.598    | -0.024 |
| 100           | 642      | 0.256   | 0.296    | 0.039  |
| 105           | 1036     | 0.250   | 0.289    | 0.039  |
| 105           | 1038     | 0.753   | 0.766    | 0.013  |
| 105           | 203      | 0.521   | 0.558    | 0.036  |
| 105           | 1029     | 0.288   | 0.356    | 0.068  |
| 105           | 1027     | 0.454   | 0.687    | 0.233  |
| 105           | Max      | 0.870   | 0.834    | 0.233  |
| 105           | Average  | 0.224   | 0.238    | 0.014  |
| 105           | Min      | -0.494  | -0.415   | -0.060 |
| 105           | Std Dev  | 0.290   | 0.286    | 0.048  |



| 8.7_EA_OS_12V |        |        |        |        |        |        |        |        |        |        |        |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site     |        |        |        |        |        |        |        |        |        |        |        |
| Tester        |        |        |        |        |        |        |        |        |        |        |        |
| Test Number   |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit     | 1.9    | mV     |        |        |        |        |        |        |        |        |        |
| Min Limit     | -1.8   | mV     |        |        |        |        |        |        |        |        |        |
| krad          | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL            | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 |
| Min           | 0.200  | -0.404 | 0.109  | -0.087 | -0.265 | -0.091 | -0.184 | -0.415 | -0.123 | -0.033 | 0.289  |
| Average       | 0.372  | 0.260  | 0.346  | 0.168  | 0.111  | 0.239  | 0.082  | 0.172  | 0.161  | 0.229  | 0.531  |
| Max           | 0.611  | 0.655  | 0.640  | 0.323  | 0.285  | 0.601  | 0.391  | 0.834  | 0.707  | 0.598  | 0.766  |
| UL            | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  |

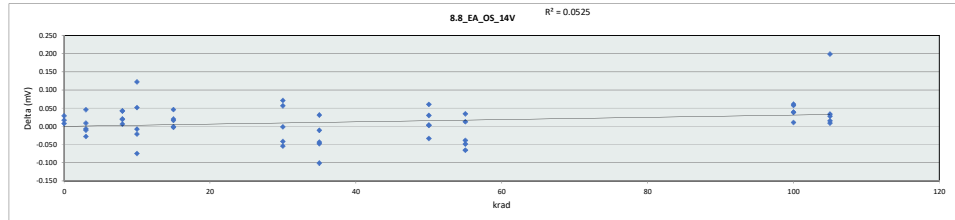


# HDR TID Report

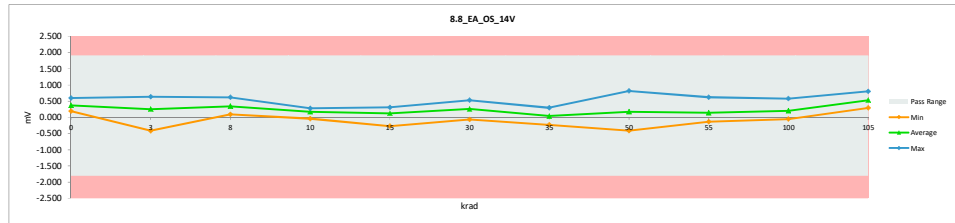
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.8_EA_OS_14V |          |         |          |        |
|---------------|----------|---------|----------|--------|
| Test Site     |          |         |          |        |
| Tester        |          |         |          |        |
| Test Number   |          |         |          |        |
| Unit          |          |         |          |        |
| Max Limit     |          |         |          |        |
| Min Limit     |          |         |          |        |
| krad          | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0             | 552      | 0.313   | 0.320    | 0.007  |
| 0             | 726      | 0.568   | 0.596    | 0.029  |
| 0             | 791      | 0.177   | 0.194    | 0.017  |
| 3             | 689      | 0.630   | 0.639    | 0.009  |
| 3             | 688      | 0.464   | 0.456    | -0.007 |
| 3             | 700      | -0.460  | -0.414   | 0.046  |
| 3             | 482      | 0.421   | 0.410    | -0.011 |
| 3             | 1033     | 0.202   | 0.174    | -0.028 |
| 8             | 442      | 0.471   | 0.490    | 0.020  |
| 8             | 699      | 0.578   | 0.621    | 0.043  |
| 8             | 344      | 0.297   | 0.303    | 0.006  |
| 8             | 355      | 0.072   | 0.091    | 0.019  |
| 8             | 790      | 0.169   | 0.210    | 0.042  |
| 10            | 537      | -0.092  | -0.040   | 0.051  |
| 10            | 396      | 0.076   | 0.198    | 0.122  |
| 10            | 521      | 0.353   | 0.279    | -0.075 |
| 10            | 535      | 0.205   | 0.197    | -0.008 |
| 10            | 526      | 0.270   | 0.249    | -0.022 |
| 15            | 540      | -0.268  | -0.271   | -0.003 |
| 15            | 387      | 0.191   | 0.207    | 0.016  |
| 15            | 787      | 0.076   | 0.096    | 0.020  |
| 15            | 1042     | 0.244   | 0.290    | 0.046  |
| 15            | 483      | 0.309   | 0.308    | -0.001 |
| 30            | 597      | 0.584   | 0.530    | -0.054 |
| 30            | 853      | 0.267   | 0.225    | -0.042 |
| 30            | 416      | -0.136  | -0.065   | 0.071  |
| 30            | 949      | 0.254   | 0.252    | -0.002 |
| 30            | 221      | 0.299   | 0.355    | 0.056  |
| 35            | 538      | 0.043   | 0.032    | -0.011 |
| 35            | 164      | 0.344   | 0.296    | -0.048 |
| 35            | 1018     | -0.184  | -0.228   | -0.044 |
| 35            | 462      | 0.051   | 0.082    | 0.031  |
| 35            | 1032     | 0.129   | 0.028    | -0.101 |
| 50            | 566      | -0.473  | -0.413   | 0.060  |
| 50            | 197      | 0.384   | 0.414    | 0.030  |
| 50            | 793      | 0.056   | 0.058    | 0.003  |
| 50            | 802      | 0.008   | 0.012    | 0.003  |
| 50            | 61       | 0.852   | 0.818    | -0.033 |
| 55            | 795      | -0.169  | -0.135   | 0.034  |
| 55            | 921      | 0.212   | 0.163    | -0.049 |
| 55            | 741      | 0.152   | 0.113    | -0.039 |
| 55            | 809      | 0.690   | 0.624    | -0.066 |
| 55            | 804      | -0.060  | -0.048   | 0.012  |
| 100           | 449      | -0.109  | -0.052   | 0.057  |
| 100           | 541      | 0.174   | 0.234    | 0.061  |
| 100           | 476      | -0.050  | -0.012   | 0.038  |
| 100           | 45       | 0.567   | 0.578    | 0.010  |
| 100           | 642      | 0.246   | 0.285    | 0.039  |
| 105           | 1036     | 0.284   | 0.293    | 0.009  |
| 105           | 1038     | 0.788   | 0.803    | 0.015  |
| 105           | 203      | 0.534   | 0.567    | 0.034  |
| 105           | 1029     | 0.291   | 0.319    | 0.028  |
| 105           | 1027     | 0.468   | 0.667    | 0.198  |
| 105           | Max      | 0.852   | 0.818    | 0.198  |
| 105           | Average  | 0.222   | 0.234    | 0.012  |
| 105           | Min      | -0.473  | -0.414   | -0.101 |
| 105           | Std Dev  | 0.285   | 0.280    | 0.049  |



| 8.8_EA_OS_14V |        |        |        |        |        |        |        |        |        |        |        |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site     |        |        |        |        |        |        |        |        |        |        |        |
| Tester        |        |        |        |        |        |        |        |        |        |        |        |
| Test Number   |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit     |        |        |        |        |        |        |        |        |        |        |        |
| Min Limit     |        |        |        |        |        |        |        |        |        |        |        |
| krad          | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL            | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 | -1.800 |
| Min           | 0.194  | -0.414 | 0.091  | -0.040 | -0.271 | -0.065 | -0.228 | -0.413 | -0.135 | -0.052 | 0.293  |
| Average       | 0.370  | 0.253  | 0.343  | 0.176  | 0.126  | 0.260  | 0.042  | 0.178  | 0.143  | 0.207  | 0.530  |
| Max           | 0.596  | 0.639  | 0.621  | 0.279  | 0.308  | 0.530  | 0.296  | 0.818  | 0.624  | 0.578  | 0.803  |
| UL            | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  | 1.900  |

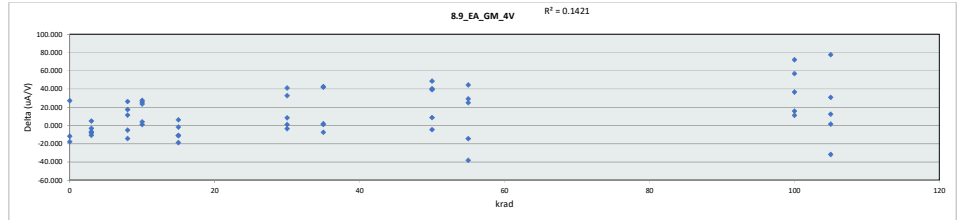


# HDR TID Report

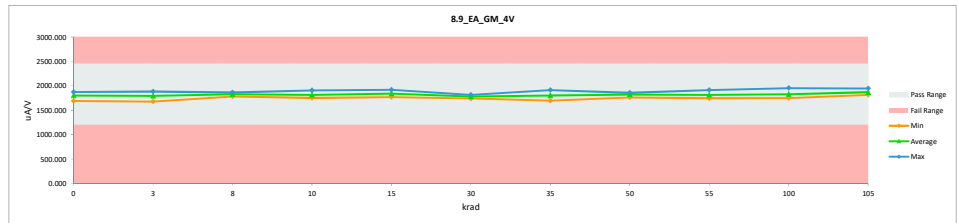
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.9_EA_GM_4V |          |          |          |         |
|--------------|----------|----------|----------|---------|
| Test Site    |          |          |          |         |
| Tester       |          |          |          |         |
| Test Number  |          |          |          |         |
| Unit         | uA/V     | uA/V     |          |         |
| Max Limit    | 2450     | 2450     |          |         |
| Min Limit    | 1200     | 1200     |          |         |
| krad         | Serial # | PRE_HDR  | POST_HDR | Delta   |
| 0            | 552      | 1845.059 | 1872.123 | 27.064  |
| 0            | 726      | 1853.109 | 1841.222 | -11.887 |
| 0            | 791      | 1706.606 | 1688.656 | -17.950 |
| 3            | 689      | 1893.185 | 1882.415 | -10.770 |
| 3            | 688      | 1828.510 | 1821.601 | -6.909  |
| 3            | 700      | 1802.316 | 1799.030 | -3.286  |
| 3            | 482      | 1807.179 | 1799.049 | -8.130  |
| 3            | 1033     | 1672.670 | 1677.436 | 4.766   |
| 8            | 442      | 1755.306 | 1781.437 | 26.131  |
| 8            | 699      | 1817.221 | 1828.410 | 11.189  |
| 8            | 344      | 1857.345 | 1842.820 | -14.525 |
| 8            | 355      | 1869.994 | 1864.695 | -5.299  |
| 8            | 750      | 1802.722 | 1820.030 | 17.308  |
| 10           | 537      | 1760.704 | 1784.174 | 23.470  |
| 10           | 396      | 1726.753 | 1752.318 | 25.565  |
| 10           | 521      | 1801.764 | 1802.626 | 0.862   |
| 10           | 535      | 1880.495 | 1907.900 | 27.405  |
| 10           | 526      | 1822.838 | 1826.618 | 3.780   |
| 15           | 540      | 1887.116 | 1893.185 | 6.069   |
| 15           | 387      | 1822.858 | 1820.978 | -1.880  |
| 15           | 787      | 1936.786 | 1917.845 | -18.941 |
| 15           | 1042     | 1822.848 | 1811.638 | -11.210 |
| 15           | 483      | 1779.217 | 1768.107 | -11.110 |
| 30           | 597      | 1731.708 | 1740.023 | 8.315   |
| 30           | 853      | 1766.562 | 1762.822 | -3.740  |
| 30           | 416      | 1773.434 | 1814.410 | 40.976  |
| 30           | 949      | 1803.856 | 1804.681 | 0.825   |
| 30           | 221      | 1741.956 | 1774.503 | 32.547  |
| 35           | 538      | 1822.848 | 1864.684 | 41.836  |
| 35           | 164      | 1691.900 | 1692.839 | 0.939   |
| 35           | 1018     | 1869.140 | 1911.618 | 42.478  |
| 35           | 462      | 1767.586 | 1769.170 | 1.584   |
| 35           | 1032     | 1781.030 | 1773.434 | -7.596  |
| 50           | 566      | 1812.568 | 1821.106 | 8.538   |
| 50           | 197      | 1767.567 | 1762.822 | -4.745  |
| 50           | 793      | 1799.677 | 1838.659 | 38.982  |
| 50           | 802      | 1789.608 | 1829.766 | 40.158  |
| 50           | 61       | 1806.877 | 1855.394 | 48.517  |
| 55           | 795      | 1782.213 | 1743.830 | -38.383 |
| 55           | 921      | 1780.586 | 1765.958 | -14.628 |
| 55           | 741      | 1752.327 | 1796.699 | 44.372  |
| 55           | 809      | 1882.584 | 1911.628 | 29.044  |
| 55           | 804      | 1827.892 | 1852.751 | 24.859  |
| 100          | 449      | 1741.956 | 1757.549 | 15.593  |
| 100          | 541      | 1725.785 | 1782.535 | 56.750  |
| 100          | 476      | 1711.568 | 1748.064 | 36.496  |
| 100          | 45       | 1898.186 | 1909.159 | 10.973  |
| 100          | 642      | 1881.086 | 1953.065 | 71.979  |
| 105          | 1036     | 1868.152 | 1945.579 | 77.427  |
| 105          | 1038     | 1869.140 | 1870.474 | 1.334   |
| 105          | 203      | 1850.350 | 1881.086 | 30.736  |
| 105          | 1029     | 1844.552 | 1812.744 | -31.808 |
| 105          | 1027     | 1826.241 | 1838.508 | 12.267  |
| 105          |          | 1936.786 | 1953.065 | 77.427  |
|              | Max      |          |          |         |
|              | Average  | 1806.067 | 1818.677 | 12.610  |
|              | Min      | 1672.670 | 1677.436 | -38.383 |
|              | Std Dev  | 58.394   | 63.052   | 24.936  |



| 8.9_EA_GM_4V |                                                                                                    |
|--------------|----------------------------------------------------------------------------------------------------|
| Test Site    |                                                                                                    |
| Tester       |                                                                                                    |
| Test Number  |                                                                                                    |
| Max Limit    | 2450 uA/V                                                                                          |
| Min Limit    | 1200 uA/V                                                                                          |
| krad         |                                                                                                    |
|              | 0 3 8 10 15 30 35 50 55 100 105                                                                    |
| LL           | 1200.000 1200.000 1200.000 1200.000 1200.000 1200.000 1200.000 1200.000 1200.000 1200.000 1200.000 |
| Min          | 1688.656 1677.436 1781.437 1752.318 1768.107 1740.023 1692.839 1762.822 1743.830 1748.064 1812.744 |
| Average      | 1800.667 1795.906 1827.478 1814.727 1842.351 1779.288 1802.349 1821.549 1814.173 1830.074 1869.678 |
| Max          | 1872.123 1882.415 1864.695 1907.900 1917.845 1814.410 1911.618 1855.394 1911.628 1953.065 1945.579 |
| UL           | 2450.000 2450.000 2450.000 2450.000 2450.000 2450.000 2450.000 2450.000 2450.000 2450.000 2450.000 |

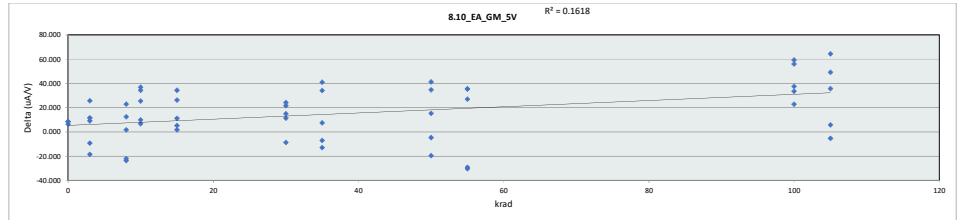


# HDR TID Report

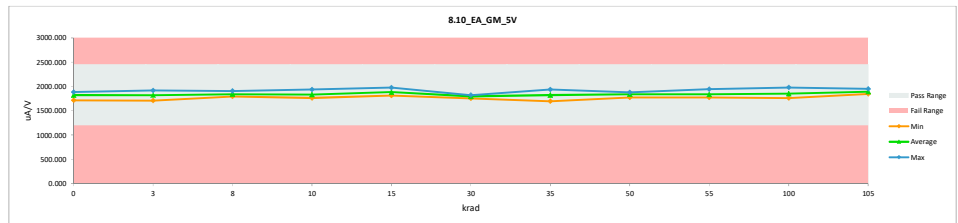
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.10_EA_GM_SV |          |          |          |         |
|---------------|----------|----------|----------|---------|
| Test Site     |          |          |          |         |
| Tester        |          |          |          |         |
| Test Number   |          |          |          |         |
| Unit          | uA/V     | uA/V     |          |         |
| Max Limit     | 2450     | 2450     |          |         |
| Min Limit     | 1200     | 1200     |          |         |
| krad          | Serial # | PRE HDR  | POST HDR | Delta   |
| 0             | 552      | 1874.497 | 1883.092 | 8.595   |
| 0             | 726      | 1863.235 | 1871.528 | 8.293   |
| 0             | 791      | 1708.083 | 1714.480 | 6.397   |
| 3             | 689      | 1905.441 | 1916.936 | 11.495  |
| 3             | 688      | 1846.674 | 1837.391 | -9.283  |
| 3             | 700      | 1819.112 | 1800.546 | -18.566 |
| 3             | 482      | 1825.158 | 1834.217 | 9.059   |
| 3             | 1033     | 1682.822 | 1707.822 | 25.000  |
| 8             | 442      | 1783.520 | 1795.968 | 12.448  |
| 8             | 699      | 1839.294 | 1817.221 | -22.073 |
| 8             | 344      | 1881.086 | 1857.356 | -23.730 |
| 8             | 355      | 1883.937 | 1906.816 | 22.879  |
| 8             | 750      | 1823.987 | 1825.884 | 1.897   |
| 10            | 537      | 1763.282 | 1806.070 | 42.788  |
| 10            | 396      | 1737.401 | 1762.813 | 25.412  |
| 10            | 521      | 1807.938 | 1814.616 | 6.678   |
| 10            | 535      | 1901.338 | 1935.624 | 34.286  |
| 10            | 526      | 1834.207 | 1844.045 | 9.838   |
| 15            | 540      | 1905.441 | 1910.584 | 5.143   |
| 15            | 387      | 1834.909 | 1869.140 | 34.231  |
| 15            | 787      | 1949.604 | 1975.778 | 26.174  |
| 15            | 1042     | 1841.667 | 1843.367 | 1.700   |
| 15            | 483      | 1800.536 | 1811.628 | 11.092  |
| 30            | 597      | 1742.463 | 1753.811 | 11.348  |
| 30            | 853      | 1787.549 | 1778.793 | -8.756  |
| 30            | 416      | 1800.546 | 1822.155 | 21.609  |
| 30            | 949      | 1805.069 | 1820.040 | 14.971  |
| 30            | 221      | 1784.184 | 1808.289 | 24.105  |
| 35            | 538      | 1837.642 | 1878.527 | 40.885  |
| 35            | 164      | 1707.952 | 1694.942 | -13.010 |
| 35            | 1018     | 1902.686 | 1936.775 | 34.089  |
| 35            | 462      | 1804.962 | 1797.816 | -7.146  |
| 35            | 1032     | 1800.536 | 1807.919 | 7.383   |
| 50            | 566      | 1863.224 | 1843.589 | -19.635 |
| 50            | 197      | 1778.189 | 1773.434 | -4.755  |
| 50            | 793      | 1822.848 | 1864.083 | 41.235  |
| 50            | 802      | 1828.510 | 1843.762 | 15.252  |
| 50            | 61       | 1844.735 | 1879.379 | 34.644  |
| 55            | 795      | 1802.606 | 1773.434 | -29.172 |
| 55            | 921      | 1815.362 | 1784.953 | -30.409 |
| 55            | 741      | 1768.107 | 1795.055 | 26.948  |
| 55            | 809      | 1908.530 | 1943.877 | 35.347  |
| 55            | 804      | 1845.699 | 1881.086 | 35.387  |
| 100           | 449      | 1757.540 | 1795.065 | 37.525  |
| 100           | 541      | 1744.882 | 1804.176 | 59.294  |
| 100           | 476      | 1726.646 | 1760.168 | 33.522  |
| 100           | 45       | 1899.282 | 1922.020 | 22.738  |
| 100           | 642      | 1924.125 | 1980.068 | 55.943  |
| 105           | 1036     | 1885.271 | 1949.604 | 64.333  |
| 105           | 1038     | 1869.140 | 1904.749 | 35.609  |
| 105           | 203      | 1869.974 | 1919.107 | 49.133  |
| 105           | 1029     | 1839.930 | 1845.709 | 5.779   |
| 105           | 1027     | 1851.504 | 1846.115 | -5.389  |
| 105           |          | 1949.604 | 1980.068 | 64.333  |
|               | Max      |          |          |         |
|               | Average  | 1825.250 | 1840.589 | 15.339  |
|               | Min      | 1682.230 | 1694.942 | -30.409 |
|               | Std Dev  | 59.649   | 66.173   | 22.693  |



| 8.10_EA_GM_SV |          |          |          |          |          |          |          |          |          |          |          |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site     |          |          |          |          |          |          |          |          |          |          |          |
| Tester        |          |          |          |          |          |          |          |          |          |          |          |
| Test Number   |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit     | 2450     | uA/V     |          |          |          |          |          |          |          |          |          |
| Min Limit     | 1200     | uA/V     |          |          |          |          |          |          |          |          |          |
| krad          | 0        | 3        | 8        | 10       | 15       | 30       | 35       | 50       | 55       | 100      | 105      |
| LL            | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 |
| Min           | 1714.480 | 1707.822 | 1795.968 | 1762.813 | 1811.628 | 1753.811 | 1694.942 | 1773.434 | 1773.434 | 1760.168 | 1845.709 |
| Average       | 1823.033 | 1819.382 | 1840.609 | 1832.634 | 1882.099 | 1796.618 | 1823.196 | 1840.849 | 1835.681 | 1852.299 | 1893.057 |
| Max           | 1883.092 | 1916.936 | 1906.816 | 1935.624 | 1975.778 | 1822.155 | 1936.775 | 1879.379 | 1943.877 | 1980.068 | 1949.604 |
| UL            | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 |

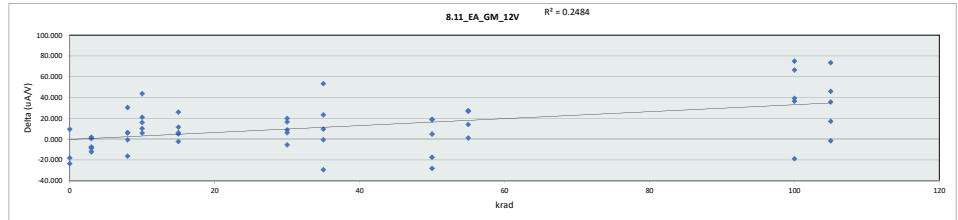


# HDR TID Report

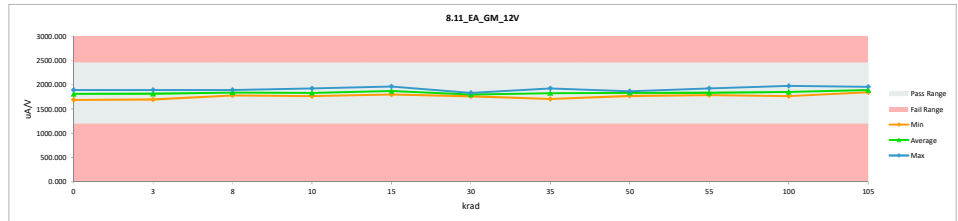
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.11_EA_GM_12V |          |          |          |         |
|----------------|----------|----------|----------|---------|
| Test Site      |          |          |          |         |
| Tester         |          |          |          |         |
| Test Number    |          |          |          |         |
| Unit           | uA/V     | uA/V     |          |         |
| Max Limit      | 2450     | 2450     |          |         |
| Min Limit      | 1200     | 1200     |          |         |
| krad           | Serial # | PRE_HDR  | POST_HDR | Delta   |
| 0              | 552      | 1881.086 | 1890.433 | 9.347   |
| 0              | 726      | 1873.900 | 1850.207 | -23.693 |
| 0              | 791      | 1706.858 | 1688.656 | -18.202 |
| 3              | 689      | 1905.441 | 1893.185 | -12.256 |
| 3              | 688      | 1842.982 | 1834.207 | -8.775  |
| 3              | 700      | 1822.353 | 1822.848 | 0.495   |
| 3              | 482      | 1821.037 | 1822.848 | 1.811   |
| 3              | 1033     | 1704.136 | 1696.450 | -7.686  |
| 8              | 442      | 1773.443 | 1779.321 | 5.878   |
| 8              | 699      | 1842.132 | 1825.674 | -16.458 |
| 8              | 344      | 1841.859 | 1872.112 | 30.253  |
| 8              | 355      | 1887.116 | 1893.185 | 6.069   |
| 8              | 750      | 1823.561 | 1822.858 | -0.703  |
| 10             | 537      | 1768.107 | 1811.628 | 43.521  |
| 10             | 396      | 1741.884 | 1762.822 | 20.938  |
| 10             | 521      | 1813.449 | 1823.472 | 10.023  |
| 10             | 535      | 1906.469 | 1922.339 | 15.870  |
| 10             | 526      | 1837.069 | 1842.830 | 5.761   |
| 15             | 540      | 1893.185 | 1899.293 | 6.108   |
| 15             | 387      | 1840.909 | 1852.342 | 11.433  |
| 15             | 787      | 1936.775 | 1962.603 | 25.828  |
| 15             | 1042     | 1839.577 | 1844.532 | 4.955   |
| 15             | 483      | 1797.488 | 1795.065 | -2.423  |
| 30             | 597      | 1752.318 | 1761.064 | 8.746   |
| 30             | 853      | 1784.459 | 1778.793 | -5.666  |
| 30             | 416      | 1796.872 | 1816.729 | 19.857  |
| 30             | 949      | 1824.900 | 1831.034 | 6.134   |
| 30             | 221      | 1789.598 | 1806.080 | 16.482  |
| 35             | 538      | 1839.940 | 1893.174 | 53.234  |
| 35             | 164      | 1705.114 | 1704.404 | -0.710  |
| 35             | 1018     | 1900.972 | 1924.114 | 23.142  |
| 35             | 462      | 1793.846 | 1803.323 | 9.477   |
| 35             | 1032     | 1823.432 | 1793.827 | -29.605 |
| 50             | 566      | 1859.115 | 1841.505 | -17.610 |
| 50             | 197      | 1796.439 | 1768.107 | -28.332 |
| 50             | 793      | 1824.979 | 1843.772 | 18.793  |
| 50             | 802      | 1834.197 | 1838.921 | 4.724   |
| 50             | 61       | 1844.066 | 1862.697 | 18.631  |
| 55             | 795      | 1785.656 | 1799.561 | 13.905  |
| 55             | 921      | 1784.725 | 1785.665 | 0.940   |
| 55             | 741      | 1768.107 | 1795.055 | 26.948  |
| 55             | 809      | 1897.242 | 1924.125 | 26.883  |
| 55             | 804      | 1843.599 | 1870.630 | 27.031  |
| 100            | 449      | 1731.708 | 1768.107 | 36.399  |
| 100            | 541      | 1748.856 | 1815.195 | 66.339  |
| 100            | 476      | 1725.430 | 1764.583 | 39.153  |
| 100            | 45       | 1936.775 | 1917.845 | -18.930 |
| 100            | 642      | 1899.293 | 1974.220 | 74.927  |
| 105            | 1036     | 1882.669 | 1956.082 | 73.413  |
| 105            | 1038     | 1861.457 | 1896.995 | 35.538  |
| 105            | 203      | 1853.457 | 1899.293 | 45.836  |
| 105            | 1029     | 1844.481 | 1861.539 | 17.058  |
| 105            | 1027     | 1845.709 | 1843.984 | -1.725  |
| 105            | Max      | 1936.775 | 1974.220 | 74.927  |
| 105            | Average  | 1824.155 | 1836.780 | 12.625  |
| 105            | Min      | 1704.136 | 1688.656 | -29.605 |
| 105            | Std Dev  | 58.312   | 63.816   | 23.737  |



| 8.11_EA_GM_12V |          |          |          |          |          |          |          |          |          |          |          |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site      |          |          |          |          |          |          |          |          |          |          |          |
| Tester         |          |          |          |          |          |          |          |          |          |          |          |
| Test Number    |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit      | 2450     | uA/V     |          |          |          |          |          |          |          |          |          |
| Min Limit      | 1200     | uA/V     |          |          |          |          |          |          |          |          |          |
| krad           |          |          |          |          |          |          |          |          |          |          |          |
| LL             | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 |
| Min            | 1688.656 | 1696.450 | 1779.321 | 1762.822 | 1795.065 | 1761.064 | 1704.404 | 1768.107 | 1785.665 | 1764.583 | 1843.984 |
| Average        | 1809.765 | 1813.908 | 1838.630 | 1832.618 | 1870.767 | 1798.740 | 1823.768 | 1831.000 | 1835.007 | 1847.990 | 1891.579 |
| Max            | 1890.433 | 1893.185 | 1893.185 | 1922.339 | 1962.603 | 1831.034 | 1924.114 | 1862.697 | 1924.125 | 1974.220 | 1956.082 |
| UL             | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 |

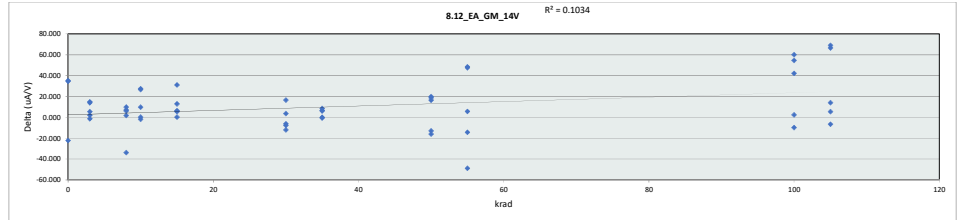


# HDR TID Report

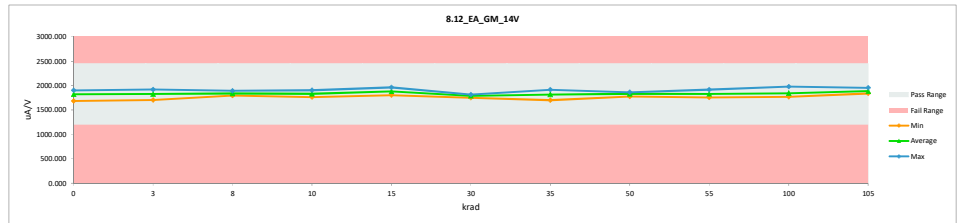
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.12_EA_GM_14V |          |          |          |         |
|----------------|----------|----------|----------|---------|
| Test Site      |          |          |          |         |
| Tester         |          |          |          |         |
| Test Number    |          |          |          |         |
| Unit           | uA/V     | uA/V     |          |         |
| Max Limit      | 2450     | 2450     |          |         |
| Min Limit      | 1200     | 1200     |          |         |
| krad           | Serial # | PRE_HDR  | POST_HDR | Delta   |
| 0              | 552      | 1866.188 | 1901.349 | 35.161  |
| 0              | 726      | 1845.709 | 1880.084 | 34.375  |
| 0              | 791      | 1706.111 | 1683.656 | -22.455 |
| 3              | 689      | 1905.430 | 1920.117 | 14.687  |
| 3              | 688      | 1853.099 | 1851.514 | -1.585  |
| 3              | 700      | 1819.280 | 1821.185 | 1.905   |
| 3              | 482      | 1823.551 | 1837.341 | 13.790  |
| 3              | 1033     | 1698.602 | 1703.876 | 5.270   |
| 8              | 442      | 1789.608 | 1795.555 | 5.947   |
| 8              | 699      | 1853.119 | 1819.092 | -34.027 |
| 8              | 344      | 1851.514 | 1858.529 | 7.015   |
| 8              | 355      | 1890.561 | 1892.181 | 1.620   |
| 8              | 750      | 1818.767 | 1828.510 | 9.743   |
| 10             | 537      | 1778.802 | 1806.070 | 27.268  |
| 10             | 396      | 1753.188 | 1762.813 | 9.625   |
| 10             | 521      | 1820.958 | 1820.978 | 0.020   |
| 10             | 535      | 1907.477 | 1905.441 | -2.036  |
| 10             | 526      | 1836.657 | 1863.224 | 26.567  |
| 15             | 540      | 1893.185 | 1924.125 | 30.940  |
| 15             | 387      | 1853.693 | 1859.971 | 6.278   |
| 15             | 787      | 1962.592 | 1962.603 | 0.011   |
| 15             | 1042     | 1832.134 | 1844.867 | 12.733  |
| 15             | 483      | 1800.845 | 1806.080 | 5.235   |
| 30             | 597      | 1748.856 | 1752.327 | 3.471   |
| 30             | 853      | 1783.283 | 1776.993 | -6.290  |
| 30             | 416      | 1822.848 | 1815.127 | -7.721  |
| 30             | 949      | 1820.800 | 1808.611 | -12.189 |
| 30             | 221      | 1784.184 | 1800.565 | 16.381  |
| 35             | 538      | 1863.235 | 1869.151 | 5.916   |
| 35             | 164      | 1695.148 | 1701.673 | 6.525   |
| 35             | 1018     | 1915.787 | 1915.787 | 0.000   |
| 35             | 462      | 1789.112 | 1797.421 | 8.309   |
| 35             | 1032     | 1797.180 | 1796.430 | -0.750  |
| 50             | 566      | 1857.356 | 1844.278 | -13.078 |
| 50             | 197      | 1789.608 | 1773.434 | -16.174 |
| 50             | 793      | 1818.176 | 1836.797 | 18.621  |
| 50             | 802      | 1828.510 | 1844.846 | 16.336  |
| 50             | 61       | 1844.430 | 1864.218 | 19.788  |
| 55             | 795      | 1805.380 | 1756.390 | -48.990 |
| 55             | 921      | 1789.083 | 1774.634 | -14.449 |
| 55             | 741      | 1776.655 | 1824.969 | 48.314  |
| 55             | 809      | 1911.628 | 1917.155 | 5.527   |
| 55             | 804      | 1829.656 | 1877.087 | 47.431  |
| 100            | 449      | 1766.795 | 1769.002 | 2.207   |
| 100            | 541      | 1739.374 | 1781.494 | 42.120  |
| 100            | 476      | 1725.243 | 1779.764 | 54.521  |
| 100            | 45       | 1917.834 | 1907.900 | -9.934  |
| 100            | 642      | 1917.856 | 1977.827 | 59.971  |
| 105            | 1036     | 1889.539 | 1956.082 | 66.543  |
| 105            | 1038     | 1864.539 | 1869.880 | 5.341   |
| 105            | 203      | 1841.182 | 1910.083 | 68.901  |
| 105            | 1029     | 1845.709 | 1838.911 | -6.798  |
| 105            | 1027     | 1839.940 | 1853.846 | 13.906  |
| 105            | Max      | 1962.592 | 1977.827 | 68.901  |
| 105            | Average  | 1826.038 | 1836.639 | 10.601  |
| 105            | Min      | 1695.148 | 1683.656 | -48.990 |
| 105            | Std Dev  | 59.246   | 64.979   | 23.495  |



| 8.12_EA_GM_14V |          |          |          |          |          |          |          |          |          |          |          |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site      |          |          |          |          |          |          |          |          |          |          |          |
| Tester         |          |          |          |          |          |          |          |          |          |          |          |
| Test Number    |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit      | 2450     | uA/V     |          |          |          |          |          |          |          |          |          |
| Min Limit      | 1200     | uA/V     |          |          |          |          |          |          |          |          |          |
| krad           | 0        | 3        | 8        | 10       | 15       | 30       | 35       | 50       | 55       | 100      | 105      |
| LL             | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 | 1200.000 |
| Min            | 1683.656 | 1703.876 | 1795.555 | 1762.813 | 1806.080 | 1752.327 | 1701.673 | 1773.434 | 1756.390 | 1769.002 | 1838.911 |
| Average        | 1821.696 | 1826.807 | 1838.773 | 1831.705 | 1879.529 | 1790.725 | 1816.092 | 1832.715 | 1830.047 | 1843.197 | 1885.760 |
| Max            | 1901.349 | 1920.117 | 1892.181 | 1905.441 | 1962.603 | 1815.127 | 1915.787 | 1864.218 | 1917.155 | 1977.827 | 1956.082 |
| UL             | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 | 2450.000 |

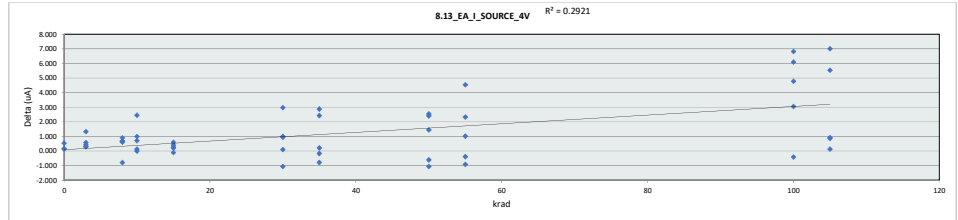


# HDR TID Report

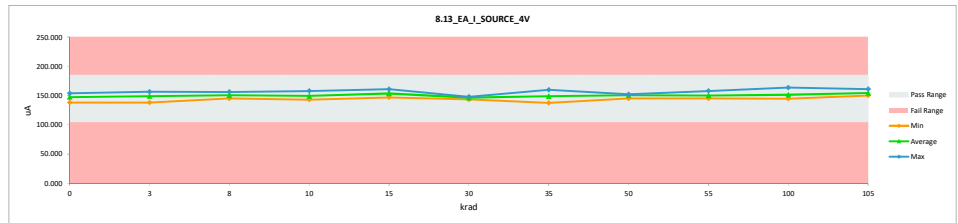
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.13_EA_I_SOURCE_4V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | uA       | uA      |          |        |
| Max Limit           | 185      | 185     |          |        |
| Min Limit           | 105      | 105     |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 153.398 | 153.927  | 0.529  |
| 0                   | 726      | 150.235 | 150.383  | 0.148  |
| 0                   | 791      | 137.905 | 138.035  | 0.130  |
| 3                   | 689      | 155.289 | 156.604  | 1.315  |
| 3                   | 688      | 150.657 | 150.941  | 0.284  |
| 3                   | 700      | 149.750 | 150.164  | 0.414  |
| 3                   | 482      | 148.581 | 148.872  | 0.291  |
| 3                   | 1033     | 137.507 | 138.073  | 0.566  |
| 8                   | 442      | 144.297 | 145.194  | 0.897  |
| 8                   | 699      | 150.231 | 149.426  | -0.805 |
| 8                   | 344      | 151.377 | 151.976  | 0.599  |
| 8                   | 355      | 155.563 | 156.208  | 0.645  |
| 8                   | 750      | 148.898 | 149.579  | 0.681  |
| 10                  | 537      | 145.244 | 147.691  | 2.447  |
| 10                  | 396      | 142.452 | 143.149  | 0.697  |
| 10                  | 521      | 147.442 | 147.424  | -0.018 |
| 10                  | 535      | 157.737 | 157.860  | 0.123  |
| 10                  | 526      | 150.414 | 151.394  | 0.980  |
| 15                  | 540      | 158.162 | 158.357  | 0.195  |
| 15                  | 387      | 151.107 | 151.693  | 0.586  |
| 15                  | 787      | 161.079 | 160.965  | -0.114 |
| 15                  | 1042     | 149.989 | 150.242  | 0.253  |
| 15                  | 483      | 146.541 | 146.932  | 0.391  |
| 30                  | 597      | 142.448 | 143.382  | 0.934  |
| 30                  | 853      | 145.667 | 145.758  | 0.091  |
| 30                  | 416      | 146.775 | 147.764  | 0.989  |
| 30                  | 949      | 149.133 | 148.061  | -1.072 |
| 30                  | 221      | 144.680 | 147.642  | 2.962  |
| 35                  | 538      | 151.323 | 154.186  | 2.863  |
| 35                  | 164      | 137.586 | 137.411  | -0.175 |
| 35                  | 1018     | 157.354 | 159.775  | 2.421  |
| 35                  | 462      | 145.702 | 145.909  | 0.207  |
| 35                  | 1032     | 147.522 | 146.725  | -0.797 |
| 50                  | 566      | 152.455 | 151.839  | -0.616 |
| 50                  | 197      | 146.338 | 145.269  | -1.069 |
| 50                  | 793      | 149.292 | 151.821  | 2.529  |
| 50                  | 802      | 149.192 | 150.626  | 1.434  |
| 50                  | 61       | 149.833 | 152.228  | 2.395  |
| 55                  | 795      | 146.234 | 145.314  | -0.920 |
| 55                  | 921      | 145.653 | 145.254  | -0.399 |
| 55                  | 741      | 145.287 | 147.612  | 2.325  |
| 55                  | 809      | 156.820 | 157.827  | 1.007  |
| 55                  | 804      | 149.833 | 154.361  | 4.528  |
| 100                 | 449      | 142.663 | 145.709  | 3.046  |
| 100                 | 541      | 140.169 | 146.259  | 6.090  |
| 100                 | 476      | 140.087 | 144.859  | 4.772  |
| 100                 | 45       | 157.026 | 156.608  | -0.418 |
| 100                 | 642      | 156.839 | 163.647  | 6.808  |
| 105                 | 1036     | 154.113 | 161.105  | 6.992  |
| 105                 | 1038     | 152.535 | 153.389  | 0.854  |
| 105                 | 203      | 151.110 | 156.633  | 5.523  |
| 105                 | 1029     | 150.025 | 150.144  | 0.119  |
| 105                 | 1027     | 149.750 | 150.662  | 0.912  |
| 105                 | Max      | 161.079 | 163.647  | 6.992  |
| 105                 | Average  | 149.006 | 150.243  | 1.237  |
| 105                 | Min      | 137.507 | 137.411  | -1.072 |
| 105                 | Std Dev  | 5.458   | 5.789    | 1.957  |



| 8.13_EA_I_SOURCE_4V |         |         |         |         |         |         |         |         |         |         |         |
|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site           |         |         |         |         |         |         |         |         |         |         |         |
| Tester              |         |         |         |         |         |         |         |         |         |         |         |
| Test Number         |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit           | 185     | uA      |         |         |         |         |         |         |         |         |         |
| Min Limit           | 105     | uA      |         |         |         |         |         |         |         |         |         |
| krad                | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                  | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 |
| Min                 | 138.035 | 138.073 | 145.194 | 143.149 | 146.932 | 143.382 | 137.411 | 145.269 | 145.254 | 144.859 | 150.144 |
| Average             | 147.448 | 148.931 | 150.477 | 149.504 | 153.638 | 146.521 | 148.801 | 150.357 | 150.074 | 151.416 | 154.387 |
| Max                 | 153.927 | 156.604 | 156.208 | 157.860 | 160.965 | 148.061 | 159.775 | 152.228 | 157.827 | 163.647 | 161.105 |
| UL                  | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 |

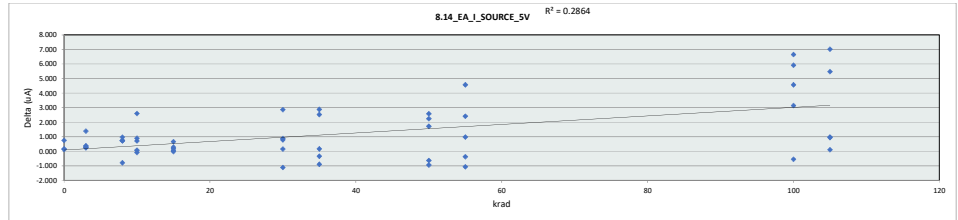


# HDR TID Report

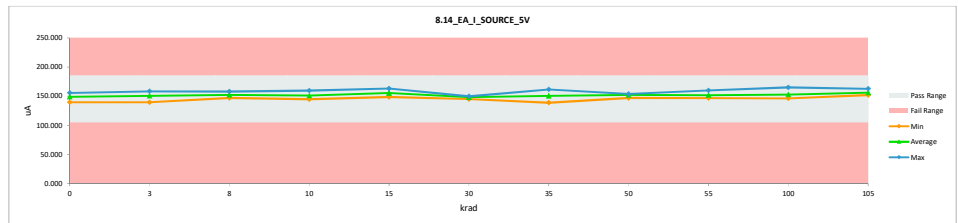
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.14_EA_I_SOURCE_SV |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | uA       | uA      |          |        |
| Max Limit           | 185      | 185     |          |        |
| Min Limit           | 105      | 105     |          |        |
| krad                | Serial # | PRE HDR | POST HDR | Delta  |
| 0                   | 552      | 154.950 | 155.698  | 0.748  |
| 0                   | 726      | 151.785 | 151.945  | 0.160  |
| 0                   | 791      | 139.417 | 139.545  | 0.128  |
| 3                   | 689      | 156.941 | 158.324  | 1.383  |
| 3                   | 688      | 152.402 | 152.643  | 0.241  |
| 3                   | 700      | 151.296 | 151.655  | 0.359  |
| 3                   | 482      | 150.308 | 150.557  | 0.249  |
| 3                   | 1033     | 139.112 | 139.498  | 0.386  |
| 8                   | 442      | 145.886 | 146.856  | 0.970  |
| 8                   | 699      | 151.899 | 151.112  | -0.787 |
| 8                   | 344      | 152.856 | 153.567  | 0.711  |
| 8                   | 355      | 157.209 | 157.944  | 0.735  |
| 8                   | 790      | 150.413 | 151.145  | 0.732  |
| 10                  | 537      | 146.849 | 149.442  | 2.593  |
| 10                  | 396      | 143.969 | 144.677  | 0.708  |
| 10                  | 521      | 149.012 | 148.921  | -0.091 |
| 10                  | 535      | 159.536 | 159.607  | 0.071  |
| 10                  | 526      | 152.005 | 152.902  | 0.897  |
| 15                  | 540      | 160.041 | 160.099  | 0.058  |
| 15                  | 387      | 152.707 | 153.368  | 0.661  |
| 15                  | 787      | 162.939 | 162.916  | -0.023 |
| 15                  | 1042     | 151.656 | 151.834  | 0.178  |
| 15                  | 483      | 148.310 | 148.587  | 0.277  |
| 30                  | 597      | 144.112 | 144.889  | 0.777  |
| 30                  | 853      | 147.389 | 147.541  | 0.152  |
| 30                  | 416      | 148.420 | 149.297  | 0.877  |
| 30                  | 949      | 150.843 | 149.731  | -1.112 |
| 30                  | 221      | 146.362 | 149.215  | 2.853  |
| 35                  | 538      | 152.844 | 155.713  | 2.869  |
| 35                  | 164      | 139.105 | 138.762  | -0.343 |
| 35                  | 1018     | 158.980 | 161.503  | 2.523  |
| 35                  | 462      | 147.281 | 147.444  | 0.163  |
| 35                  | 1032     | 149.212 | 148.315  | -0.897 |
| 50                  | 566      | 154.184 | 153.549  | -0.635 |
| 50                  | 197      | 147.834 | 146.893  | -0.941 |
| 50                  | 793      | 150.948 | 153.429  | 2.581  |
| 50                  | 802      | 150.920 | 152.634  | 1.714  |
| 50                  | 61       | 151.498 | 153.732  | 2.234  |
| 55                  | 795      | 147.919 | 146.854  | -1.065 |
| 55                  | 921      | 147.198 | 146.822  | -0.376 |
| 55                  | 741      | 146.850 | 149.257  | 2.407  |
| 55                  | 809      | 158.676 | 159.649  | 0.973  |
| 55                  | 804      | 151.419 | 155.979  | 4.560  |
| 100                 | 449      | 144.220 | 147.362  | 3.142  |
| 100                 | 541      | 141.800 | 147.708  | 5.908  |
| 100                 | 476      | 141.741 | 146.307  | 4.566  |
| 100                 | 45       | 158.795 | 158.237  | -0.558 |
| 100                 | 642      | 158.397 | 165.044  | 6.647  |
| 105                 | 1036     | 155.855 | 162.870  | 7.015  |
| 105                 | 1038     | 154.346 | 155.324  | 0.978  |
| 105                 | 203      | 152.814 | 158.279  | 5.465  |
| 105                 | 1029     | 151.766 | 151.870  | 0.104  |
| 105                 | 1027     | 151.487 | 152.423  | 0.936  |
| 105                 | Max      | 162.939 | 165.044  | 7.015  |
| 105                 | Average  | 150.653 | 151.877  | 1.223  |
| 105                 | Min      | 139.105 | 138.762  | -1.112 |
| 105                 | Std Dev  | 5.507   | 5.856    | 1.948  |



| 8.14_EA_I_SOURCE_SV |         |         |         |         |         |         |         |         |         |         |
|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site           |         |         |         |         |         |         |         |         |         |         |
| Tester              |         |         |         |         |         |         |         |         |         |         |
| Test Number         |         |         |         |         |         |         |         |         |         |         |
| Max Limit           | 185     | uA      |         |         |         |         |         |         |         |         |
| Min Limit           | 105     | uA      |         |         |         |         |         |         |         |         |
|                     | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 105     |
| LL                  | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 |
| Min                 | 139.545 | 139.498 | 146.856 | 144.677 | 148.587 | 144.889 | 138.762 | 146.893 | 146.822 | 146.307 |
| Average             | 149.063 | 150.535 | 152.125 | 151.110 | 155.361 | 148.135 | 150.347 | 152.047 | 151.712 | 152.932 |
| Max                 | 155.698 | 158.324 | 157.944 | 159.607 | 162.916 | 149.731 | 161.503 | 153.732 | 159.649 | 165.044 |
| UL                  | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 |

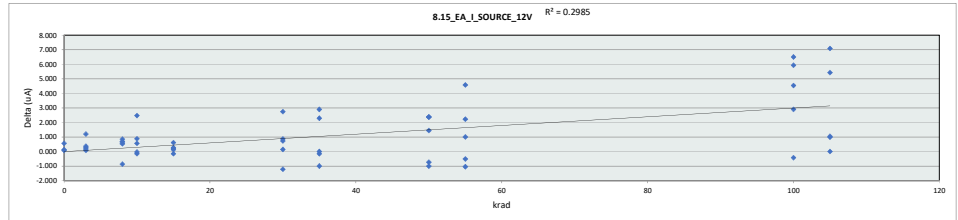


# HDR TID Report

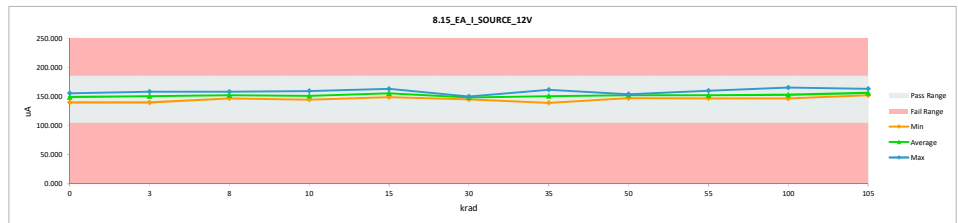
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.15_EA_I_SOURCE_12V |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 | uA       | uA      |          |        |
| Max Limit            | 185      | 185     |          |        |
| Min Limit            | 105      | 105     |          |        |
| krad                 | Serial # | PRE HDR | POST HDR | Delta  |
| 0                    | 552      | 154.998 | 155.558  | 0.560  |
| 0                    | 726      | 151.818 | 151.941  | 0.123  |
| 0                    | 791      | 139.499 | 139.577  | 0.078  |
| 3                    | 689      | 156.987 | 158.182  | 1.195  |
| 3                    | 688      | 152.449 | 152.620  | 0.171  |
| 3                    | 700      | 151.382 | 151.643  | 0.261  |
| 3                    | 482      | 150.424 | 150.498  | 0.074  |
| 3                    | 1033     | 139.571 | 139.571  | 0.353  |
| 8                    | 442      | 145.998 | 146.840  | 0.842  |
| 8                    | 699      | 151.919 | 151.050  | -0.869 |
| 8                    | 344      | 152.983 | 153.513  | 0.530  |
| 8                    | 355      | 157.226 | 157.904  | 0.678  |
| 8                    | 790      | 150.476 | 151.124  | 0.648  |
| 10                   | 537      | 146.854 | 149.314  | 2.460  |
| 10                   | 396      | 144.045 | 144.601  | 0.556  |
| 10                   | 521      | 149.092 | 148.934  | -0.158 |
| 10                   | 535      | 159.459 | 159.424  | -0.035 |
| 10                   | 526      | 152.089 | 152.961  | 0.872  |
| 15                   | 540      | 159.962 | 160.217  | 0.255  |
| 15                   | 387      | 152.760 | 153.371  | 0.611  |
| 15                   | 787      | 163.007 | 162.851  | -0.156 |
| 15                   | 1042     | 151.668 | 151.790  | 0.122  |
| 15                   | 483      | 148.401 | 148.604  | 0.203  |
| 30                   | 597      | 144.046 | 144.910  | 0.864  |
| 30                   | 853      | 147.425 | 147.559  | 0.134  |
| 30                   | 416      | 148.575 | 149.297  | 0.722  |
| 30                   | 949      | 150.937 | 149.715  | -1.222 |
| 30                   | 221      | 146.456 | 149.191  | 2.735  |
| 35                   | 538      | 152.804 | 155.689  | 2.885  |
| 35                   | 164      | 139.116 | 138.963  | -0.153 |
| 35                   | 1018     | 159.076 | 161.361  | 2.285  |
| 35                   | 462      | 147.436 | 147.436  | 0.000  |
| 35                   | 1032     | 149.311 | 148.307  | -1.004 |
| 50                   | 566      | 154.248 | 153.507  | -0.741 |
| 50                   | 197      | 147.979 | 146.970  | -1.009 |
| 50                   | 793      | 150.940 | 153.315  | 2.375  |
| 50                   | 802      | 150.963 | 152.401  | 1.438  |
| 50                   | 61       | 151.580 | 153.935  | 2.355  |
| 55                   | 795      | 148.061 | 147.013  | -1.048 |
| 55                   | 921      | 147.338 | 146.820  | -0.518 |
| 55                   | 741      | 146.936 | 149.152  | 2.216  |
| 55                   | 809      | 158.656 | 159.657  | 1.001  |
| 55                   | 804      | 151.480 | 156.051  | 4.571  |
| 100                  | 449      | 144.253 | 147.147  | 2.894  |
| 100                  | 541      | 141.888 | 147.805  | 5.917  |
| 100                  | 476      | 141.780 | 146.306  | 4.526  |
| 100                  | 45       | 158.856 | 158.429  | -0.427 |
| 100                  | 642      | 158.495 | 164.584  | 6.089  |
| 105                  | 1036     | 155.890 | 162.968  | 7.078  |
| 105                  | 1038     | 154.210 | 155.195  | 0.985  |
| 105                  | 203      | 152.894 | 158.308  | 5.414  |
| 105                  | 1029     | 151.835 | 151.834  | -0.001 |
| 105                  | 1027     | 151.337 | 152.377  | 1.040  |
| 105                  | Max      | 163.007 | 164.584  | 7.078  |
|                      | Average  | 150.708 | 151.862  | 1.154  |
|                      | Min      | 139.116 | 138.963  | -1.222 |
|                      | Std Dev  | 5.491   | 5.836    | 1.947  |



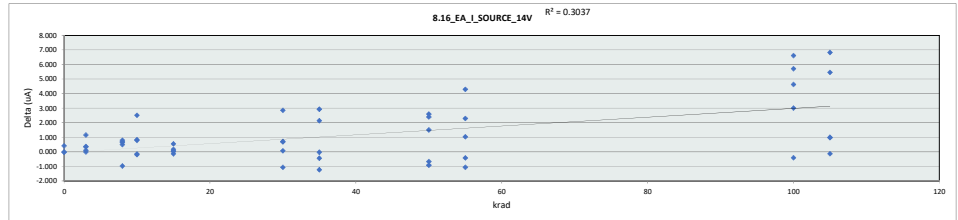
| 8.15_EA_I_SOURCE_12V |         |         |         |         |         |         |         |         |         |         |
|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site            |         |         |         |         |         |         |         |         |         |         |
| Tester               |         |         |         |         |         |         |         |         |         |         |
| Test Number          |         |         |         |         |         |         |         |         |         |         |
| Max Limit            | 185     | uA      |         |         |         |         |         |         |         |         |
| Min Limit            | 105     | uA      |         |         |         |         |         |         |         |         |
|                      | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 105     |
| LL                   | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 |
| Min                  | 139.577 | 139.571 | 146.840 | 144.601 | 148.604 | 144.910 | 138.963 | 146.970 | 146.820 | 146.306 |
| Average              | 149.025 | 150.503 | 152.086 | 151.047 | 155.367 | 148.134 | 150.351 | 152.026 | 151.739 | 152.934 |
| Max                  | 155.558 | 158.182 | 157.904 | 159.424 | 162.851 | 149.715 | 161.361 | 153.935 | 159.657 | 164.984 |
| UL                   | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 |



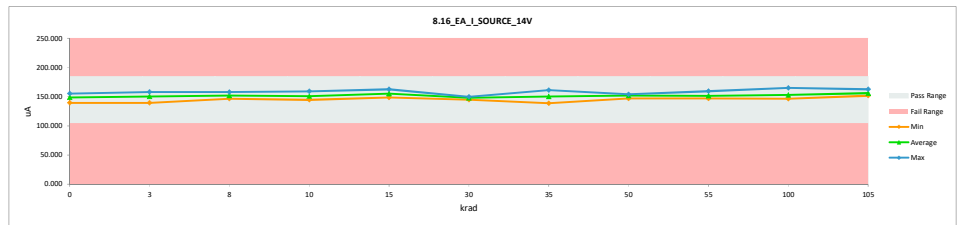
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.16_EA_I_SOURCE_14V |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 |          |         |          |        |
| Max Limit            |          |         |          |        |
| Min Limit            |          |         |          |        |
| krad                 | Serial # | PRE HDR | POST HDR | Delta  |
| 0                    | 552      | 154.927 | 155.342  | 0.415  |
| 0                    | 726      | 151.746 | 151.722  | -0.024 |
| 0                    | 791      | 139.478 | 139.470  | -0.008 |
| 3                    | 689      | 156.890 | 158.040  | 1.150  |
| 3                    | 688      | 152.341 | 152.444  | 0.103  |
| 3                    | 700      | 151.294 | 151.631  | 0.337  |
| 3                    | 482      | 150.282 | 150.270  | -0.012 |
| 3                    | 1033     | 139.141 | 139.506  | 0.365  |
| 8                    | 442      | 145.910 | 146.706  | 0.796  |
| 8                    | 699      | 151.826 | 150.854  | -0.972 |
| 8                    | 344      | 152.839 | 153.338  | 0.499  |
| 8                    | 355      | 157.130 | 157.784  | 0.654  |
| 8                    | 790      | 150.351 | 151.044  | 0.693  |
| 10                   | 537      | 146.771 | 149.280  | 2.509  |
| 10                   | 396      | 143.785 | 144.625  | 0.840  |
| 10                   | 521      | 148.924 | 148.724  | -0.200 |
| 10                   | 535      | 159.368 | 159.217  | -0.151 |
| 10                   | 526      | 151.985 | 152.770  | 0.785  |
| 15                   | 540      | 159.809 | 159.833  | 0.024  |
| 15                   | 387      | 152.667 | 153.218  | 0.551  |
| 15                   | 787      | 162.839 | 162.700  | -0.139 |
| 15                   | 1042     | 151.557 | 151.618  | 0.061  |
| 15                   | 483      | 148.239 | 148.410  | 0.171  |
| 30                   | 597      | 144.122 | 144.835  | 0.713  |
| 30                   | 853      | 147.296 | 147.370  | 0.074  |
| 30                   | 416      | 148.500 | 149.179  | 0.679  |
| 30                   | 949      | 150.799 | 149.732  | -1.067 |
| 30                   | 221      | 146.372 | 149.224  | 2.852  |
| 35                   | 538      | 152.700 | 155.626  | 2.926  |
| 35                   | 164      | 139.173 | 138.731  | -0.442 |
| 35                   | 1018     | 159.078 | 161.212  | 2.134  |
| 35                   | 462      | 147.374 | 147.350  | -0.024 |
| 35                   | 1032     | 149.398 | 148.171  | -1.227 |
| 50                   | 566      | 154.113 | 153.446  | -0.667 |
| 50                   | 197      | 147.813 | 146.891  | -0.922 |
| 50                   | 793      | 150.757 | 153.349  | 2.592  |
| 50                   | 802      | 150.798 | 152.304  | 1.506  |
| 50                   | 61       | 151.470 | 153.868  | 2.398  |
| 55                   | 795      | 147.946 | 146.884  | -1.062 |
| 55                   | 921      | 147.207 | 146.794  | -0.413 |
| 55                   | 741      | 146.780 | 149.069  | 2.289  |
| 55                   | 809      | 158.460 | 159.488  | 1.028  |
| 55                   | 804      | 151.416 | 155.708  | 4.292  |
| 100                  | 449      | 144.126 | 147.138  | 3.012  |
| 100                  | 541      | 141.728 | 147.437  | 5.709  |
| 100                  | 476      | 141.751 | 146.376  | 4.625  |
| 100                  | 45       | 158.743 | 158.335  | -0.408 |
| 100                  | 642      | 158.312 | 164.924  | 6.612  |
| 105                  | 1036     | 155.907 | 162.734  | 6.827  |
| 105                  | 1038     | 154.272 | 155.274  | 1.002  |
| 105                  | 203      | 152.774 | 158.227  | 5.453  |
| 105                  | 1029     | 151.788 | 151.658  | -0.130 |
| 105                  | 1027     | 151.386 | 152.349  | 0.963  |
| 105                  | Max      | 162.839 | 164.924  | 6.827  |
|                      | Average  | 150.612 | 151.740  | 1.128  |
|                      | Min      | 139.141 | 138.731  | -1.227 |
|                      | Std Dev  | 5.479   | 5.816    | 1.949  |



| 8.16_EA_I_SOURCE_14V |         |         |         |         |         |         |         |         |         |         |         |
|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site            |         |         |         |         |         |         |         |         |         |         |         |
| Tester               |         |         |         |         |         |         |         |         |         |         |         |
| Test Number          |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit            |         |         |         |         |         |         |         |         |         |         |         |
| Min Limit            |         |         |         |         |         |         |         |         |         |         |         |
| krad                 | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                   | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 |
| Min                  | 139.470 | 139.506 | 146.706 | 144.625 | 148.410 | 144.835 | 138.731 | 146.891 | 146.794 | 146.376 | 151.658 |
| Average              | 148.845 | 150.378 | 151.945 | 150.923 | 155.156 | 148.068 | 150.218 | 151.972 | 151.589 | 152.842 | 156.048 |
| Max                  | 155.342 | 158.040 | 157.784 | 159.217 | 162.700 | 162.700 | 149.732 | 161.212 | 153.868 | 159.488 | 164.924 |
| UL                   | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 |

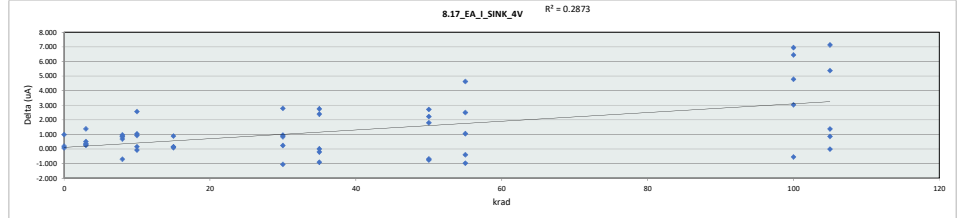


# HDR TID Report

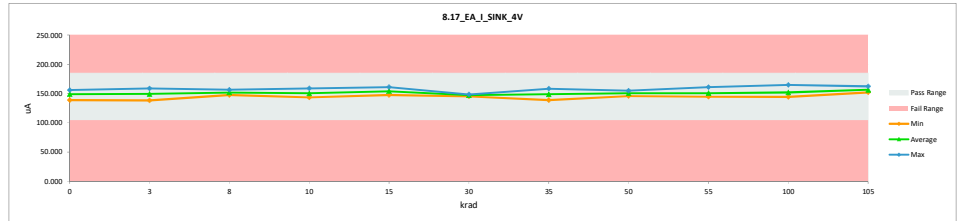
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.17_EA_I_SINK_4V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              | uA       | uA      |          |        |
| Max Limit         | 185      | 185     |          |        |
| Min Limit         | 105      | 105     |          |        |
| krad              | Serial # | PRE HDR | POST HDR | Delta  |
| 0                 | 552      | 154.888 | 155.863  | 0.975  |
| 0                 | 726      | 152.520 | 152.705  | 0.185  |
| 0                 | 791      | 138.839 | 138.907  | 0.068  |
| 3                 | 689      | 157.334 | 158.706  | 1.372  |
| 3                 | 688      | 151.307 | 151.563  | 0.256  |
| 3                 | 700      | 147.845 | 148.116  | 0.271  |
| 3                 | 482      | 149.725 | 150.086  | 0.361  |
| 3                 | 1033     | 137.862 | 138.368  | 0.506  |
| 8                 | 442      | 146.717 | 147.677  | 0.960  |
| 8                 | 699      | 151.882 | 151.175  | -0.707 |
| 8                 | 344      | 153.220 | 153.894  | 0.674  |
| 8                 | 355      | 155.662 | 156.539  | 0.877  |
| 8                 | 750      | 149.119 | 149.950  | 0.831  |
| 10                | 537      | 145.186 | 147.746  | 2.560  |
| 10                | 396      | 142.384 | 143.300  | 0.916  |
| 10                | 521      | 148.795 | 148.715  | -0.080 |
| 10                | 535      | 158.860 | 159.008  | 0.148  |
| 10                | 526      | 151.841 | 152.873  | 1.032  |
| 15                | 540      | 156.802 | 156.928  | 0.126  |
| 15                | 387      | 152.450 | 153.328  | 0.878  |
| 15                | 787      | 161.075 | 161.157  | 0.082  |
| 15                | 1042     | 150.873 | 151.010  | 0.137  |
| 15                | 483      | 147.465 | 147.602  | 0.137  |
| 30                | 597      | 144.500 | 145.330  | 0.830  |
| 30                | 853      | 145.979 | 146.208  | 0.229  |
| 30                | 416      | 146.397 | 147.337  | 0.940  |
| 30                | 949      | 149.604 | 148.540  | -1.064 |
| 30                | 221      | 145.714 | 148.489  | 2.775  |
| 35                | 538      | 151.610 | 154.349  | 2.739  |
| 35                | 164      | 139.114 | 138.901  | -0.213 |
| 35                | 1018     | 155.958 | 158.347  | 2.389  |
| 35                | 462      | 145.826 | 145.823  | -0.003 |
| 35                | 1032     | 147.281 | 146.366  | -0.915 |
| 50                | 566      | 150.021 | 149.332  | -0.689 |
| 50                | 197      | 146.433 | 145.671  | -0.762 |
| 50                | 793      | 148.832 | 151.538  | 2.706  |
| 50                | 802      | 149.450 | 151.239  | 1.789  |
| 50                | 61       | 152.685 | 154.904  | 2.219  |
| 55                | 795      | 145.613 | 144.629  | -0.984 |
| 55                | 921      | 145.734 | 145.328  | -0.406 |
| 55                | 741      | 145.655 | 148.144  | 2.489  |
| 55                | 809      | 159.919 | 160.959  | 1.040  |
| 55                | 804      | 149.930 | 154.549  | 4.619  |
| 100               | 449      | 141.991 | 145.006  | 3.015  |
| 100               | 541      | 141.314 | 147.749  | 6.435  |
| 100               | 476      | 139.629 | 144.403  | 4.774  |
| 100               | 45       | 159.155 | 158.603  | -0.552 |
| 100               | 642      | 157.801 | 164.737  | 6.936  |
| 105               | 1036     | 155.217 | 162.341  | 7.124  |
| 105               | 1038     | 156.323 | 157.179  | 0.856  |
| 105               | 203      | 152.189 | 157.556  | 5.367  |
| 105               | 1029     | 152.041 | 152.028  | -0.013 |
| 105               | 1027     | 151.642 | 153.002  | 1.360  |
| 105               | Max      | 161.075 | 164.737  | 7.124  |
|                   | Average  | 149.740 | 151.015  | 1.275  |
|                   | Min      | 137.862 | 138.368  | -1.064 |
|                   | Std Dev  | 5.666   | 6.016    | 1.983  |



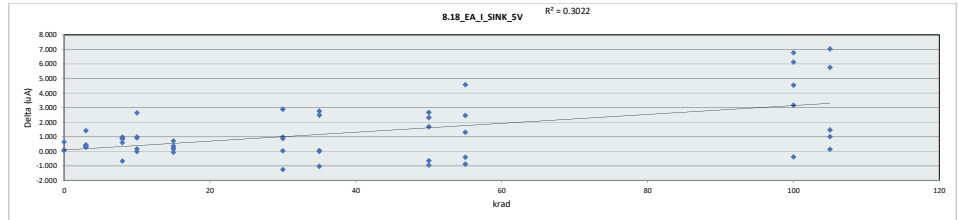
| 8.17_EA_I_SINK_4V |         |         |         |         |         |         |         |         |         |         |         |         |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site         |         |         |         |         |         |         |         |         |         |         |         |         |
| Tester            |         |         |         |         |         |         |         |         |         |         |         |         |
| Test Number       |         |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit         | 185     | uA      |         |         |         |         |         |         |         |         |         |         |
| Min Limit         | 105     | uA      |         |         |         |         |         |         |         |         |         |         |
|                   | krad    | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 |
| Min               | 138.907 | 138.368 | 147.677 | 143.300 | 147.602 | 145.330 | 138.901 | 145.671 | 144.629 | 144.403 | 152.028 |         |
| Average           | 149.158 | 149.368 | 151.847 | 150.328 | 154.005 | 147.181 | 148.757 | 150.537 | 150.722 | 152.100 | 156.421 |         |
| Max               | 155.863 | 158.706 | 156.539 | 159.008 | 161.157 | 148.540 | 158.347 | 154.904 | 160.959 | 164.737 | 162.341 |         |
| UL                | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 |



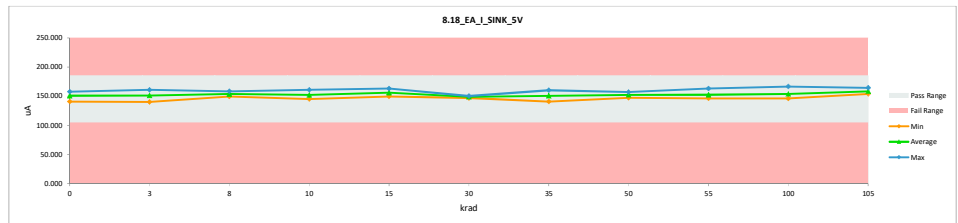
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.18_EA_I_SINK_V |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             |          |         |          |        |
| Max Limit        |          |         |          |        |
| Min Limit        |          |         |          |        |
| krad             | Serial # | PRE HDR | POST HDR | Delta  |
| 0                | 552      | 156.886 | 157.515  | 0.629  |
| 0                | 726      | 154.344 | 154.434  | 0.090  |
| 0                | 791      | 140.518 | 140.581  | 0.063  |
| 3                | 689      | 159.286 | 160.698  | 1.412  |
| 3                | 688      | 153.164 | 153.600  | 0.436  |
| 3                | 700      | 149.502 | 149.813  | 0.311  |
| 3                | 482      | 151.515 | 151.798  | 0.283  |
| 3                | 1033     | 149.056 | 140.054  | 0.408  |
| 8                | 442      | 148.345 | 149.321  | 0.976  |
| 8                | 699      | 153.694 | 153.013  | -0.681 |
| 8                | 344      | 154.858 | 155.452  | 0.594  |
| 8                | 355      | 157.399 | 158.242  | 0.843  |
| 8                | 750      | 150.800 | 151.684  | 0.884  |
| 10               | 537      | 146.981 | 149.617  | 2.636  |
| 10               | 396      | 144.085 | 145.003  | 0.918  |
| 10               | 521      | 150.504 | 150.480  | -0.024 |
| 10               | 535      | 160.543 | 160.700  | 0.157  |
| 10               | 526      | 153.639 | 154.624  | 0.985  |
| 15               | 540      | 158.516 | 158.742  | 0.226  |
| 15               | 387      | 154.321 | 155.028  | 0.707  |
| 15               | 787      | 163.123 | 163.047  | -0.076 |
| 15               | 1042     | 152.618 | 152.772  | 0.154  |
| 15               | 483      | 149.165 | 149.525  | 0.360  |
| 30               | 597      | 146.114 | 146.986  | 0.872  |
| 30               | 853      | 147.879 | 147.910  | 0.031  |
| 30               | 416      | 148.170 | 149.144  | 0.974  |
| 30               | 949      | 151.506 | 150.253  | -1.253 |
| 30               | 221      | 147.321 | 150.209  | 2.888  |
| 35               | 538      | 153.345 | 156.097  | 2.752  |
| 35               | 164      | 140.650 | 140.650  | 0.000  |
| 35               | 1018     | 157.757 | 160.234  | 2.477  |
| 35               | 462      | 147.514 | 147.549  | 0.035  |
| 35               | 1032     | 149.122 | 148.082  | -1.040 |
| 50               | 566      | 151.894 | 151.245  | -0.649 |
| 50               | 197      | 148.145 | 147.193  | -0.952 |
| 50               | 793      | 150.436 | 153.100  | 2.664  |
| 50               | 802      | 151.395 | 153.079  | 1.684  |
| 50               | 61       | 154.583 | 156.894  | 2.311  |
| 55               | 795      | 147.234 | 146.354  | -0.880 |
| 55               | 921      | 147.533 | 147.122  | -0.411 |
| 55               | 741      | 147.339 | 149.796  | 2.457  |
| 55               | 809      | 161.711 | 163.014  | 1.303  |
| 55               | 804      | 151.710 | 156.280  | 4.570  |
| 100              | 449      | 143.494 | 146.645  | 3.151  |
| 100              | 541      | 143.122 | 149.245  | 6.123  |
| 100              | 476      | 141.388 | 145.929  | 4.541  |
| 100              | 45       | 161.020 | 160.629  | -0.391 |
| 100              | 642      | 159.571 | 166.341  | 6.770  |
| 105              | 1036     | 157.176 | 164.204  | 7.028  |
| 105              | 1038     | 158.066 | 159.067  | 1.001  |
| 105              | 203      | 153.732 | 159.491  | 5.759  |
| 105              | 1029     | 153.862 | 154.000  | 0.138  |
| 105              | 1027     | 153.338 | 154.803  | 1.465  |
| 105              | Max      | 163.123 | 166.341  | 7.028  |
|                  | Average  | 151.501 | 152.779  | 1.278  |
|                  | Min      | 139.646 | 140.054  | -1.253 |
|                  | Std Dev  | 5.718   | 6.072    | 1.969  |



| 8.18_EA_I_SINK_V |         |         |         |         |         |         |         |         |         |         |         |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site        |         |         |         |         |         |         |         |         |         |         |         |
| Tester           |         |         |         |         |         |         |         |         |         |         |         |
| Test Number      |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit        | 185 uA  |         |         |         |         |         |         |         |         |         |         |
| Min Limit        | 105 uA  |         |         |         |         |         |         |         |         |         |         |
|                  | krad    | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     |
| LL               | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 |
| Min              | 140.581 | 140.054 | 149.321 | 145.003 | 149.525 | 146.986 | 140.650 | 147.193 | 146.354 | 145.929 | 154.000 |
| Average          | 150.843 | 151.193 | 153.542 | 152.085 | 155.823 | 148.900 | 150.522 | 152.302 | 152.513 | 153.758 | 158.313 |
| Max              | 157.515 | 160.698 | 158.242 | 160.700 | 163.047 | 150.253 | 160.234 | 156.894 | 163.014 | 166.341 | 164.204 |
| UL               | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 |

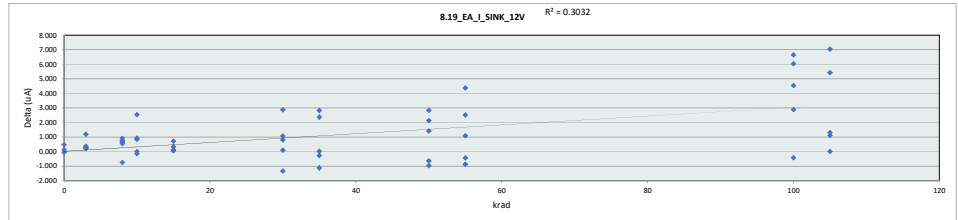


# HDR TID Report

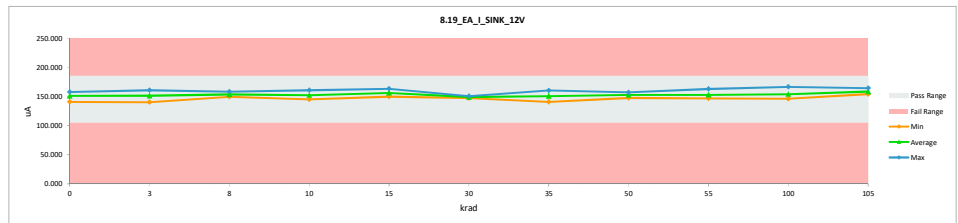
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.19_EA_I_SINK_12V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               |          |         |          |        |
| Max Limit          |          |         |          |        |
| Min Limit          |          |         |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 156.946 | 157.409  | 0.463  |
| 0                  | 726      | 154.360 | 154.480  | 0.120  |
| 0                  | 791      | 140.630 | 140.574  | -0.056 |
| 3                  | 689      | 159.420 | 160.606  | 1.186  |
| 3                  | 688      | 153.207 | 153.489  | 0.282  |
| 3                  | 700      | 149.661 | 149.860  | 0.199  |
| 3                  | 482      | 151.551 | 151.796  | 0.245  |
| 3                  | 1033     | 139.763 | 140.130  | 0.367  |
| 8                  | 442      | 148.439 | 149.339  | 0.900  |
| 8                  | 699      | 153.743 | 152.987  | -0.756 |
| 8                  | 344      | 154.899 | 155.440  | 0.541  |
| 8                  | 355      | 157.482 | 158.123  | 0.641  |
| 8                  | 750      | 150.896 | 151.642  | 0.746  |
| 10                 | 537      | 146.971 | 149.496  | 2.525  |
| 10                 | 396      | 144.140 | 144.957  | 0.817  |
| 10                 | 521      | 150.627 | 150.470  | -0.157 |
| 10                 | 535      | 160.555 | 160.544  | -0.011 |
| 10                 | 526      | 153.779 | 154.692  | 0.913  |
| 15                 | 540      | 158.773 | 158.878  | 0.105  |
| 15                 | 387      | 154.344 | 155.052  | 0.708  |
| 15                 | 787      | 163.214 | 163.264  | 0.050  |
| 15                 | 1042     | 152.667 | 152.737  | 0.070  |
| 15                 | 483      | 149.302 | 149.626  | 0.324  |
| 30                 | 597      | 146.275 | 147.068  | 0.793  |
| 30                 | 853      | 147.989 | 148.073  | 0.084  |
| 30                 | 416      | 148.121 | 149.183  | 1.062  |
| 30                 | 949      | 151.640 | 150.297  | -1.343 |
| 30                 | 221      | 147.423 | 150.283  | 2.860  |
| 35                 | 538      | 153.283 | 156.092  | 2.809  |
| 35                 | 164      | 140.859 | 140.581  | -0.278 |
| 35                 | 1018     | 157.840 | 160.204  | 2.364  |
| 35                 | 462      | 147.635 | 147.651  | 0.016  |
| 35                 | 1032     | 149.210 | 148.079  | -1.131 |
| 50                 | 566      | 151.974 | 151.330  | -0.644 |
| 50                 | 197      | 148.272 | 147.294  | -0.978 |
| 50                 | 793      | 150.517 | 153.344  | 2.827  |
| 50                 | 802      | 151.461 | 152.864  | 1.403  |
| 50                 | 61       | 154.702 | 156.820  | 2.118  |
| 55                 | 795      | 147.415 | 146.530  | -0.885 |
| 55                 | 921      | 147.627 | 147.181  | -0.446 |
| 55                 | 741      | 147.436 | 149.940  | 2.504  |
| 55                 | 809      | 161.761 | 162.838  | 1.077  |
| 55                 | 804      | 151.792 | 156.151  | 4.359  |
| 100                | 449      | 143.476 | 146.355  | 2.879  |
| 100                | 541      | 143.176 | 149.197  | 6.021  |
| 100                | 476      | 141.423 | 145.954  | 4.531  |
| 100                | 45       | 161.126 | 160.691  | -0.435 |
| 100                | 642      | 159.680 | 166.317  | 6.637  |
| 105                | 1036     | 157.171 | 164.205  | 7.034  |
| 105                | 1038     | 158.266 | 159.371  | 1.105  |
| 105                | 203      | 153.837 | 159.246  | 5.409  |
| 105                | 1029     | 153.946 | 153.944  | -0.002 |
| 105                | 1027     | 153.491 | 154.788  | 1.297  |
| 105                | Max      | 163.214 | 166.317  | 7.034  |
|                    | Average  | 151.589 | 152.782  | 1.194  |
|                    | Min      | 139.763 | 140.130  | -1.343 |
|                    | Std Dev  | 5.717   | 6.057    | 1.953  |



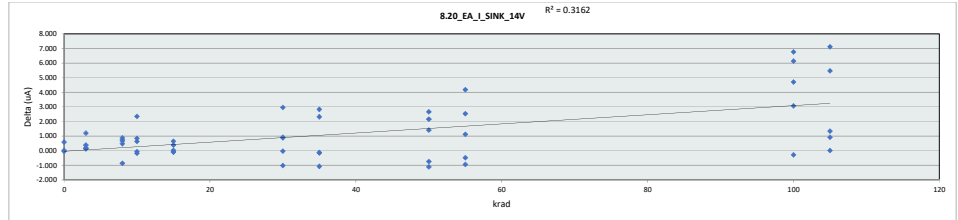
| 8.19_EA_I_SINK_12V |         |         |         |         |         |         |         |         |         |         |         |
|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site          |         |         |         |         |         |         |         |         |         |         |         |
| Tester             |         |         |         |         |         |         |         |         |         |         |         |
| Test Number        |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit          |         |         |         |         |         |         |         |         |         |         |         |
| Min Limit          |         |         |         |         |         |         |         |         |         |         |         |
| krad               | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 |
| Min                | 140.574 | 140.130 | 149.339 | 144.957 | 149.626 | 147.068 | 140.581 | 147.294 | 146.530 | 145.954 | 153.944 |
| Average            | 150.821 | 151.176 | 153.506 | 152.032 | 155.911 | 148.981 | 150.521 | 152.330 | 152.528 | 153.703 | 158.311 |
| Max                | 157.409 | 160.606 | 158.123 | 160.544 | 163.264 | 150.297 | 160.204 | 156.820 | 162.838 | 166.317 | 164.205 |
| UL                 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 |



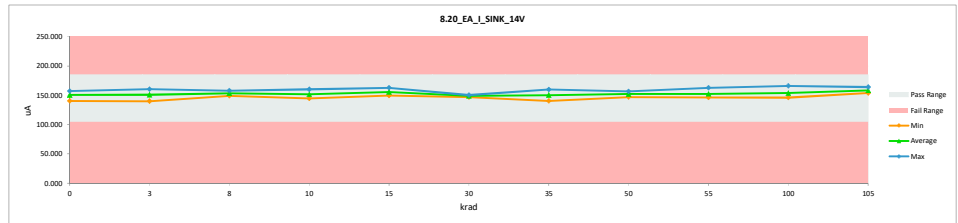
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 8.20_EA_I_SINK_14V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               |          |         |          |        |
| Max Limit          |          |         |          |        |
| Min Limit          |          |         |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 156.656 | 157.231  | 0.575  |
| 0                  | 726      | 154.253 | 154.263  | 0.010  |
| 0                  | 791      | 140.595 | 140.535  | -0.060 |
| 3                  | 689      | 159.233 | 160.425  | 1.192  |
| 3                  | 688      | 153.154 | 153.271  | 0.117  |
| 3                  | 700      | 149.600 | 149.776  | 0.176  |
| 3                  | 482      | 151.473 | 151.620  | 0.147  |
| 3                  | 1033     | 140.035 | 140.035  | 0.375  |
| 8                  | 442      | 148.336 | 149.205  | 0.869  |
| 8                  | 699      | 153.677 | 152.798  | -0.879 |
| 8                  | 344      | 154.782 | 155.243  | 0.461  |
| 8                  | 355      | 157.401 | 158.057  | 0.656  |
| 8                  | 750      | 150.758 | 151.499  | 0.741  |
| 10                 | 537      | 146.905 | 149.242  | 2.337  |
| 10                 | 396      | 144.153 | 144.777  | 0.624  |
| 10                 | 521      | 150.491 | 150.307  | -0.184 |
| 10                 | 535      | 160.455 | 160.382  | -0.073 |
| 10                 | 526      | 153.681 | 154.517  | 0.836  |
| 15                 | 540      | 158.677 | 158.577  | -0.100 |
| 15                 | 387      | 154.211 | 154.865  | 0.634  |
| 15                 | 787      | 163.080 | 162.971  | -0.109 |
| 15                 | 1042     | 152.594 | 152.607  | 0.013  |
| 15                 | 483      | 149.143 | 149.514  | 0.371  |
| 30                 | 597      | 146.120 | 146.986  | 0.866  |
| 30                 | 853      | 147.858 | 147.818  | -0.040 |
| 30                 | 416      | 148.087 | 149.000  | 0.913  |
| 30                 | 949      | 151.480 | 150.451  | -1.029 |
| 30                 | 221      | 147.367 | 150.319  | 2.952  |
| 35                 | 538      | 153.146 | 155.972  | 2.826  |
| 35                 | 164      | 140.682 | 140.527  | -0.155 |
| 35                 | 1018     | 157.660 | 159.976  | 2.316  |
| 35                 | 462      | 147.624 | 147.480  | -0.144 |
| 35                 | 1032     | 149.024 | 147.941  | -1.083 |
| 50                 | 566      | 151.911 | 151.158  | -0.753 |
| 50                 | 197      | 148.297 | 147.181  | -1.116 |
| 50                 | 793      | 150.424 | 153.076  | 2.652  |
| 50                 | 802      | 151.334 | 152.734  | 1.400  |
| 50                 | 61       | 154.590 | 156.737  | 2.147  |
| 55                 | 795      | 147.248 | 146.292  | -0.956 |
| 55                 | 921      | 147.547 | 147.049  | -0.498 |
| 55                 | 741      | 147.355 | 149.877  | 2.522  |
| 55                 | 809      | 161.735 | 162.847  | 1.112  |
| 55                 | 804      | 151.718 | 155.890  | 4.172  |
| 100                | 449      | 143.413 | 146.474  | 3.061  |
| 100                | 541      | 143.073 | 149.203  | 6.130  |
| 100                | 476      | 141.358 | 146.060  | 4.702  |
| 100                | 45       | 161.025 | 160.721  | -0.304 |
| 100                | 642      | 159.492 | 166.253  | 6.761  |
| 105                | 1036     | 156.973 | 164.077  | 7.104  |
| 105                | 1038     | 158.026 | 158.931  | 0.905  |
| 105                | 203      | 153.745 | 159.207  | 5.462  |
| 105                | 1029     | 153.913 | 153.911  | -0.002 |
| 105                | 1027     | 153.513 | 154.847  | 1.334  |
| 105                | Max      | 163.080 | 166.253  | 7.104  |
|                    | Average  | 151.485 | 152.655  | 1.170  |
|                    | Min      | 139.660 | 140.035  | -1.116 |
|                    | Std Dev  | 5.699   | 6.034    | 1.984  |



| 8.20_EA_I_SINK_14V |         |         |         |         |         |         |         |         |         |         |         |
|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site          |         |         |         |         |         |         |         |         |         |         |         |
| Tester             |         |         |         |         |         |         |         |         |         |         |         |
| Test Number        |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit          |         |         |         |         |         |         |         |         |         |         |         |
| Min Limit          |         |         |         |         |         |         |         |         |         |         |         |
| krad               | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 | 105.000 |
| Min                | 140.535 | 140.035 | 149.205 | 144.777 | 149.514 | 146.986 | 140.527 | 147.181 | 146.292 | 146.060 | 153.911 |
| Average            | 150.676 | 151.025 | 153.360 | 151.845 | 155.707 | 148.915 | 150.379 | 152.177 | 152.391 | 153.742 | 158.195 |
| Max                | 157.231 | 160.425 | 158.057 | 160.382 | 162.971 | 150.451 | 159.976 | 156.737 | 162.847 | 166.253 | 164.077 |
| UL                 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 | 185.000 |

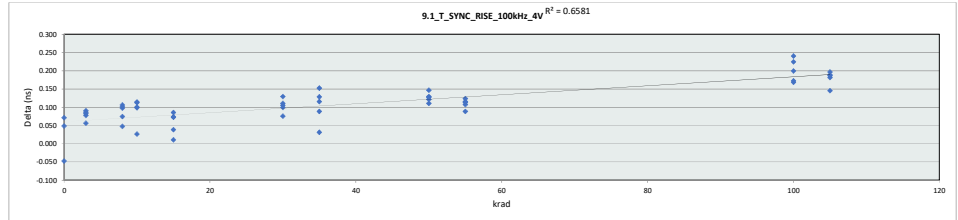


# HDR TID Report

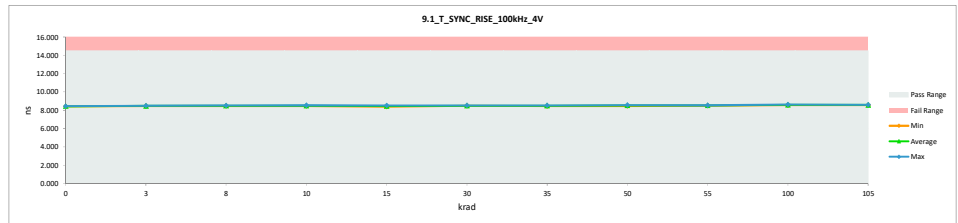
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.1_T_SYNC_RISE_100kHz_4V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      |          |         |          |        |
| Max Limit                 |          |         |          |        |
| Min Limit                 |          |         |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 8.488   | 8.440    | -0.048 |
| 0                         | 726      | 8.361   | 8.409    | 0.048  |
| 0                         | 791      | 8.356   | 8.427    | 0.071  |
| 3                         | 689      | 8.397   | 8.474    | 0.077  |
| 3                         | 688      | 8.384   | 8.466    | 0.082  |
| 3                         | 700      | 8.410   | 8.466    | 0.056  |
| 3                         | 482      | 8.397   | 8.483    | 0.086  |
| 3                         | 1033     | 8.374   | 8.453    | 0.080  |
| 8                         | 442      | 8.408   | 8.455    | 0.047  |
| 8                         | 699      | 8.405   | 8.511    | 0.106  |
| 8                         | 344      | 8.388   | 8.485    | 0.097  |
| 8                         | 355      | 8.395   | 8.496    | 0.101  |
| 8                         | 750      | 8.436   | 8.510    | 0.074  |
| 10                        | 537      | 8.392   | 8.465    | 0.075  |
| 10                        | 396      | 8.393   | 8.491    | 0.098  |
| 10                        | 521      | 8.359   | 8.471    | 0.112  |
| 10                        | 535      | 8.421   | 8.521    | 0.100  |
| 10                        | 526      | 8.418   | 8.532    | 0.114  |
| 15                        | 540      | 8.410   | 8.495    | 0.085  |
| 15                        | 387      | 8.436   | 8.508    | 0.072  |
| 15                        | 787      | 8.372   | 8.382    | 0.010  |
| 15                        | 1042     | 8.387   | 8.425    | 0.038  |
| 15                        | 483      | 8.404   | 8.477    | 0.073  |
| 30                        | 597      | 8.399   | 8.528    | 0.129  |
| 30                        | 853      | 8.359   | 8.469    | 0.110  |
| 30                        | 416      | 8.417   | 8.492    | 0.075  |
| 30                        | 949      | 8.367   | 8.472    | 0.105  |
| 30                        | 221      | 8.414   | 8.513    | 0.099  |
| 35                        | 538      | 8.389   | 8.517    | 0.128  |
| 35                        | 164      | 8.375   | 8.527    | 0.152  |
| 35                        | 1018     | 8.396   | 8.484    | 0.088  |
| 35                        | 462      | 8.397   | 8.512    | 0.115  |
| 35                        | 1032     | 8.411   | 8.442    | 0.031  |
| 50                        | 566      | 8.420   | 8.530    | 0.110  |
| 50                        | 197      | 8.335   | 8.456    | 0.121  |
| 50                        | 793      | 8.406   | 8.533    | 0.127  |
| 50                        | 802      | 8.364   | 8.493    | 0.129  |
| 50                        | 61       | 8.415   | 8.561    | 0.146  |
| 55                        | 795      | 8.386   | 8.493    | 0.107  |
| 55                        | 921      | 8.401   | 8.516    | 0.115  |
| 55                        | 741      | 8.418   | 8.541    | 0.123  |
| 55                        | 809      | 8.384   | 8.497    | 0.113  |
| 55                        | 804      | 8.438   | 8.526    | 0.088  |
| 100                       | 449      | 8.429   | 8.597    | 0.168  |
| 100                       | 541      | 8.384   | 8.556    | 0.172  |
| 100                       | 476      | 8.344   | 8.584    | 0.240  |
| 100                       | 45       | 8.378   | 8.577    | 0.199  |
| 100                       | 642      | 8.393   | 8.617    | 0.224  |
| 105                       | 1036     | 8.428   | 8.573    | 0.145  |
| 105                       | 1038     | 8.374   | 8.570    | 0.196  |
| 105                       | 203      | 8.368   | 8.549    | 0.181  |
| 105                       | 1029     | 8.401   | 8.589    | 0.188  |
| 105                       | 1027     | 8.392   | 8.578    | 0.186  |
| 105                       | Max      | 8.488   | 8.617    | 0.240  |
| Average                   |          | 8.396   | 8.504    | 0.108  |
| Min                       |          | 8.335   | 8.382    | -0.048 |
| Std Dev                   |          | 0.028   | 0.050    | 0.054  |



| 9.1_T_SYNC_RISE_100kHz_4V |        |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14.5   | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |        |        |        |        |        |        |        |        |        |
|                           | krad   | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 8.409  | 8.453  | 8.455  | 8.465  | 8.382  | 8.469  | 8.442  | 8.456  | 8.493  | 8.556  | 8.549  | 8.542  |
| Average                   | 8.425  | 8.468  | 8.491  | 8.496  | 8.457  | 8.495  | 8.496  | 8.515  | 8.515  | 8.586  | 8.572  | 8.574  |
| Max                       | 8.440  | 8.483  | 8.511  | 8.532  | 8.508  | 8.528  | 8.527  | 8.561  | 8.541  | 8.617  | 8.589  | 8.589  |
| UL                        | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 |

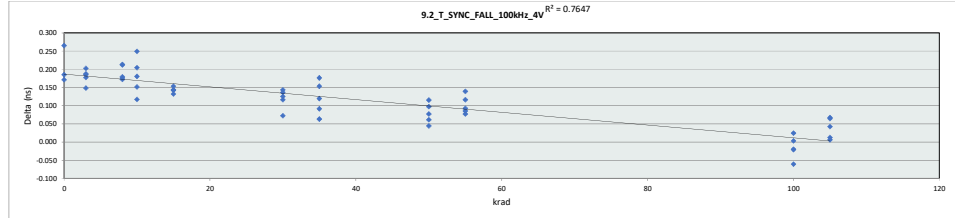


# HDR TID Report

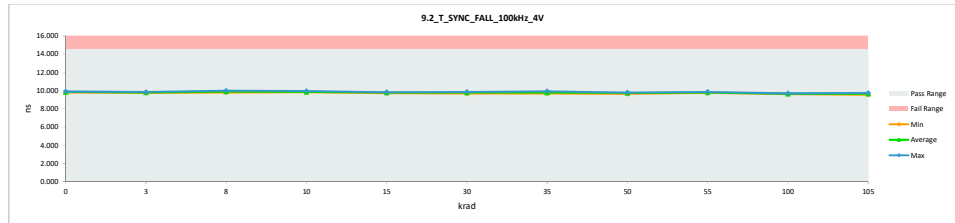
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.2_T_SYNC_FALL_100kHz_4V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      |          |         |          |        |
| Max Limit                 |          |         |          |        |
| Min Limit                 |          |         |          |        |
| krad                      | Serial # | PRE HDR | POST HDR | Delta  |
| 0                         | 552      | 9.636   | 9.901    | 0.265  |
| 0                         | 726      | 9.634   | 9.819    | 0.185  |
| 0                         | 791      | 9.607   | 9.778    | 0.171  |
| 3                         | 689      | 9.625   | 9.810    | 0.185  |
| 3                         | 688      | 9.648   | 9.835    | 0.187  |
| 3                         | 700      | 9.574   | 9.722    | 0.148  |
| 3                         | 482      | 9.578   | 9.755    | 0.177  |
| 3                         | 1033     | 9.548   | 9.750    | 0.202  |
| 8                         | 442      | 9.809   | 9.985    | 0.176  |
| 8                         | 699      | 9.571   | 9.784    | 0.213  |
| 8                         | 344      | 9.693   | 9.905    | 0.212  |
| 8                         | 355      | 9.772   | 9.951    | 0.179  |
| 8                         | 750      | 9.693   | 9.865    | 0.172  |
| 10                        | 537      | 9.646   | 9.797    | 0.151  |
| 10                        | 396      | 9.621   | 9.801    | 0.180  |
| 10                        | 521      | 9.688   | 9.805    | 0.117  |
| 10                        | 535      | 9.714   | 9.918    | 0.204  |
| 10                        | 526      | 9.686   | 9.935    | 0.249  |
| 15                        | 540      | 9.689   | 9.821    | 0.132  |
| 15                        | 387      | 9.641   | 9.784    | 0.143  |
| 15                        | 787      | 9.578   | 9.720    | 0.142  |
| 15                        | 1042     | 9.587   | 9.740    | 0.153  |
| 15                        | 483      | 9.606   | 9.749    | 0.143  |
| 30                        | 597      | 9.671   | 9.743    | 0.072  |
| 30                        | 853      | 9.531   | 9.667    | 0.136  |
| 30                        | 416      | 9.699   | 9.842    | 0.143  |
| 30                        | 949      | 9.695   | 9.820    | 0.125  |
| 30                        | 221      | 9.663   | 9.779    | 0.116  |
| 35                        | 538      | 9.620   | 9.739    | 0.119  |
| 35                        | 164      | 9.600   | 9.776    | 0.176  |
| 35                        | 1018     | 9.601   | 9.692    | 0.091  |
| 35                        | 462      | 9.755   | 9.908    | 0.153  |
| 35                        | 1032     | 9.623   | 9.686    | 0.063  |
| 50                        | 566      | 9.673   | 9.717    | 0.044  |
| 50                        | 197      | 9.547   | 9.624    | 0.077  |
| 50                        | 793      | 9.662   | 9.777    | 0.115  |
| 50                        | 802      | 9.705   | 9.766    | 0.061  |
| 50                        | 61       | 9.645   | 9.742    | 0.097  |
| 55                        | 795      | 9.647   | 9.732    | 0.085  |
| 55                        | 921      | 9.668   | 9.760    | 0.092  |
| 55                        | 741      | 9.633   | 9.772    | 0.139  |
| 55                        | 809      | 9.775   | 9.852    | 0.077  |
| 55                        | 804      | 9.659   | 9.775    | 0.116  |
| 100                       | 449      | 9.690   | 9.670    | -0.020 |
| 100                       | 541      | 9.706   | 9.685    | -0.021 |
| 100                       | 476      | 9.622   | 9.625    | 0.003  |
| 100                       | 45       | 9.615   | 9.639    | 0.024  |
| 100                       | 642      | 9.677   | 9.616    | -0.061 |
| 105                       | 1036     | 9.624   | 9.691    | 0.067  |
| 105                       | 1038     | 9.527   | 9.533    | 0.006  |
| 105                       | 203      | 9.657   | 9.721    | 0.064  |
| 105                       | 1029     | 9.532   | 9.544    | 0.012  |
| 105                       | 1027     | 9.625   | 9.667    | 0.042  |
| 105                       | Max      | 9.809   | 9.985    | 0.265  |
| 105                       | Average  | 9.645   | 9.764    | 0.119  |
| 105                       | Min      | 9.527   | 9.533    | -0.061 |
| 105                       | Std Dev  | 0.062   | 0.096    | 0.071  |



| 9.2_T_SYNC_FALL_100kHz_4V |        |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14.5   | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      |        |        |        |        |        |        |        |        |        |        |        |
|                           | krad   | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 9.778  | 9.722  | 9.784  | 9.797  | 9.720  | 9.667  | 9.686  | 9.624  | 9.732  | 9.616  | 9.533  |        |
| Average                   | 9.833  | 9.774  | 9.898  | 9.851  | 9.763  | 9.770  | 9.760  | 9.725  | 9.778  | 9.647  | 9.631  |        |
| Max                       | 9.901  | 9.835  | 9.985  | 9.935  | 9.821  | 9.842  | 9.908  | 9.777  | 9.852  | 9.685  | 9.721  |        |
| UL                        | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 |

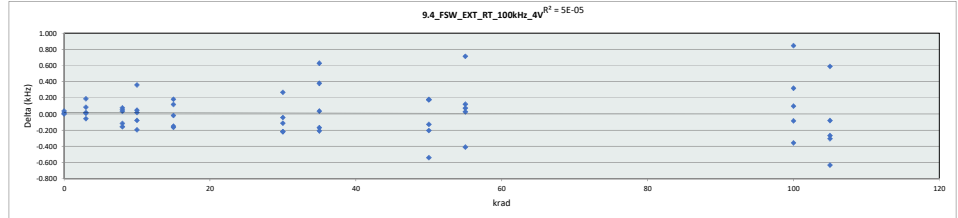


# HDR TID Report

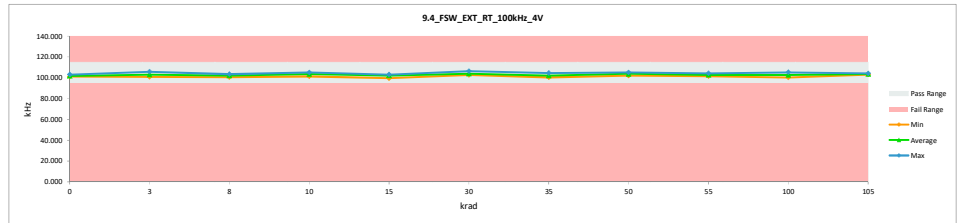
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.4_FSW_EXT_RT_100kHz_4V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     | kHz      | kHz     |          |        |
| Max Limit                | 115      | 115     |          |        |
| Min Limit                | 95       | 95      |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 101.019 | 101.017  | -0.002 |
| 0                        | 726      | 101.154 | 101.189  | 0.035  |
| 0                        | 791      | 103.051 | 103.061  | 0.010  |
| 3                        | 689      | 102.182 | 102.198  | 0.016  |
| 3                        | 688      | 103.465 | 103.473  | 0.008  |
| 3                        | 700      | 100.565 | 100.751  | 0.186  |
| 3                        | 482      | 105.567 | 105.649  | 0.082  |
| 3                        | 1033     | 102.957 | 102.897  | -0.060 |
| 8                        | 442      | 103.314 | 103.366  | 0.052  |
| 8                        | 699      | 102.766 | 102.647  | -0.119 |
| 8                        | 344      | 102.185 | 102.217  | 0.032  |
| 8                        | 355      | 101.429 | 101.503  | 0.074  |
| 8                        | 750      | 100.765 | 100.605  | -0.160 |
| 10                       | 537      | 101.202 | 101.248  | 0.046  |
| 10                       | 396      | 103.266 | 103.185  | -0.081 |
| 10                       | 521      | 104.762 | 104.564  | -0.198 |
| 10                       | 535      | 104.995 | 105.011  | 0.016  |
| 10                       | 526      | 103.476 | 103.833  | 0.357  |
| 15                       | 540      | 102.547 | 102.727  | 0.180  |
| 15                       | 387      | 102.638 | 102.471  | -0.167 |
| 15                       | 787      | 102.440 | 102.419  | -0.021 |
| 15                       | 1042     | 99.623  | 99.471   | -0.152 |
| 15                       | 483      | 102.918 | 103.034  | 0.116  |
| 30                       | 597      | 102.736 | 102.621  | -0.115 |
| 30                       | 853      | 105.950 | 106.216  | 0.266  |
| 30                       | 416      | 103.535 | 103.313  | -0.222 |
| 30                       | 949      | 104.046 | 103.828  | -0.218 |
| 30                       | 221      | 103.154 | 103.108  | -0.046 |
| 35                       | 538      | 104.626 | 104.454  | -0.172 |
| 35                       | 164      | 101.619 | 102.245  | 0.626  |
| 35                       | 1018     | 101.278 | 101.656  | 0.378  |
| 35                       | 462      | 100.271 | 100.305  | 0.034  |
| 35                       | 1032     | 101.949 | 101.738  | -0.211 |
| 50                       | 566      | 103.753 | 103.931  | 0.178  |
| 50                       | 197      | 104.873 | 105.046  | 0.173  |
| 50                       | 793      | 105.075 | 104.868  | -0.207 |
| 50                       | 802      | 103.643 | 103.101  | -0.542 |
| 50                       | 61       | 102.063 | 101.933  | -0.130 |
| 55                       | 795      | 101.940 | 101.528  | -0.412 |
| 55                       | 921      | 102.016 | 102.041  | 0.025  |
| 55                       | 741      | 104.159 | 104.229  | 0.070  |
| 55                       | 809      | 103.444 | 103.562  | 0.118  |
| 55                       | 804      | 101.020 | 101.731  | 0.711  |
| 100                      | 449      | 99.969  | 100.285  | 0.316  |
| 100                      | 541      | 102.442 | 102.356  | -0.086 |
| 100                      | 476      | 103.019 | 102.661  | -0.358 |
| 100                      | 45       | 105.146 | 105.241  | 0.095  |
| 100                      | 642      | 102.543 | 103.386  | 0.843  |
| 105                      | 1036     | 103.471 | 104.058  | 0.587  |
| 105                      | 1038     | 103.217 | 103.133  | -0.084 |
| 105                      | 203      | 104.069 | 103.800  | -0.269 |
| 105                      | 1029     | 104.624 | 103.990  | -0.634 |
| 105                      | 1027     | 103.448 | 103.141  | -0.307 |
| 105                      | Max      | 105.950 | 106.216  | 0.843  |
| 105                      | Average  | 102.856 | 102.869  | 0.012  |
| 105                      | Min      | 99.623  | 99.471   | -0.634 |
| 105                      | Std Dev  | 1.472   | 1.443    | 0.282  |



| 9.4_FSW_EXT_RT_100kHz_4V |         |         |         |         |         |         |         |         |         |         |         |
|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site                |         |         |         |         |         |         |         |         |         |         |         |
| Tester                   |         |         |         |         |         |         |         |         |         |         |         |
| Test Number              |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit                | 115     | kHz     |         |         |         |         |         |         |         |         |         |
| Min Limit                | 95      | kHz     |         |         |         |         |         |         |         |         |         |
| krad                     | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                       | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  |
| Min                      | 101.017 | 100.751 | 100.605 | 101.248 | 99.471  | 102.621 | 100.305 | 101.933 | 101.528 | 100.285 | 103.133 |
| Average                  | 101.756 | 102.994 | 102.068 | 103.568 | 102.024 | 103.817 | 102.080 | 103.776 | 102.618 | 102.786 | 103.624 |
| Max                      | 103.061 | 105.649 | 103.366 | 105.011 | 103.034 | 106.216 | 104.454 | 105.046 | 104.229 | 105.241 | 104.058 |
| UL                       | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 |

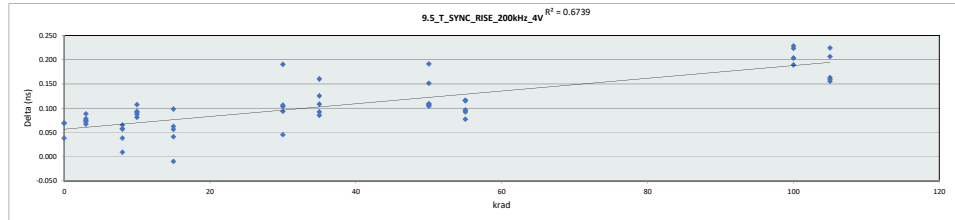


# HDR TID Report

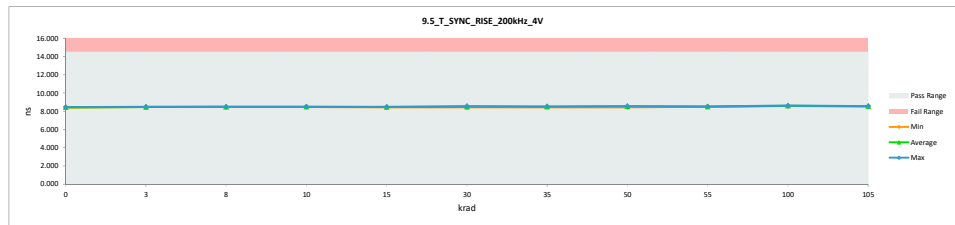
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.5_T_SYNC_RISE_200kHz_4V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      | ns       | ns      |          |        |
| Max Limit                 | 14.5     | 14.5    |          |        |
| Min Limit                 | 0        | 0       |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 8.433   | 8.471    | 0.038  |
| 0                         | 726      | 8.379   | 8.448    | 0.069  |
| 0                         | 791      | 8.334   | 8.403    | 0.069  |
| 3                         | 689      | 8.389   | 8.477    | 0.088  |
| 3                         | 688      | 8.388   | 8.460    | 0.072  |
| 3                         | 700      | 8.391   | 8.458    | 0.067  |
| 3                         | 482      | 8.410   | 8.488    | 0.078  |
| 3                         | 1033     | 8.386   | 8.461    | 0.075  |
| 8                         | 442      | 8.399   | 8.456    | 0.057  |
| 8                         | 699      | 8.421   | 8.486    | 0.065  |
| 8                         | 344      | 8.481   | 8.490    | 0.009  |
| 8                         | 355      | 8.426   | 8.464    | 0.038  |
| 8                         | 790      | 8.443   | 8.500    | 0.057  |
| 10                        | 537      | 8.396   | 8.475    | 0.081  |
| 10                        | 396      | 8.383   | 8.490    | 0.107  |
| 10                        | 521      | 8.392   | 8.479    | 0.087  |
| 10                        | 535      | 8.421   | 8.512    | 0.091  |
| 10                        | 526      | 8.414   | 8.507    | 0.093  |
| 15                        | 540      | 8.449   | 8.490    | 0.041  |
| 15                        | 387      | 8.488   | 8.478    | -0.010 |
| 15                        | 787      | 8.384   | 8.482    | 0.098  |
| 15                        | 1042     | 8.390   | 8.452    | 0.062  |
| 15                        | 483      | 8.427   | 8.483    | 0.056  |
| 30                        | 597      | 8.369   | 8.559    | 0.190  |
| 30                        | 853      | 8.383   | 8.428    | 0.045  |
| 30                        | 416      | 8.397   | 8.490    | 0.093  |
| 30                        | 949      | 8.364   | 8.470    | 0.106  |
| 30                        | 221      | 8.399   | 8.502    | 0.103  |
| 35                        | 538      | 8.380   | 8.540    | 0.160  |
| 35                        | 164      | 8.385   | 8.493    | 0.108  |
| 35                        | 1018     | 8.384   | 8.509    | 0.125  |
| 35                        | 462      | 8.405   | 8.490    | 0.085  |
| 35                        | 1032     | 8.359   | 8.451    | 0.092  |
| 50                        | 566      | 8.414   | 8.523    | 0.109  |
| 50                        | 197      | 8.339   | 8.446    | 0.107  |
| 50                        | 793      | 8.387   | 8.538    | 0.151  |
| 50                        | 802      | 8.350   | 8.541    | 0.191  |
| 50                        | 61       | 8.462   | 8.566    | 0.104  |
| 55                        | 795      | 8.408   | 8.504    | 0.096  |
| 55                        | 921      | 8.435   | 8.527    | 0.092  |
| 55                        | 741      | 8.379   | 8.495    | 0.116  |
| 55                        | 809      | 8.393   | 8.508    | 0.115  |
| 55                        | 804      | 8.451   | 8.528    | 0.077  |
| 100                       | 449      | 8.385   | 8.608    | 0.223  |
| 100                       | 541      | 8.374   | 8.577    | 0.203  |
| 100                       | 476      | 8.408   | 8.611    | 0.203  |
| 100                       | 45       | 8.347   | 8.575    | 0.228  |
| 100                       | 842      | 8.432   | 8.621    | 0.189  |
| 105                       | 1036     | 8.392   | 8.547    | 0.155  |
| 105                       | 1038     | 8.323   | 8.547    | 0.224  |
| 105                       | 203      | 8.370   | 8.576    | 0.206  |
| 105                       | 1029     | 8.358   | 8.521    | 0.163  |
| 105                       | 1027     | 8.405   | 8.564    | 0.159  |
| 105                       | Max      | 8.488   | 8.621    | 0.228  |
| 105                       | Average  | 8.397   | 8.505    | 0.108  |
| 105                       | Min      | 8.323   | 8.403    | -0.010 |
| 105                       | Std Dev  | 0.034   | 0.047    | 0.057  |



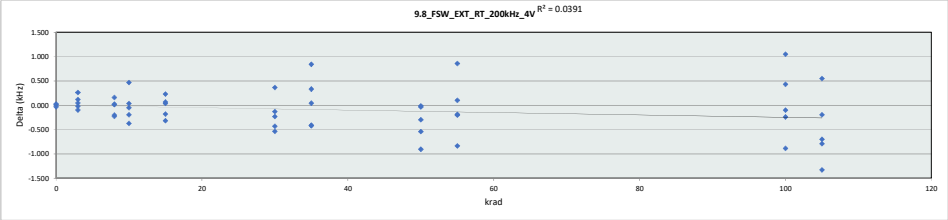
| 9.5_T_SYNC_RISE_200kHz_4V |        |        |        |       |        |       |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|-------|--------|-------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |       |        |       |        |        |        |        |        |        |        |
| Tester                    |        |        |        |       |        |       |        |        |        |        |        |        |        |
| Test Number               |        |        |        |       |        |       |        |        |        |        |        |        |        |
| Max Limit                 | 14.5   | ns     |        |       |        |       |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |       |        |       |        |        |        |        |        |        |        |
| krad                      | 0      | 3      | 8      |       |        | 10    | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000 | 0.000  | 0.000 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 8.403  | 8.458  | 8.456  |       | 8.475  |       | 8.452  | 8.428  | 8.451  | 8.446  | 8.495  | 8.575  | 8.521  |
| Average                   | 8.441  | 8.469  | 8.479  |       | 8.493  |       | 8.477  | 8.490  | 8.497  | 8.523  | 8.512  | 8.598  | 8.551  |
| Max                       | 8.471  | 8.488  | 8.500  |       | 8.512  |       | 8.490  | 8.559  | 8.540  | 8.566  | 8.528  | 8.621  | 8.576  |
| UL                        | 14.500 | 14.500 | 14.500 |       | 14.500 |       | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 |



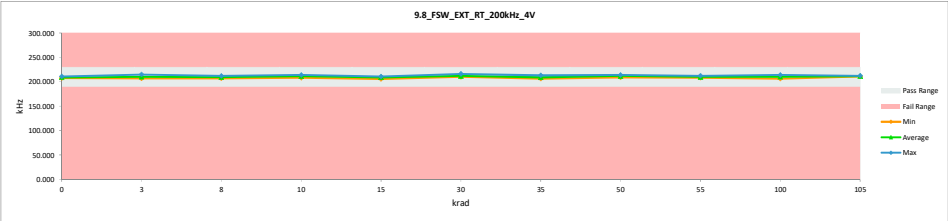
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.8_FSW_EXT_RT_200kHz_4V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          | kHz     | kHz      |        |
| Max Limit                |          | 230     | 230      |        |
| Min Limit                |          | 190     | 190      |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 207.629 | 207.636  | 0.007  |
| 0                        | 726      | 208.253 | 208.277  | 0.024  |
| 0                        | 791      | 211.120 | 211.085  | -0.035 |
| 3                        | 689      | 209.583 | 209.628  | 0.045  |
| 3                        | 688      | 211.184 | 211.163  | -0.021 |
| 3                        | 700      | 206.544 | 206.805  | 0.261  |
| 3                        | 482      | 214.889 | 215.007  | 0.118  |
| 3                        | 1033     | 210.779 | 210.679  | -0.100 |
| 8                        | 442      | 211.909 | 211.929  | 0.020  |
| 8                        | 699      | 210.017 | 209.789  | -0.228 |
| 8                        | 344      | 210.223 | 210.236  | 0.013  |
| 8                        | 355      | 208.800 | 208.959  | 0.159  |
| 8                        | 750      | 207.364 | 207.160  | -0.204 |
| 10                       | 537      | 208.031 | 208.066  | 0.035  |
| 10                       | 396      | 211.603 | 211.406  | -0.197 |
| 10                       | 521      | 214.028 | 213.654  | -0.374 |
| 10                       | 535      | 214.011 | 213.957  | -0.054 |
| 10                       | 526      | 211.256 | 211.722  | 0.466  |
| 15                       | 540      | 209.506 | 209.734  | 0.228  |
| 15                       | 387      | 210.964 | 210.645  | -0.319 |
| 15                       | 787      | 209.966 | 210.002  | 0.036  |
| 15                       | 1042     | 206.174 | 205.991  | -0.183 |
| 15                       | 483      | 210.846 | 210.911  | 0.065  |
| 30                       | 597      | 210.215 | 210.083  | -0.132 |
| 30                       | 853      | 215.808 | 216.171  | 0.363  |
| 30                       | 416      | 211.922 | 211.488  | -0.434 |
| 30                       | 949      | 212.395 | 211.858  | -0.537 |
| 30                       | 221      | 211.104 | 210.870  | -0.234 |
| 35                       | 538      | 213.530 | 213.109  | -0.421 |
| 35                       | 164      | 208.608 | 209.449  | 0.841  |
| 35                       | 1018     | 208.405 | 208.736  | 0.331  |
| 35                       | 462      | 206.276 | 206.317  | 0.041  |
| 35                       | 1032     | 209.467 | 209.053  | -0.414 |
| 50                       | 566      | 212.041 | 212.026  | -0.015 |
| 50                       | 197      | 214.098 | 214.061  | -0.037 |
| 50                       | 793      | 214.518 | 213.976  | -0.542 |
| 50                       | 802      | 212.174 | 211.268  | -0.906 |
| 50                       | 61       | 209.413 | 209.114  | -0.299 |
| 55                       | 795      | 209.321 | 208.483  | -0.838 |
| 55                       | 921      | 209.186 | 208.996  | -0.190 |
| 55                       | 741      | 212.728 | 212.524  | -0.204 |
| 55                       | 809      | 211.552 | 211.652  | 0.100  |
| 55                       | 804      | 208.008 | 208.865  | 0.857  |
| 100                      | 449      | 206.052 | 206.480  | 0.428  |
| 100                      | 541      | 210.215 | 209.973  | -0.242 |
| 100                      | 476      | 210.943 | 210.055  | -0.888 |
| 100                      | 45       | 214.114 | 214.012  | -0.102 |
| 100                      | 642      | 209.645 | 210.691  | 1.046  |
| 105                      | 1036     | 212.001 | 212.549  | 0.548  |
| 105                      | 1038     | 211.080 | 210.884  | -0.196 |
| 105                      | 203      | 213.007 | 212.213  | -0.794 |
| 105                      | 1029     | 213.375 | 212.043  | -1.332 |
| 105                      | 1027     | 211.581 | 210.899  | -0.682 |
| 105                      | Max      | 215.808 | 216.171  | 1.046  |
| 105                      | Average  | 210.707 | 210.610  | -0.097 |
| 105                      | Min      | 206.052 | 205.991  | -1.332 |
| 105                      | Std Dev  | 2.358   | 2.255    | 0.444  |



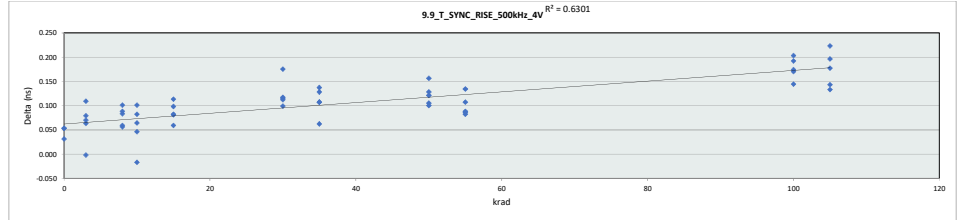
| 9.8_FSW_EXT_RT_200kHz_4V |         |         |         |         |         |         |         |         |         |         |         |
|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site                |         |         |         |         |         |         |         |         |         |         |         |
| Tester                   |         |         |         |         |         |         |         |         |         |         |         |
| Test Number              |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit                |         | 230     | kHz     |         |         |         |         |         |         |         |         |
| Min Limit                |         | 190     | kHz     |         |         |         |         |         |         |         |         |
| krad                     | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                       | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 |
| Min                      | 207.636 | 206.805 | 207.160 | 208.066 | 205.991 | 210.083 | 206.317 | 209.114 | 208.483 | 206.480 | 210.879 |
| Average                  | 208.999 | 210.656 | 209.615 | 211.761 | 209.457 | 212.094 | 209.333 | 212.089 | 210.104 | 210.242 | 211.714 |
| Max                      | 211.085 | 215.007 | 211.929 | 213.957 | 210.911 | 216.171 | 213.109 | 214.061 | 212.524 | 214.012 | 212.549 |
| UL                       | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 |



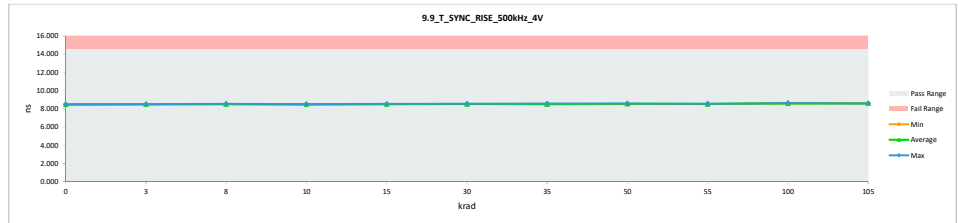
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.9 T_SYNC_RISE_500kHz_4V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      | ns       | ns      |          |        |
| Max Limit                 | 14.5     | 14.5    |          |        |
| Min Limit                 | 0        | 0       |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 8.458   | 8.489    | 0.031  |
| 0                         | 726      | 8.406   | 8.459    | 0.053  |
| 0                         | 791      | 8.396   | 8.449    | 0.053  |
| 3                         | 689      | 8.395   | 8.504    | 0.109  |
| 3                         | 688      | 8.399   | 8.462    | 0.063  |
| 3                         | 700      | 8.422   | 8.492    | 0.070  |
| 3                         | 482      | 8.494   | 8.492    | -0.002 |
| 3                         | 1033     | 8.402   | 8.471    | 0.079  |
| 8                         | 442      | 8.426   | 8.485    | 0.059  |
| 8                         | 699      | 8.437   | 8.525    | 0.088  |
| 8                         | 344      | 8.420   | 8.476    | 0.056  |
| 8                         | 355      | 8.406   | 8.489    | 0.083  |
| 8                         | 790      | 8.444   | 8.545    | 0.101  |
| 10                        | 537      | 8.450   | 8.496    | 0.046  |
| 10                        | 396      | 8.428   | 8.492    | 0.064  |
| 10                        | 521      | 8.464   | 8.447    | -0.017 |
| 10                        | 535      | 8.417   | 8.518    | 0.101  |
| 10                        | 526      | 8.429   | 8.511    | 0.082  |
| 15                        | 540      | 8.437   | 8.535    | 0.098  |
| 15                        | 387      | 8.452   | 8.511    | 0.059  |
| 15                        | 787      | 8.385   | 8.467    | 0.082  |
| 15                        | 1042     | 8.391   | 8.472    | 0.081  |
| 15                        | 483      | 8.412   | 8.525    | 0.113  |
| 30                        | 597      | 8.413   | 8.525    | 0.112  |
| 30                        | 853      | 8.357   | 8.532    | 0.175  |
| 30                        | 416      | 8.412   | 8.529    | 0.117  |
| 30                        | 949      | 8.432   | 8.547    | 0.115  |
| 30                        | 221      | 8.418   | 8.517    | 0.099  |
| 35                        | 538      | 8.429   | 8.536    | 0.107  |
| 35                        | 164      | 8.399   | 8.527    | 0.128  |
| 35                        | 1018     | 8.402   | 8.509    | 0.107  |
| 35                        | 462      | 8.426   | 8.563    | 0.137  |
| 35                        | 1032     | 8.408   | 8.470    | 0.062  |
| 50                        | 566      | 8.439   | 8.544    | 0.105  |
| 50                        | 197      | 8.403   | 8.503    | 0.100  |
| 50                        | 793      | 8.458   | 8.579    | 0.121  |
| 50                        | 802      | 8.417   | 8.573    | 0.156  |
| 50                        | 61       | 8.457   | 8.585    | 0.128  |
| 55                        | 795      | 8.414   | 8.521    | 0.107  |
| 55                        | 921      | 8.446   | 8.534    | 0.088  |
| 55                        | 741      | 8.453   | 8.535    | 0.082  |
| 55                        | 809      | 8.436   | 8.522    | 0.086  |
| 55                        | 804      | 8.424   | 8.558    | 0.134  |
| 100                       | 449      | 8.441   | 8.611    | 0.170  |
| 100                       | 541      | 8.387   | 8.579    | 0.192  |
| 100                       | 476      | 8.413   | 8.587    | 0.174  |
| 100                       | 45       | 8.432   | 8.576    | 0.144  |
| 100                       | 642      | 8.423   | 8.626    | 0.203  |
| 105                       | 1036     | 8.436   | 8.579    | 0.143  |
| 105                       | 1038     | 8.380   | 8.576    | 0.196  |
| 105                       | 203      | 8.349   | 8.572    | 0.223  |
| 105                       | 1029     | 8.453   | 8.586    | 0.133  |
| 105                       | 1027     | 8.394   | 8.571    | 0.177  |
| 105                       | Max      | 8.494   | 8.626    | 0.223  |
|                           | Average  | 8.421   | 8.526    | 0.105  |
|                           | Min      | 8.349   | 8.447    | -0.017 |
|                           | Std Dev  | 0.027   | 0.043    | 0.049  |



| 9.9_T_SYNC_RISE_500kHz_4V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14.5   | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 8.449  | 8.462  | 8.476  | 8.447  | 8.467  | 8.517  | 8.470  | 8.503  | 8.521  | 8.576  | 8.571  |
| Average                   | 8.466  | 8.484  | 8.504  | 8.493  | 8.502  | 8.530  | 8.521  | 8.557  | 8.534  | 8.596  | 8.577  |
| Max                       | 8.489  | 8.504  | 8.545  | 8.518  | 8.535  | 8.547  | 8.563  | 8.585  | 8.558  | 8.626  | 8.586  |
| UL                        | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 |

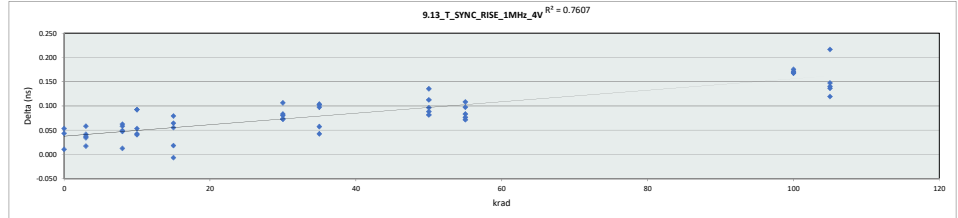


# HDR TID Report

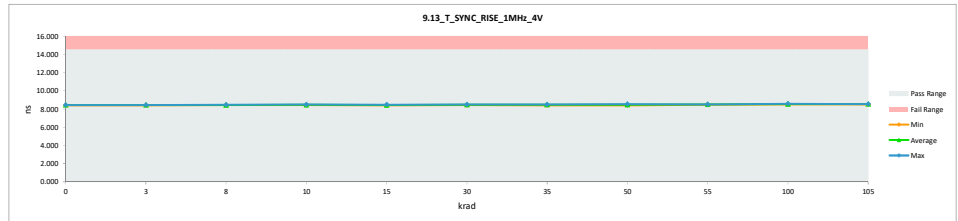
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.13_T_SYNC_RISE_1MHZ_4V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     | ns       | ns      |          |        |
| Max Limit                | 14.5     | 14.5    |          |        |
| Min Limit                | 0        | 0       |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 8.433   | 8.443    | 0.010  |
| 0                        | 726      | 8.372   | 8.415    | 0.043  |
| 0                        | 791      | 8.364   | 8.417    | 0.053  |
| 3                        | 689      | 8.396   | 8.437    | 0.041  |
| 3                        | 688      | 8.388   | 8.405    | 0.017  |
| 3                        | 700      | 8.397   | 8.431    | 0.034  |
| 3                        | 482      | 8.393   | 8.430    | 0.037  |
| 3                        | 1033     | 8.364   | 8.422    | 0.058  |
| 8                        | 442      | 8.399   | 8.446    | 0.047  |
| 8                        | 699      | 8.401   | 8.450    | 0.049  |
| 8                        | 344      | 8.363   | 8.421    | 0.058  |
| 8                        | 355      | 8.374   | 8.436    | 0.062  |
| 8                        | 750      | 8.445   | 8.457    | 0.012  |
| 10                       | 537      | 8.397   | 8.447    | 0.040  |
| 10                       | 396      | 8.363   | 8.455    | 0.092  |
| 10                       | 521      | 8.381   | 8.434    | 0.053  |
| 10                       | 535      | 8.413   | 8.455    | 0.042  |
| 10                       | 526      | 8.396   | 8.488    | 0.092  |
| 15                       | 540      | 8.394   | 8.473    | 0.079  |
| 15                       | 387      | 8.441   | 8.434    | -0.007 |
| 15                       | 787      | 8.384   | 8.402    | 0.018  |
| 15                       | 1042     | 8.381   | 8.436    | 0.055  |
| 15                       | 483      | 8.389   | 8.453    | 0.064  |
| 30                       | 597      | 8.399   | 8.472    | 0.073  |
| 30                       | 853      | 8.356   | 8.428    | 0.072  |
| 30                       | 416      | 8.385   | 8.491    | 0.106  |
| 30                       | 949      | 8.385   | 8.468    | 0.083  |
| 30                       | 221      | 8.401   | 8.481    | 0.080  |
| 35                       | 538      | 8.383   | 8.486    | 0.103  |
| 35                       | 164      | 8.396   | 8.453    | 0.057  |
| 35                       | 1018     | 8.382   | 8.484    | 0.102  |
| 35                       | 462      | 8.369   | 8.466    | 0.097  |
| 35                       | 1032     | 8.373   | 8.415    | 0.042  |
| 50                       | 566      | 8.404   | 8.485    | 0.081  |
| 50                       | 197      | 8.323   | 8.411    | 0.088  |
| 50                       | 793      | 8.379   | 8.491    | 0.112  |
| 50                       | 802      | 8.359   | 8.494    | 0.135  |
| 50                       | 61       | 8.440   | 8.536    | 0.096  |
| 55                       | 795      | 8.392   | 8.475    | 0.083  |
| 55                       | 921      | 8.389   | 8.497    | 0.108  |
| 55                       | 741      | 8.415   | 8.486    | 0.071  |
| 55                       | 809      | 8.392   | 8.468    | 0.076  |
| 55                       | 804      | 8.410   | 8.507    | 0.097  |
| 100                      | 449      | 8.387   | 8.554    | 0.167  |
| 100                      | 541      | 8.376   | 8.545    | 0.169  |
| 100                      | 476      | 8.383   | 8.558    | 0.175  |
| 100                      | 45       | 8.339   | 8.510    | 0.171  |
| 100                      | 642      | 8.399   | 8.567    | 0.168  |
| 105                      | 1036     | 8.390   | 8.537    | 0.147  |
| 105                      | 1038     | 8.329   | 8.545    | 0.216  |
| 105                      | 203      | 8.377   | 8.496    | 0.119  |
| 105                      | 1029     | 8.379   | 8.515    | 0.136  |
| 105                      | 1027     | 8.385   | 8.525    | 0.140  |
| 105                      | Max      | 8.445   | 8.567    | 0.216  |
| 105                      | Average  | 8.387   | 8.470    | 0.083  |
| 105                      | Min      | 8.323   | 8.402    | -0.007 |
| 105                      | Std Dev  | 0.024   | 0.043    | 0.048  |



| 9.13_T_SYNC_RISE_1MHZ_4V |      |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |      |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |      |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |      |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 14.5 | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit                | 0    | ns     |        |        |        |        |        |        |        |        |        |        |
|                          | krad | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| Average                  | LL   | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|                          | Min  | 8.415  | 8.405  | 8.421  | 8.434  | 8.402  | 8.428  | 8.415  | 8.411  | 8.468  | 8.510  | 8.496  |
|                          | Max  | 8.425  | 8.425  | 8.442  | 8.456  | 8.440  | 8.468  | 8.461  | 8.483  | 8.487  | 8.547  | 8.524  |
|                          | UL   | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 |
|                          | UL   | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 | 14.500 |

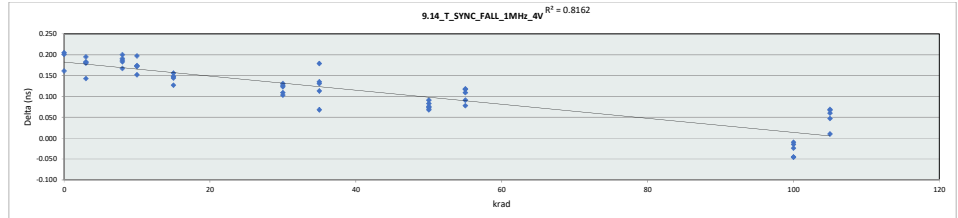


# HDR TID Report

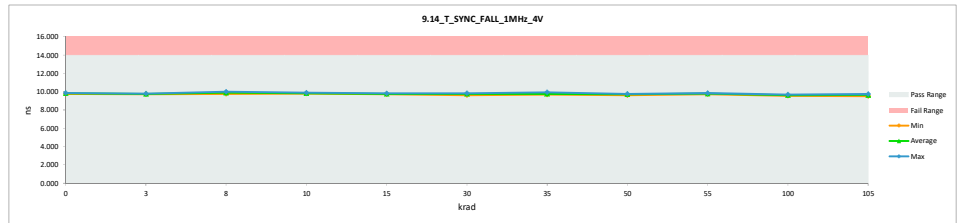
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.14_T_SYNC_FALL_1MHZ_4V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE HDR | POST HDR | Delta  |
| 0                        | 552      | 9.654   | 9.859    | 0.205  |
| 0                        | 726      | 9.634   | 9.835    | 0.201  |
| 0                        | 791      | 9.603   | 9.764    | 0.161  |
| 3                        | 689      | 9.612   | 9.793    | 0.181  |
| 3                        | 688      | 9.600   | 9.783    | 0.183  |
| 3                        | 700      | 9.579   | 9.722    | 0.143  |
| 3                        | 482      | 9.568   | 9.763    | 0.195  |
| 3                        | 1033     | 9.549   | 9.729    | 0.180  |
| 8                        | 442      | 9.800   | 9.987    | 0.187  |
| 8                        | 699      | 9.561   | 9.752    | 0.191  |
| 8                        | 344      | 9.676   | 9.876    | 0.200  |
| 8                        | 355      | 9.763   | 9.946    | 0.183  |
| 8                        | 750      | 9.680   | 9.847    | 0.167  |
| 10                       | 937      | 9.637   | 9.804    | 0.173  |
| 10                       | 396      | 9.637   | 9.811    | 0.174  |
| 10                       | 521      | 9.643   | 9.795    | 0.152  |
| 10                       | 535      | 9.682   | 9.854    | 0.172  |
| 10                       | 526      | 9.690   | 9.887    | 0.197  |
| 15                       | 540      | 9.654   | 9.810    | 0.156  |
| 15                       | 387      | 9.637   | 9.781    | 0.144  |
| 15                       | 787      | 9.566   | 9.714    | 0.148  |
| 15                       | 1042     | 9.591   | 9.718    | 0.127  |
| 15                       | 483      | 9.586   | 9.733    | 0.147  |
| 30                       | 597      | 9.654   | 9.757    | 0.103  |
| 30                       | 853      | 9.502   | 9.625    | 0.123  |
| 30                       | 416      | 9.695   | 9.826    | 0.131  |
| 30                       | 949      | 9.674   | 9.783    | 0.109  |
| 30                       | 221      | 9.650   | 9.777    | 0.127  |
| 35                       | 538      | 9.617   | 9.752    | 0.135  |
| 35                       | 164      | 9.563   | 9.694    | 0.131  |
| 35                       | 1018     | 9.593   | 9.706    | 0.113  |
| 35                       | 462      | 9.748   | 9.927    | 0.179  |
| 35                       | 1032     | 9.602   | 9.670    | 0.068  |
| 50                       | 566      | 9.641   | 9.732    | 0.091  |
| 50                       | 197      | 9.534   | 9.610    | 0.076  |
| 50                       | 793      | 9.652   | 9.735    | 0.083  |
| 50                       | 802      | 9.683   | 9.756    | 0.073  |
| 50                       | 61       | 9.664   | 9.732    | 0.068  |
| 55                       | 795      | 9.618   | 9.736    | 0.118  |
| 55                       | 921      | 9.664   | 9.781    | 0.117  |
| 55                       | 741      | 9.649   | 9.727    | 0.078  |
| 55                       | 809      | 9.756   | 9.847    | 0.091  |
| 55                       | 804      | 9.662   | 9.771    | 0.109  |
| 100                      | 449      | 9.696   | 9.681    | -0.015 |
| 100                      | 541      | 9.681   | 9.671    | -0.010 |
| 100                      | 476      | 9.618   | 9.594    | -0.024 |
| 100                      | 45       | 9.601   | 9.556    | -0.045 |
| 100                      | 642      | 9.653   | 9.607    | -0.046 |
| 105                      | 1036     | 9.609   | 9.669    | 0.060  |
| 105                      | 1038     | 9.501   | 9.511    | 0.010  |
| 105                      | 203      | 9.665   | 9.732    | 0.067  |
| 105                      | 1029     | 9.531   | 9.578    | 0.047  |
| 105                      | 1027     | 9.592   | 9.661    | 0.069  |
| 105                      | Max      | 9.800   | 9.987    | 0.205  |
| 105                      | Average  | 9.633   | 9.750    | 0.117  |
| 105                      | Min      | 9.501   | 9.511    | -0.046 |
| 105                      | Std Dev  | 0.062   | 0.096    | 0.066  |



| 9.14_T_SYNC_FALL_1MHZ_4V                                     |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |
|--------------------------------------------------------------|--------|--|--------|--|--------|--|--------|--|--------|--|--------|--|--------|--|--------|--|--------|--|--------|--|--------|--|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |
|                                                              |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |
|                                                              |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |
|                                                              |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |
|                                                              |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |
|                                                              |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |        |  |
| krad                                                         | 0      |  | 3      |  | 8      |  | 10     |  | 15     |  | 30     |  | 35     |  | 50     |  | 55     |  | 100    |  | 105    |  |
| LL                                                           | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  |
| Min                                                          | 9.764  |  | 9.722  |  | 9.752  |  | 9.795  |  | 9.714  |  | 9.625  |  | 9.670  |  | 9.610  |  | 9.727  |  | 9.556  |  | 9.511  |  |
| Average                                                      | 9.819  |  | 9.758  |  | 9.882  |  | 9.830  |  | 9.751  |  | 9.754  |  | 9.750  |  | 9.713  |  | 9.722  |  | 9.622  |  | 9.630  |  |
| Max                                                          | 9.859  |  | 9.793  |  | 9.987  |  | 9.887  |  | 9.810  |  | 9.826  |  | 9.927  |  | 9.756  |  | 9.847  |  | 9.681  |  | 9.732  |  |
| UL                                                           | 14.000 |  | 14.000 |  | 14.000 |  | 14.000 |  | 14.000 |  | 14.000 |  | 14.000 |  | 14.000 |  | 14.000 |  | 14.000 |  | 14.000 |  |

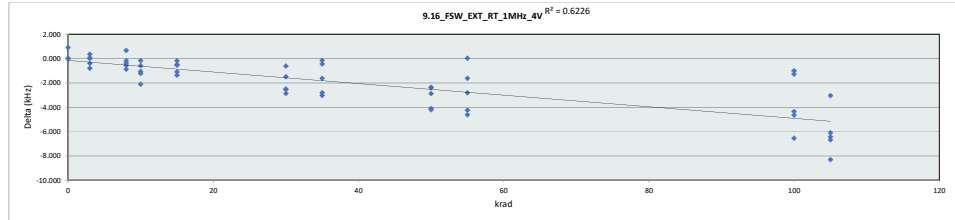


# HDR TID Report

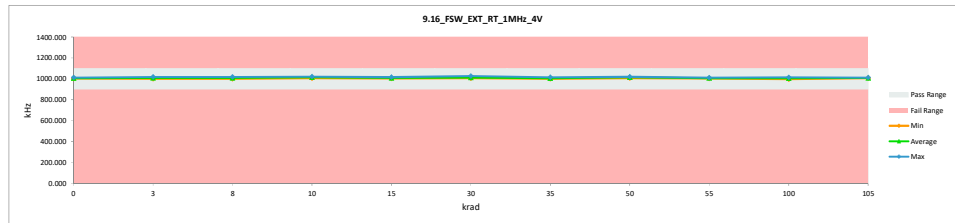
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.16_FSW_EXT_RT_1MHz_4V |          |          |          |        |
|-------------------------|----------|----------|----------|--------|
| Test Site               |          |          |          |        |
| Tester                  |          |          |          |        |
| Test Number             |          |          |          |        |
| Unit                    | kHz      |          | kHz      |        |
| Max Limit               | 1100     |          | 1100     |        |
| Min Limit               | 900      |          | 900      |        |
| krad                    | Serial # | PRE_HDR  | POST_HDR | Delta  |
| 0                       | 552      | 1000.994 | 1001.899 | 0.905  |
| 0                       | 726      | 1008.872 | 1008.899 | 0.027  |
| 0                       | 791      | 1012.715 | 1012.693 | -0.022 |
| 3                       | 689      | 1008.976 | 1008.989 | 0.013  |
| 3                       | 688      | 1012.428 | 1012.489 | 0.061  |
| 3                       | 700      | 1000.556 | 1000.905 | 0.349  |
| 3                       | 482      | 1019.128 | 1018.732 | -0.396 |
| 3                       | 1033     | 1010.181 | 1009.384 | -0.797 |
| 8                       | 442      | 1018.907 | 1018.730 | -0.177 |
| 8                       | 699      | 1008.791 | 1007.919 | -0.872 |
| 8                       | 344      | 1013.764 | 1013.215 | -0.549 |
| 8                       | 355      | 1007.935 | 1008.599 | 0.664  |
| 8                       | 750      | 1000.620 | 1000.255 | -0.365 |
| 10                      | 537      | 1005.471 | 1004.887 | -0.584 |
| 10                      | 396      | 1017.562 | 1016.336 | -1.226 |
| 10                      | 521      | 1022.820 | 1020.712 | -2.108 |
| 10                      | 535      | 1020.039 | 1018.972 | -1.067 |
| 10                      | 526      | 1010.612 | 1010.452 | -0.160 |
| 15                      | 540      | 1003.825 | 1003.305 | -0.520 |
| 15                      | 387      | 1017.237 | 1015.865 | -1.372 |
| 15                      | 787      | 1010.369 | 1010.177 | -0.192 |
| 15                      | 1042     | 1005.807 | 1004.711 | -1.096 |
| 15                      | 483      | 1011.082 | 1010.561 | -0.521 |
| 30                      | 597      | 1006.576 | 1005.079 | -1.497 |
| 30                      | 853      | 1026.949 | 1026.325 | -0.624 |
| 30                      | 416      | 1014.091 | 1011.573 | -2.518 |
| 30                      | 949      | 1014.620 | 1011.747 | -2.873 |
| 30                      | 221      | 1012.095 | 1009.564 | -2.531 |
| 35                      | 538      | 1017.905 | 1014.873 | -3.032 |
| 35                      | 164      | 1001.481 | 1001.326 | -0.155 |
| 35                      | 1018     | 1006.666 | 1006.222 | -0.444 |
| 35                      | 462      | 1000.773 | 999.153  | -1.620 |
| 35                      | 1032     | 1009.570 | 1006.759 | -2.811 |
| 50                      | 566      | 1015.467 | 1013.093 | -2.374 |
| 50                      | 197      | 1020.732 | 1017.856 | -2.876 |
| 50                      | 793      | 1024.234 | 1020.017 | -4.217 |
| 50                      | 802      | 1018.040 | 1013.938 | -4.102 |
| 50                      | 61       | 1009.170 | 1006.784 | -2.386 |
| 55                      | 795      | 1008.448 | 1003.824 | -4.624 |
| 55                      | 921      | 1006.023 | 1003.214 | -2.809 |
| 55                      | 741      | 1013.780 | 1009.531 | -4.249 |
| 55                      | 809      | 1012.944 | 1011.316 | -1.628 |
| 55                      | 804      | 1004.373 | 1004.392 | 0.019  |
| 100                     | 449      | 996.472  | 995.465  | -1.007 |
| 100                     | 541      | 1011.269 | 1006.909 | -4.360 |
| 100                     | 476      | 1011.161 | 1004.614 | -6.547 |
| 100                     | 45       | 1018.717 | 1014.063 | -4.654 |
| 100                     | 642      | 1003.809 | 1002.521 | -1.288 |
| 105                     | 1036     | 1014.867 | 1011.824 | -3.043 |
| 105                     | 1038     | 1011.977 | 1005.870 | -6.107 |
| 105                     | 203      | 1018.212 | 1011.521 | -6.691 |
| 105                     | 1029     | 1015.534 | 1007.224 | -8.310 |
| 105                     | 1027     | 1014.881 | 1008.440 | -6.441 |
| 105                     | Max      | 1026.949 | 1026.325 | 0.905  |
| Average                 | 1011.501 | 1009.504 |          | -1.996 |
| Min                     | 996.472  | 995.465  |          | -8.310 |
| Std Dev                 | 6.648    | 6.190    |          | 2.144  |



| 9.16_FSW_EXT_RT_1MHz_4V |          |          |          |          |          |          |          |          |          |          |          |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site               |          |          |          |          |          |          |          |          |          |          |          |
| Tester                  |          |          |          |          |          |          |          |          |          |          |          |
| Test Number             |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit               | 1100     | kHz      |          |          |          |          |          |          |          |          |          |
| Min Limit               | 900      | kHz      |          |          |          |          |          |          |          |          |          |
| krad                    | 38       |          |          |          |          |          |          |          |          |          |          |
| LL                      | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  |
| Min                     | 1001.899 | 1000.905 | 1000.255 | 1004.887 | 1003.305 | 1005.079 | 999.153  | 1006.784 | 1003.214 | 995.465  | 1005.870 |
| Average                 | 1007.830 | 1010.100 | 1009.744 | 1014.272 | 1008.924 | 1012.858 | 1005.667 | 1014.338 | 1006.455 | 1004.714 | 1008.976 |
| Max                     | 1012.693 | 1018.732 | 1018.730 | 1020.712 | 1015.865 | 1026.325 | 1014.873 | 1020.017 | 1011.316 | 1014.063 | 1011.824 |
| UL                      | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 |

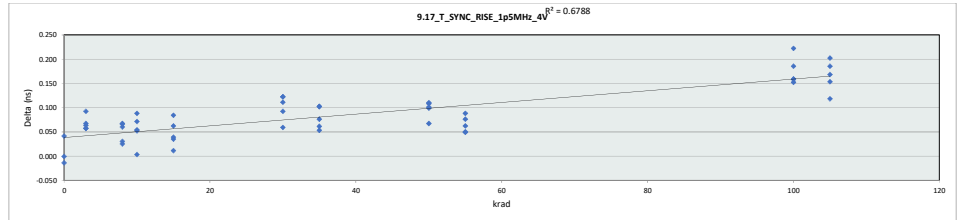


# HDR TID Report

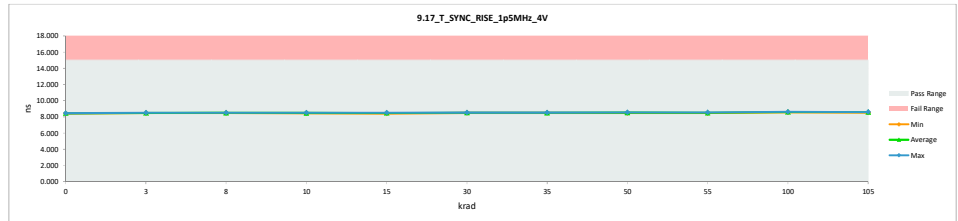
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.17_T_SYNC_RISE_1p5MHz_4V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE HDR | POST HDR | Delta  |
| 0                          | 552      | 8.440   | 8.426    | -0.014 |
| 0                          | 726      | 8.406   | 8.447    | 0.041  |
| 0                          | 791      | 8.408   | 8.407    | -0.001 |
| 3                          | 689      | 8.401   | 8.458    | 0.057  |
| 3                          | 688      | 8.399   | 8.466    | 0.067  |
| 3                          | 700      | 8.388   | 8.480    | 0.092  |
| 3                          | 482      | 8.436   | 8.493    | 0.057  |
| 3                          | 1033     | 8.456   | 8.456    | 0.003  |
| 8                          | 442      | 8.450   | 8.480    | 0.030  |
| 8                          | 699      | 8.427   | 8.494    | 0.067  |
| 8                          | 344      | 8.440   | 8.465    | 0.025  |
| 8                          | 355      | 8.455   | 8.515    | 0.060  |
| 8                          | 790      | 8.443   | 8.509    | 0.066  |
| 10                         | 537      | 8.440   | 8.440    | 0.003  |
| 10                         | 396      | 8.419   | 8.490    | 0.071  |
| 10                         | 521      | 8.429   | 8.483    | 0.054  |
| 10                         | 535      | 8.429   | 8.517    | 0.088  |
| 10                         | 526      | 8.454   | 8.506    | 0.052  |
| 15                         | 540      | 8.467   | 8.506    | 0.039  |
| 15                         | 387      | 8.458   | 8.493    | 0.035  |
| 15                         | 787      | 8.401   | 8.412    | 0.011  |
| 15                         | 1042     | 8.375   | 8.459    | 0.084  |
| 15                         | 483      | 8.440   | 8.502    | 0.062  |
| 30                         | 597      | 8.409   | 8.520    | 0.111  |
| 30                         | 853      | 8.429   | 8.488    | 0.059  |
| 30                         | 416      | 8.410   | 8.532    | 0.122  |
| 30                         | 949      | 8.406   | 8.528    | 0.122  |
| 30                         | 221      | 8.421   | 8.513    | 0.092  |
| 35                         | 538      | 8.440   | 8.493    | 0.053  |
| 35                         | 164      | 8.405   | 8.507    | 0.102  |
| 35                         | 1018     | 8.423   | 8.525    | 0.102  |
| 35                         | 462      | 8.413   | 8.489    | 0.076  |
| 35                         | 1032     | 8.417   | 8.478    | 0.061  |
| 50                         | 566      | 8.454   | 8.553    | 0.099  |
| 50                         | 197      | 8.363   | 8.473    | 0.110  |
| 50                         | 793      | 8.433   | 8.541    | 0.108  |
| 50                         | 802      | 8.429   | 8.530    | 0.101  |
| 50                         | 61       | 8.483   | 8.550    | 0.067  |
| 55                         | 795      | 8.408   | 8.458    | 0.050  |
| 55                         | 921      | 8.446   | 8.508    | 0.062  |
| 55                         | 741      | 8.450   | 8.499    | 0.049  |
| 55                         | 809      | 8.418   | 8.506    | 0.088  |
| 55                         | 804      | 8.460   | 8.536    | 0.076  |
| 100                        | 449      | 8.420   | 8.605    | 0.185  |
| 100                        | 541      | 8.424   | 8.576    | 0.152  |
| 100                        | 476      | 8.387   | 8.609    | 0.222  |
| 100                        | 45       | 8.400   | 8.558    | 0.158  |
| 100                        | 642      | 8.439   | 8.598    | 0.159  |
| 105                        | 1036     | 8.423   | 8.591    | 0.168  |
| 105                        | 1038     | 8.396   | 8.598    | 0.202  |
| 105                        | 203      | 8.393   | 8.578    | 0.185  |
| 105                        | 1029     | 8.407   | 8.525    | 0.118  |
| 105                        | 1027     | 8.421   | 8.574    | 0.153  |
| 105                        | Max      | 8.483   | 8.609    | 0.222  |
| 105                        | Average  | 8.423   | 8.508    | 0.085  |
| 105                        | Min      | 8.363   | 8.407    | -0.014 |
| 105                        | Std Dev  | 0.024   | 0.048    | 0.052  |



| 9.17_T_SYNC_RISE_1p5MHz |      |        |        |        |        |        |        |        |        |        |        |
|-------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site               |      |        |        |        |        |        |        |        |        |        |        |
| Tester                  |      |        |        |        |        |        |        |        |        |        |        |
| Test Number             |      |        |        |        |        |        |        |        |        |        |        |
| Max Limit               | 15   | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit               | 0    | ns     |        |        |        |        |        |        |        |        |        |
|                         | krad |        |        |        |        |        |        |        |        |        |        |
|                         |      | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| LL                      |      | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                     |      | 8.407  | 8.456  | 8.465  | 8.440  | 8.412  | 8.488  | 8.478  | 8.473  | 8.458  | 8.558  |
| Average                 |      | 8.427  | 8.471  | 8.493  | 8.487  | 8.474  | 8.516  | 8.498  | 8.529  | 8.501  | 8.589  |
| Max                     |      | 8.447  | 8.493  | 8.515  | 8.517  | 8.506  | 8.532  | 8.525  | 8.553  | 8.536  | 8.609  |
| UL                      |      | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 |

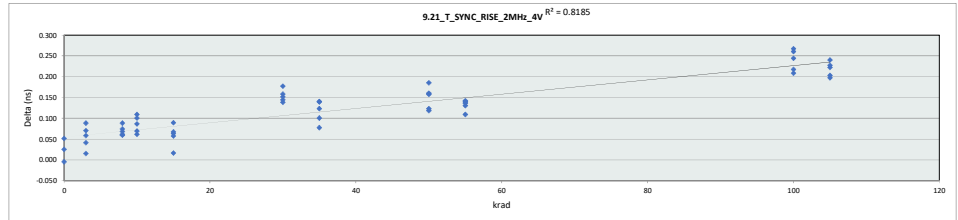


# HDR TID Report

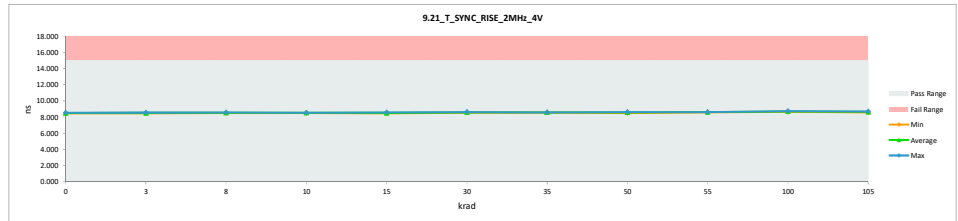
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.21_T_SYNC_RISE_2MHz_4V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     | ns       | ns      |          |        |
| Max Limit                | 15       | 15      |          |        |
| Min Limit                | 0        | 0       |          |        |
| krad                     | Serial # | PRE HDR | POST HDR | Delta  |
| 0                        | 552      | 8.549   | 8.544    | -0.005 |
| 0                        | 726      | 8.435   | 8.460    | 0.025  |
| 0                        | 791      | 8.416   | 8.467    | 0.051  |
| 3                        | 689      | 8.441   | 8.511    | 0.070  |
| 3                        | 688      | 8.433   | 8.474    | 0.041  |
| 3                        | 700      | 8.495   | 8.510    | 0.015  |
| 3                        | 482      | 8.453   | 8.511    | 0.058  |
| 3                        | 1033     | 8.492   | 8.554    | 0.068  |
| 8                        | 442      | 8.413   | 8.481    | 0.068  |
| 8                        | 699      | 8.457   | 8.545    | 0.088  |
| 8                        | 344      | 8.426   | 8.500    | 0.074  |
| 8                        | 355      | 8.450   | 8.511    | 0.061  |
| 8                        | 790      | 8.515   | 8.574    | 0.059  |
| 10                       | 537      | 8.461   | 8.530    | 0.069  |
| 10                       | 396      | 8.412   | 8.512    | 0.100  |
| 10                       | 521      | 8.391   | 8.500    | 0.109  |
| 10                       | 535      | 8.455   | 8.516    | 0.061  |
| 10                       | 526      | 8.458   | 8.544    | 0.086  |
| 15                       | 540      | 8.482   | 8.571    | 0.089  |
| 15                       | 387      | 8.430   | 8.497    | 0.067  |
| 15                       | 787      | 8.447   | 8.463    | 0.016  |
| 15                       | 1042     | 8.453   | 8.516    | 0.063  |
| 15                       | 483      | 8.479   | 8.536    | 0.057  |
| 30                       | 597      | 8.476   | 8.627    | 0.151  |
| 30                       | 853      | 8.368   | 8.526    | 0.158  |
| 30                       | 416      | 8.420   | 8.558    | 0.138  |
| 30                       | 949      | 8.383   | 8.560    | 0.177  |
| 30                       | 221      | 8.450   | 8.594    | 0.144  |
| 35                       | 538      | 8.434   | 8.574    | 0.140  |
| 35                       | 164      | 8.444   | 8.583    | 0.139  |
| 35                       | 1018     | 8.472   | 8.572    | 0.100  |
| 35                       | 462      | 8.437   | 8.560    | 0.123  |
| 35                       | 1032     | 8.473   | 8.550    | 0.077  |
| 50                       | 566      | 8.479   | 8.597    | 0.118  |
| 50                       | 197      | 8.366   | 8.489    | 0.123  |
| 50                       | 793      | 8.427   | 8.587    | 0.160  |
| 50                       | 802      | 8.429   | 8.586    | 0.157  |
| 50                       | 61       | 8.441   | 8.626    | 0.185  |
| 55                       | 795      | 8.448   | 8.578    | 0.130  |
| 55                       | 921      | 8.481   | 8.620    | 0.139  |
| 55                       | 741      | 8.471   | 8.613    | 0.142  |
| 55                       | 809      | 8.464   | 8.573    | 0.109  |
| 55                       | 804      | 8.473   | 8.609    | 0.136  |
| 100                      | 449      | 8.507   | 8.724    | 0.217  |
| 100                      | 541      | 8.438   | 8.646    | 0.208  |
| 100                      | 476      | 8.412   | 8.679    | 0.267  |
| 100                      | 45       | 8.379   | 8.639    | 0.260  |
| 100                      | 642      | 8.488   | 8.722    | 0.244  |
| 105                      | 1036     | 8.422   | 8.649    | 0.227  |
| 105                      | 1038     | 8.466   | 8.688    | 0.222  |
| 105                      | 203      | 8.389   | 8.586    | 0.197  |
| 105                      | 1029     | 8.460   | 8.663    | 0.203  |
| 105                      | 1027     | 8.426   | 8.666    | 0.240  |
| 105                      | Max      | 8.549   | 8.732    | 0.267  |
| Average                  |          | 8.446   | 8.568    | 0.122  |
| Min                      |          | 8.366   | 8.460    | -0.005 |
| Std Dev                  |          | 0.036   | 0.066    | 0.068  |



| 9.21_T_SYNC_RISE_2MHz_4V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 15     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                     |        |        | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                      | 8.460  | 8.474  | 8.481  | 8.500  | 8.463  | 8.526  | 8.550  | 8.489  | 8.573  | 8.639  | 8.586  |
| Average                  | 8.490  | 8.512  | 8.522  | 8.520  | 8.517  | 8.573  | 8.568  | 8.577  | 8.599  | 8.684  | 8.650  |
| Max                      | 8.544  | 8.554  | 8.574  | 8.544  | 8.571  | 8.627  | 8.583  | 8.626  | 8.620  | 8.732  | 8.688  |
| UL                       | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 | 15.000 |

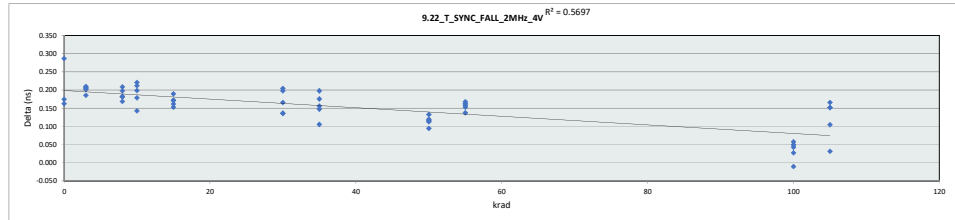


# HDR TID Report

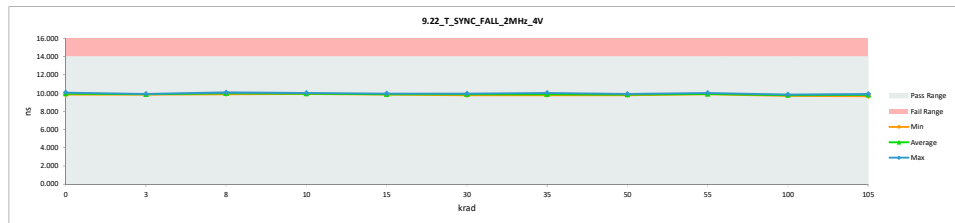
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.22_T_SYNC_FALL_2MHz_4V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 9.768   | 10.054   | 0.286  |
| 0                        | 726      | 9.746   | 9.920    | 0.174  |
| 0                        | 791      | 9.664   | 9.826    | 0.162  |
| 3                        | 689      | 9.689   | 9.896    | 0.207  |
| 3                        | 688      | 9.674   | 9.883    | 0.209  |
| 3                        | 700      | 9.666   | 9.870    | 0.204  |
| 3                        | 482      | 9.644   | 9.829    | 0.185  |
| 3                        | 1033     | 9.646   | 9.846    | 0.201  |
| 8                        | 442      | 9.878   | 10.059   | 0.181  |
| 8                        | 699      | 9.688   | 9.885    | 0.197  |
| 8                        | 344      | 9.807   | 9.975    | 0.168  |
| 8                        | 355      | 9.822   | 10.003   | 0.181  |
| 8                        | 750      | 9.718   | 9.926    | 0.208  |
| 10                       | 537      | 9.699   | 9.919    | 0.220  |
| 10                       | 396      | 9.717   | 9.915    | 0.198  |
| 10                       | 521      | 9.758   | 9.900    | 0.142  |
| 10                       | 535      | 9.805   | 9.983    | 0.178  |
| 10                       | 526      | 9.786   | 9.997    | 0.211  |
| 15                       | 540      | 9.782   | 9.953    | 0.171  |
| 15                       | 387      | 9.739   | 9.900    | 0.161  |
| 15                       | 787      | 9.652   | 9.823    | 0.171  |
| 15                       | 1042     | 9.690   | 9.842    | 0.152  |
| 15                       | 483      | 9.656   | 9.845    | 0.189  |
| 30                       | 597      | 9.754   | 9.889    | 0.135  |
| 30                       | 853      | 9.615   | 9.751    | 0.136  |
| 30                       | 416      | 9.721   | 9.935    | 0.204  |
| 30                       | 949      | 9.719   | 9.916    | 0.197  |
| 30                       | 221      | 9.747   | 9.912    | 0.165  |
| 35                       | 538      | 9.681   | 9.878    | 0.197  |
| 35                       | 164      | 9.637   | 9.784    | 0.147  |
| 35                       | 1018     | 9.694   | 9.849    | 0.155  |
| 35                       | 462      | 9.834   | 10.009   | 0.175  |
| 35                       | 1032     | 9.740   | 9.845    | 0.105  |
| 50                       | 566      | 9.730   | 9.842    | 0.112  |
| 50                       | 197      | 9.630   | 9.749    | 0.119  |
| 50                       | 793      | 9.770   | 9.864    | 0.094  |
| 50                       | 802      | 9.770   | 9.902    | 0.132  |
| 50                       | 61       | 9.755   | 9.870    | 0.115  |
| 55                       | 795      | 9.712   | 9.870    | 0.158  |
| 55                       | 921      | 9.774   | 9.926    | 0.152  |
| 55                       | 741      | 9.705   | 9.867    | 0.162  |
| 55                       | 809      | 9.871   | 10.008   | 0.137  |
| 55                       | 804      | 9.735   | 9.902    | 0.167  |
| 100                      | 449      | 9.791   | 9.833    | 0.042  |
| 100                      | 541      | 9.773   | 9.822    | 0.049  |
| 100                      | 476      | 9.694   | 9.751    | 0.057  |
| 100                      | 45       | 9.671   | 9.698    | 0.027  |
| 100                      | 642      | 9.794   | 9.783    | -0.011 |
| 105                      | 1036     | 9.672   | 9.837    | 0.165  |
| 105                      | 1038     | 9.620   | 9.651    | 0.031  |
| 105                      | 203      | 9.780   | 9.884    | 0.104  |
| 105                      | 1029     | 9.591   | 9.742    | 0.151  |
| 105                      | 1027     | 9.680   | 9.831    | 0.151  |
| 105                      | Max      | 9.878   | 10.059   | 0.286  |
| 105                      | Average  | 9.724   | 9.876    | 0.153  |
| 105                      | Min      | 9.591   | 9.651    | -0.011 |
| 105                      | Std Dev  | 0.065   | 0.084    | 0.056  |



| 9.22_T_SYNC_FALL_2MHz_4V                                     |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              | 14     | ns     |        |        |        |        |        |        |        |        |        |
|                                                              | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                                                         | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                                                           | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                                                          | 9.826  | 9.829  | 9.885  | 9.900  | 9.823  | 9.751  | 9.784  | 9.749  | 9.867  | 9.698  | 9.651  |
| Average                                                      | 9.933  | 9.865  | 9.970  | 9.943  | 9.873  | 9.881  | 9.873  | 9.845  | 9.915  | 9.777  | 9.789  |
| Max                                                          | 10.054 | 9.896  | 10.059 | 9.997  | 9.953  | 9.935  | 10.009 | 9.902  | 10.008 | 9.833  | 9.884  |
| UL                                                           | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

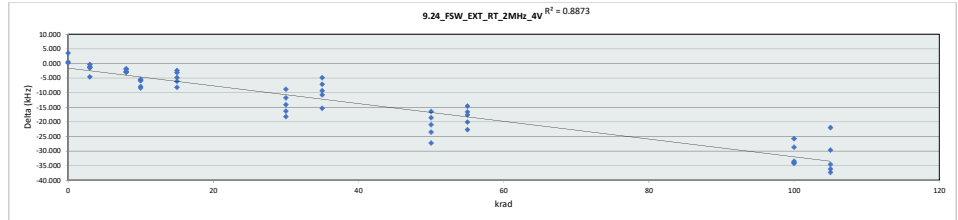


# HDR TID Report

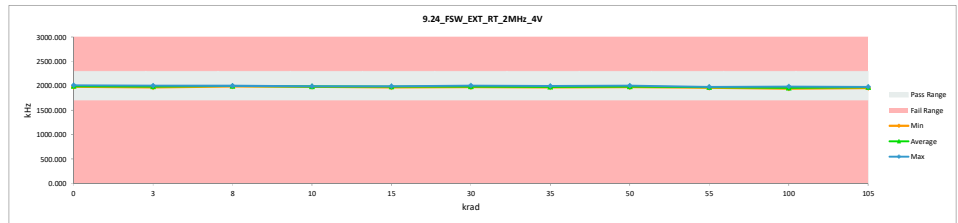
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.24_FSW_EXT_RT_2MHz_4V |          |          |          |         |
|-------------------------|----------|----------|----------|---------|
| Test Site               |          |          |          |         |
| Tester                  |          |          |          |         |
| Test Number             |          |          |          |         |
| Unit                    | kHz      | kHz      |          |         |
| Max Limit               | 2300     | 2300     |          |         |
| Min Limit               | 1700     | 1700     |          |         |
| krad                    | Serial # | PRE_HDR  | POST_HDR | Delta   |
| 0                       | 552      | 1973.779 | 1977.328 | 3.549   |
| 0                       | 726      | 1996.357 | 1996.832 | 0.475   |
| 0                       | 791      | 2010.729 | 2010.884 | 0.155   |
| 3                       | 689      | 1981.007 | 1980.666 | -0.341  |
| 3                       | 688      | 1996.605 | 1995.217 | -1.388  |
| 3                       | 700      | 1968.405 | 1967.283 | -1.122  |
| 3                       | 482      | 2004.065 | 2002.531 | -1.534  |
| 3                       | 1033     | 1986.761 | 1986.761 | -4.639  |
| 8                       | 442      | 2001.904 | 1998.928 | -2.976  |
| 8                       | 699      | 1987.340 | 1985.359 | -1.981  |
| 8                       | 344      | 1995.396 | 1992.735 | -2.661  |
| 8                       | 355      | 2000.222 | 1997.175 | -3.047  |
| 8                       | 750      | 2001.730 | 1999.878 | -1.852  |
| 10                      | 537      | 1992.042 | 1984.115 | -7.927  |
| 10                      | 396      | 1998.978 | 1993.216 | -5.762  |
| 10                      | 521      | 2001.489 | 1993.116 | -8.373  |
| 10                      | 535      | 1996.662 | 1990.696 | -5.966  |
| 10                      | 526      | 1983.184 | 1977.686 | -5.498  |
| 15                      | 540      | 1970.955 | 1967.812 | -3.143  |
| 15                      | 387      | 2000.386 | 1994.248 | -6.138  |
| 15                      | 787      | 1995.674 | 1993.229 | -2.445  |
| 15                      | 1042     | 1975.474 | 1970.620 | -4.854  |
| 15                      | 483      | 1999.976 | 1991.790 | -8.186  |
| 30                      | 597      | 1982.774 | 1973.919 | -8.855  |
| 30                      | 853      | 2017.169 | 2005.366 | -11.803 |
| 30                      | 416      | 2012.830 | 1994.563 | -18.267 |
| 30                      | 949      | 2009.858 | 1993.498 | -16.360 |
| 30                      | 221      | 1985.017 | 1970.866 | -14.151 |
| 35                      | 538      | 1996.322 | 1980.946 | -15.376 |
| 35                      | 164      | 2002.972 | 1995.850 | -7.122  |
| 35                      | 1018     | 1980.234 | 1969.435 | -10.799 |
| 35                      | 462      | 1984.667 | 1979.750 | -4.917  |
| 35                      | 1032     | 1976.827 | 1967.449 | -9.378  |
| 50                      | 566      | 1996.707 | 1980.236 | -16.471 |
| 50                      | 197      | 2021.768 | 2003.167 | -18.601 |
| 50                      | 793      | 2022.702 | 1995.418 | -27.284 |
| 50                      | 802      | 2001.896 | 1980.885 | -21.011 |
| 50                      | 61       | 1991.880 | 1968.350 | -23.530 |
| 55                      | 795      | 1990.383 | 1973.770 | -16.613 |
| 55                      | 921      | 1981.595 | 1963.957 | -17.638 |
| 55                      | 741      | 2000.654 | 1977.927 | -22.727 |
| 55                      | 809      | 1973.846 | 1959.196 | -14.650 |
| 55                      | 804      | 1985.163 | 1965.055 | -20.108 |
| 100                     | 449      | 1980.731 | 1946.443 | -34.288 |
| 100                     | 541      | 1992.408 | 1963.670 | -28.738 |
| 100                     | 476      | 1988.253 | 1954.285 | -33.968 |
| 100                     | 45       | 2010.965 | 1985.177 | -25.788 |
| 100                     | 642      | 1975.236 | 1941.719 | -33.517 |
| 105                     | 1036     | 2008.475 | 1972.304 | -36.171 |
| 105                     | 1038     | 1975.909 | 1953.923 | -21.986 |
| 105                     | 203      | 2016.590 | 1979.220 | -37.370 |
| 105                     | 1029     | 2004.516 | 1974.843 | -29.673 |
| 105                     | 1027     | 1996.637 | 1962.019 | -34.618 |
| 105                     | Max      | 2022.702 | 2010.884 | 3.549   |
| Average                 |          | 1994.127 | 1980.779 | -13.348 |
| Min                     |          | 1968.405 | 1941.719 | -37.370 |
| Std Dev                 |          | 13.438   | 15.701   | 11.462  |



| 9.24_FSW_EXT_RT_2MHz_4V |          |          |          |          |          |          |          |          |          |          |          |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site               |          |          |          |          |          |          |          |          |          |          |          |
| Tester                  |          |          |          |          |          |          |          |          |          |          |          |
| Test Number             |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit               | 2300     | kHz      |          |          |          |          |          |          |          |          |          |
| Min Limit               | 1700     | kHz      |          |          |          |          |          |          |          |          |          |
| krad                    | 0        | 3        | 8        | 10       | 15       | 30       | 35       | 50       | 55       | 100      | 105      |
| LL                      | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 |
| Min                     | 1977.328 | 1967.283 | 1985.359 | 1977.686 | 1967.812 | 1970.866 | 1967.449 | 1968.350 | 1959.196 | 1941.719 | 1953.923 |
| Average                 | 1995.015 | 1986.492 | 1994.815 | 1987.766 | 1983.540 | 1987.642 | 1978.686 | 1985.611 | 1967.981 | 1958.259 | 1968.462 |
| Max                     | 2010.884 | 2002.531 | 1999.878 | 1993.216 | 1994.248 | 2005.366 | 1995.850 | 2003.167 | 1977.927 | 1985.177 | 1979.220 |
| UL                      | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 |

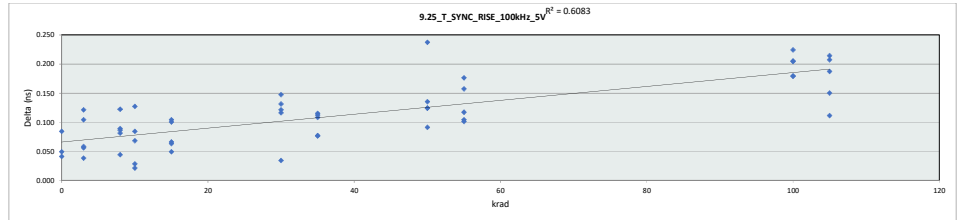


# HDR TID Report

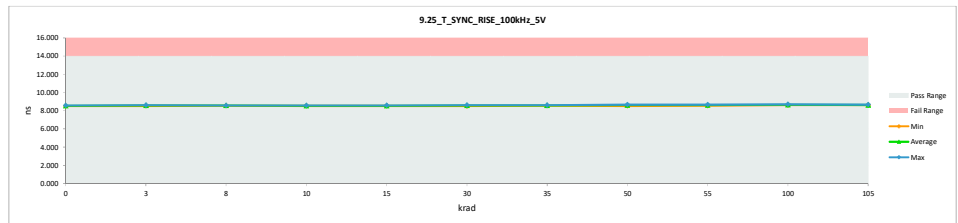
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.25_T_SYNC_RISE_100kHz_5V |          |         |          |       |
|----------------------------|----------|---------|----------|-------|
| Test Site                  |          |         |          |       |
| Tester                     |          |         |          |       |
| Test Number                |          |         |          |       |
| Unit                       |          |         |          |       |
| Max Limit                  |          |         |          |       |
| Min Limit                  |          |         |          |       |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                          | 552      | 8.536   | 8.577    | 0.041 |
| 0                          | 726      | 8.462   | 8.511    | 0.049 |
| 0                          | 791      | 8.429   | 8.513    | 0.084 |
| 3                          | 689      | 8.513   | 8.551    | 0.038 |
| 3                          | 688      | 8.507   | 8.563    | 0.056 |
| 3                          | 700      | 8.476   | 8.580    | 0.104 |
| 3                          | 482      | 8.489   | 8.610    | 0.121 |
| 3                          | 1033     | 8.466   | 8.524    | 0.058 |
| 8                          | 442      | 8.478   | 8.564    | 0.086 |
| 8                          | 699      | 8.484   | 8.565    | 0.081 |
| 8                          | 344      | 8.451   | 8.540    | 0.089 |
| 8                          | 355      | 8.513   | 8.557    | 0.044 |
| 8                          | 790      | 8.456   | 8.578    | 0.122 |
| 10                         | 537      | 8.512   | 8.533    | 0.021 |
| 10                         | 396      | 8.467   | 8.551    | 0.084 |
| 10                         | 521      | 8.450   | 8.577    | 0.127 |
| 10                         | 535      | 8.513   | 8.541    | 0.028 |
| 10                         | 526      | 8.517   | 8.585    | 0.068 |
| 15                         | 540      | 8.473   | 8.573    | 0.100 |
| 15                         | 387      | 8.518   | 8.567    | 0.049 |
| 15                         | 787      | 8.456   | 8.522    | 0.066 |
| 15                         | 1042     | 8.463   | 8.526    | 0.063 |
| 15                         | 483      | 8.487   | 8.591    | 0.104 |
| 30                         | 597      | 8.459   | 8.580    | 0.121 |
| 30                         | 853      | 8.462   | 8.496    | 0.034 |
| 30                         | 416      | 8.442   | 8.558    | 0.116 |
| 30                         | 949      | 8.432   | 8.579    | 0.147 |
| 30                         | 221      | 8.481   | 8.612    | 0.131 |
| 35                         | 538      | 8.476   | 8.584    | 0.108 |
| 35                         | 164      | 8.461   | 8.576    | 0.115 |
| 35                         | 1018     | 8.464   | 8.541    | 0.077 |
| 35                         | 462      | 8.489   | 8.601    | 0.112 |
| 35                         | 1032     | 8.477   | 8.553    | 0.076 |
| 50                         | 566      | 8.473   | 8.608    | 0.135 |
| 50                         | 197      | 8.439   | 8.530    | 0.091 |
| 50                         | 793      | 8.463   | 8.587    | 0.124 |
| 50                         | 802      | 8.394   | 8.631    | 0.237 |
| 50                         | 61       | 8.544   | 8.668    | 0.124 |
| 55                         | 795      | 8.462   | 8.579    | 0.117 |
| 55                         | 921      | 8.492   | 8.668    | 0.176 |
| 55                         | 741      | 8.475   | 8.576    | 0.101 |
| 55                         | 809      | 8.445   | 8.549    | 0.104 |
| 55                         | 804      | 8.504   | 8.661    | 0.157 |
| 100                        | 449      | 8.490   | 8.669    | 0.179 |
| 100                        | 541      | 8.446   | 8.651    | 0.205 |
| 100                        | 476      | 8.451   | 8.655    | 0.204 |
| 100                        | 45       | 8.443   | 8.622    | 0.179 |
| 100                        | 642      | 8.481   | 8.705    | 0.224 |
| 105                        | 1036     | 8.454   | 8.641    | 0.187 |
| 105                        | 1038     | 8.422   | 8.629    | 0.207 |
| 105                        | 203      | 8.491   | 8.602    | 0.111 |
| 105                        | 1029     | 8.455   | 8.605    | 0.150 |
| 105                        | 1027     | 8.455   | 8.669    | 0.214 |
| 105                        | Max      | 8.544   | 8.705    | 0.237 |
| Average                    |          | 8.472   | 8.585    | 0.112 |
| Min                        |          | 8.394   | 8.496    | 0.021 |
| Std Dev                    |          | 0.029   | 0.048    | 0.054 |



| 9.25_T_SYNC_RISE_100kHz_5                                    |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
| krad                                                         | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                                                           | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                                                          | 8.511  | 8.524  | 8.540  | 8.533  | 8.522  | 8.496  | 8.541  | 8.530  | 8.549  | 8.622  | 8.602  |
| Average                                                      | 8.534  | 8.566  | 8.561  | 8.557  | 8.556  | 8.565  | 8.571  | 8.605  | 8.607  | 8.660  | 8.629  |
| Max                                                          | 8.577  | 8.610  | 8.578  | 8.585  | 8.591  | 8.612  | 8.601  | 8.668  | 8.668  | 8.705  | 8.669  |
| UL                                                           | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

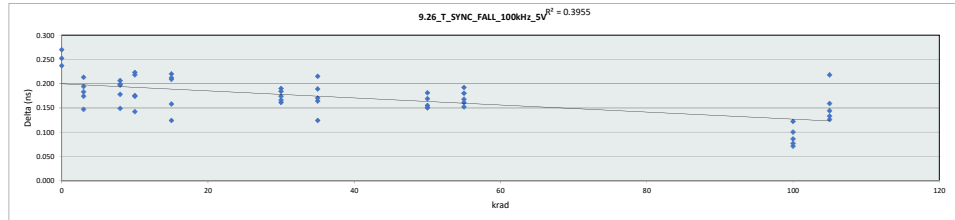


# HDR TID Report

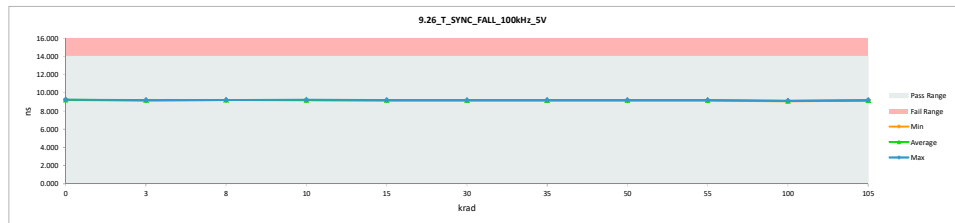
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.26_T_SYNC_FALL_100kHz_5V |          |         |          |       |
|----------------------------|----------|---------|----------|-------|
| Test Site                  |          |         |          |       |
| Tester                     |          |         |          |       |
| Test Number                |          |         |          |       |
| Unit                       |          |         |          |       |
| Max Limit                  |          |         |          |       |
| Min Limit                  |          |         |          |       |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                          | 552      | 8.999   | 9.251    | 0.252 |
| 0                          | 726      | 8.980   | 9.217    | 0.237 |
| 0                          | 791      | 8.946   | 9.216    | 0.270 |
| 3                          | 689      | 8.999   | 9.182    | 0.183 |
| 3                          | 688      | 8.984   | 9.197    | 0.213 |
| 3                          | 700      | 8.996   | 9.143    | 0.147 |
| 3                          | 482      | 8.975   | 9.149    | 0.174 |
| 3                          | 1033     | 8.983   | 9.177    | 0.194 |
| 8                          | 442      | 9.016   | 9.222    | 0.206 |
| 8                          | 699      | 9.001   | 9.198    | 0.197 |
| 8                          | 344      | 9.035   | 9.184    | 0.149 |
| 8                          | 355      | 9.042   | 9.220    | 0.178 |
| 8                          | 750      | 8.986   | 9.185    | 0.199 |
| 10                         | 537      | 9.021   | 9.196    | 0.175 |
| 10                         | 396      | 9.017   | 9.191    | 0.174 |
| 10                         | 521      | 9.025   | 9.167    | 0.142 |
| 10                         | 535      | 8.973   | 9.196    | 0.223 |
| 10                         | 526      | 9.010   | 9.228    | 0.218 |
| 15                         | 540      | 8.978   | 9.187    | 0.209 |
| 15                         | 387      | 8.974   | 9.186    | 0.212 |
| 15                         | 787      | 8.981   | 9.201    | 0.220 |
| 15                         | 1042     | 9.003   | 9.127    | 0.124 |
| 15                         | 483      | 8.985   | 9.143    | 0.158 |
| 30                         | 597      | 9.004   | 9.165    | 0.161 |
| 30                         | 853      | 8.963   | 9.137    | 0.174 |
| 30                         | 416      | 9.007   | 9.191    | 0.184 |
| 30                         | 949      | 8.999   | 9.189    | 0.190 |
| 30                         | 221      | 9.009   | 9.175    | 0.166 |
| 35                         | 538      | 8.989   | 9.178    | 0.189 |
| 35                         | 164      | 9.008   | 9.172    | 0.164 |
| 35                         | 1018     | 9.007   | 9.131    | 0.124 |
| 35                         | 462      | 9.008   | 9.178    | 0.170 |
| 35                         | 1032     | 8.990   | 9.205    | 0.215 |
| 50                         | 566      | 8.991   | 9.172    | 0.181 |
| 50                         | 197      | 9.004   | 9.159    | 0.155 |
| 50                         | 793      | 8.987   | 9.138    | 0.151 |
| 50                         | 802      | 9.007   | 9.176    | 0.169 |
| 50                         | 61       | 9.051   | 9.201    | 0.150 |
| 55                         | 795      | 9.017   | 9.178    | 0.161 |
| 55                         | 921      | 9.014   | 9.182    | 0.168 |
| 55                         | 741      | 8.968   | 9.148    | 0.180 |
| 55                         | 809      | 9.012   | 9.164    | 0.152 |
| 55                         | 804      | 9.011   | 9.203    | 0.192 |
| 100                        | 449      | 9.034   | 9.111    | 0.077 |
| 100                        | 541      | 9.026   | 9.112    | 0.086 |
| 100                        | 476      | 9.012   | 9.112    | 0.100 |
| 100                        | 45       | 9.003   | 9.125    | 0.122 |
| 100                        | 642      | 8.996   | 9.067    | 0.071 |
| 105                        | 1036     | 9.019   | 9.145    | 0.126 |
| 105                        | 1038     | 8.987   | 9.131    | 0.144 |
| 105                        | 203      | 9.028   | 9.161    | 0.133 |
| 105                        | 1029     | 8.982   | 9.141    | 0.159 |
| 105                        | 1027     | 8.983   | 9.201    | 0.218 |
| 105                        | Max      | 9.051   | 9.251    | 0.270 |
| 105                        | Average  | 9.000   | 9.172    | 0.171 |
| 105                        | Min      | 8.946   | 9.067    | 0.071 |
| 105                        | Std Dev  | 0.021   | 0.035    | 0.041 |



| 9.26_T_SYNC_FALL_100kHz_5 |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 9.216  | 9.143  | 9.184  | 9.167  | 9.127  | 9.137  | 9.131  | 9.138  | 9.148  | 9.067  | 9.131  |
| Average                   | 9.228  | 9.170  | 9.202  | 9.196  | 9.169  | 9.171  | 9.173  | 9.169  | 9.175  | 9.105  | 9.156  |
| Max                       | 9.251  | 9.197  | 9.222  | 9.228  | 9.201  | 9.191  | 9.205  | 9.201  | 9.203  | 9.125  | 9.201  |
| UL                        | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

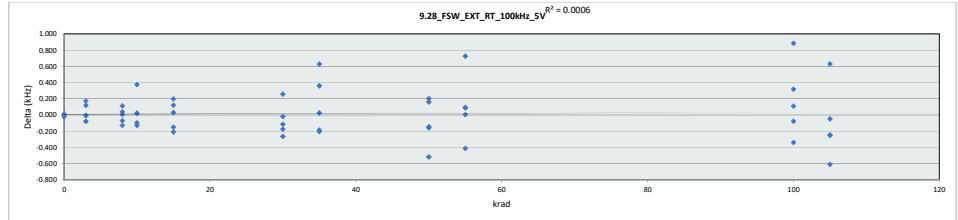


# HDR TID Report

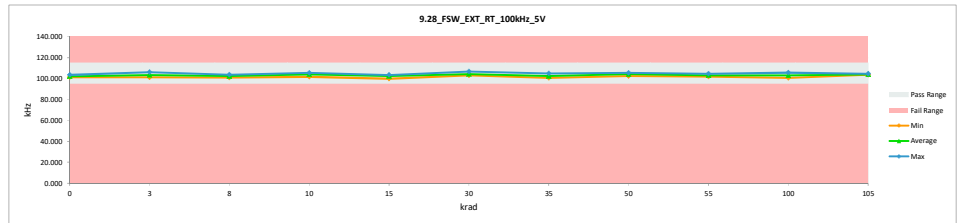
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.28_FSW_EXT_RT_100kHz_5V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      | kHz      | kHz     |          |        |
| Max Limit                 | 115      | 115     |          |        |
| Min Limit                 | 95       | 95      |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 101.437 | 101.437  | 0.000  |
| 0                         | 726      | 101.614 | 101.624  | 0.010  |
| 0                         | 791      | 103.557 | 103.534  | -0.023 |
| 3                         | 689      | 102.608 | 102.602  | -0.006 |
| 3                         | 688      | 103.891 | 103.881  | -0.010 |
| 3                         | 700      | 101.019 | 101.191  | 0.172  |
| 3                         | 482      | 106.035 | 106.152  | 0.117  |
| 3                         | 1033     | 103.454 | 103.374  | -0.080 |
| 8                         | 442      | 103.764 | 103.803  | 0.039  |
| 8                         | 699      | 103.212 | 103.141  | -0.071 |
| 8                         | 344      | 102.621 | 102.626  | 0.005  |
| 8                         | 355      | 101.851 | 101.962  | 0.111  |
| 8                         | 790      | 101.207 | 101.077  | -0.130 |
| 10                        | 537      | 101.663 | 101.686  | 0.023  |
| 10                        | 396      | 103.695 | 103.597  | -0.098 |
| 10                        | 521      | 105.187 | 105.056  | -0.131 |
| 10                        | 535      | 105.450 | 105.466  | 0.016  |
| 10                        | 526      | 103.966 | 104.340  | 0.374  |
| 15                        | 540      | 103.081 | 103.278  | 0.197  |
| 15                        | 387      | 103.087 | 102.877  | -0.210 |
| 15                        | 787      | 102.852 | 102.881  | 0.029  |
| 15                        | 1042     | 100.034 | 99.882   | -0.152 |
| 15                        | 483      | 103.383 | 103.503  | 0.120  |
| 30                        | 597      | 103.248 | 103.133  | -0.115 |
| 30                        | 853      | 106.468 | 106.725  | 0.257  |
| 30                        | 416      | 103.969 | 103.793  | -0.176 |
| 30                        | 949      | 104.503 | 104.237  | -0.266 |
| 30                        | 221      | 103.648 | 103.628  | -0.020 |
| 35                        | 538      | 105.120 | 104.932  | -0.188 |
| 35                        | 164      | 102.125 | 102.752  | 0.627  |
| 35                        | 1018     | 101.739 | 102.097  | 0.358  |
| 35                        | 462      | 100.710 | 100.734  | 0.024  |
| 35                        | 1032     | 102.395 | 102.189  | -0.206 |
| 50                        | 566      | 104.209 | 104.368  | 0.159  |
| 50                        | 197      | 105.319 | 105.520  | 0.201  |
| 50                        | 793      | 105.528 | 105.368  | -0.160 |
| 50                        | 802      | 104.044 | 103.526  | -0.518 |
| 50                        | 61       | 102.559 | 102.414  | -0.145 |
| 55                        | 795      | 102.401 | 101.988  | -0.413 |
| 55                        | 921      | 102.489 | 102.493  | 0.004  |
| 55                        | 741      | 104.607 | 104.698  | 0.091  |
| 55                        | 809      | 103.909 | 103.995  | 0.086  |
| 55                        | 804      | 101.472 | 102.197  | 0.725  |
| 100                       | 449      | 100.429 | 100.747  | 0.318  |
| 100                       | 541      | 102.857 | 102.779  | -0.078 |
| 100                       | 476      | 103.480 | 103.140  | -0.340 |
| 100                       | 45       | 105.616 | 105.725  | 0.109  |
| 100                       | 642      | 102.989 | 103.871  | 0.882  |
| 105                       | 1036     | 103.909 | 104.537  | 0.628  |
| 105                       | 1038     | 103.690 | 103.641  | -0.049 |
| 105                       | 203      | 104.558 | 104.310  | -0.248 |
| 105                       | 1029     | 105.128 | 104.518  | -0.610 |
| 105                       | 1027     | 103.875 | 103.624  | -0.251 |
| 105                       | Max      | 106.468 | 106.725  | 0.882  |
| 105                       | Average  | 103.314 | 103.333  | 0.019  |
| 105                       | Min      | 100.034 | 99.882   | -0.610 |
| 105                       | Std Dev  | 1.479   | 1.458    | 0.282  |



| 9.28_FSW_EXT_RT_100kHz_5V |         |         |         |         |         |         |         |         |         |         |         |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site                 |         |         |         |         |         |         |         |         |         |         |         |
| Tester                    |         |         |         |         |         |         |         |         |         |         |         |
| Test Number               |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit                 | 115     | kHz     |         |         |         |         |         |         |         |         |         |
| Min Limit                 | 95      | kHz     |         |         |         |         |         |         |         |         |         |
|                           | krad    | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     |
| Max                       | LL      | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  |
|                           | Min     | 101.437 | 101.191 | 101.077 | 101.686 | 99.882  | 103.133 | 100.734 | 102.414 | 101.988 | 100.747 |
|                           | Average | 102.198 | 103.440 | 102.522 | 104.029 | 102.484 | 104.303 | 102.541 | 104.239 | 103.074 | 103.252 |
|                           | UL      | 103.534 | 106.152 | 103.803 | 105.466 | 103.503 | 106.725 | 104.932 | 105.520 | 104.698 | 105.725 |
| Min                       | UL      | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 |

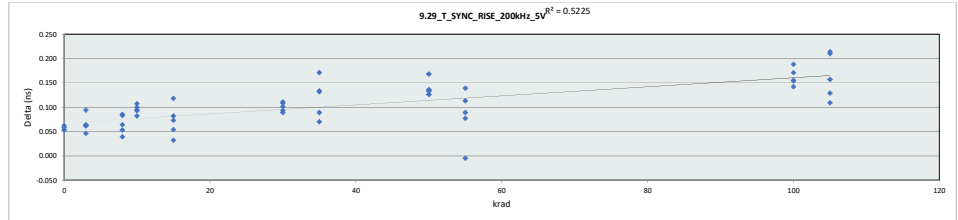


# HDR TID Report

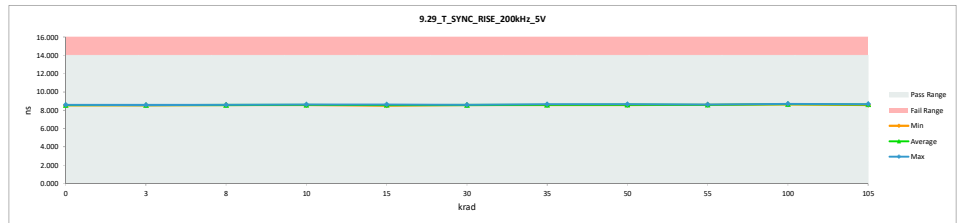
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.29_T_SYNC_RISE_200kHz_5V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE HDR | POST HDR | Delta  |
| 0                          | 552      | 8.532   | 8.590    | 0.058  |
| 0                          | 726      | 8.494   | 8.547    | 0.053  |
| 0                          | 791      | 8.446   | 8.508    | 0.062  |
| 3                          | 689      | 8.482   | 8.576    | 0.094  |
| 3                          | 688      | 8.472   | 8.518    | 0.046  |
| 3                          | 700      | 8.479   | 8.541    | 0.062  |
| 3                          | 482      | 8.507   | 8.569    | 0.062  |
| 3                          | 1033     | 8.469   | 8.533    | 0.064  |
| 8                          | 442      | 8.499   | 8.563    | 0.064  |
| 8                          | 699      | 8.489   | 8.572    | 0.083  |
| 8                          | 344      | 8.469   | 8.554    | 0.085  |
| 8                          | 355      | 8.533   | 8.586    | 0.053  |
| 8                          | 790      | 8.535   | 8.574    | 0.039  |
| 10                         | 537      | 8.478   | 8.572    | 0.094  |
| 10                         | 396      | 8.447   | 8.547    | 0.100  |
| 10                         | 521      | 8.482   | 8.564    | 0.082  |
| 10                         | 535      | 8.487   | 8.594    | 0.107  |
| 10                         | 526      | 8.526   | 8.619    | 0.093  |
| 15                         | 540      | 8.494   | 8.567    | 0.073  |
| 15                         | 387      | 8.501   | 8.619    | 0.118  |
| 15                         | 787      | 8.471   | 8.503    | 0.032  |
| 15                         | 1042     | 8.483   | 8.537    | 0.054  |
| 15                         | 483      | 8.486   | 8.568    | 0.082  |
| 30                         | 597      | 8.485   | 8.586    | 0.101  |
| 30                         | 853      | 8.428   | 8.539    | 0.111  |
| 30                         | 416      | 8.474   | 8.567    | 0.093  |
| 30                         | 949      | 8.472   | 8.580    | 0.108  |
| 30                         | 221      | 8.497   | 8.586    | 0.089  |
| 35                         | 538      | 8.472   | 8.643    | 0.171  |
| 35                         | 164      | 8.464   | 8.553    | 0.089  |
| 35                         | 1018     | 8.505   | 8.575    | 0.070  |
| 35                         | 462      | 8.478   | 8.610    | 0.132  |
| 35                         | 1032     | 8.420   | 8.553    | 0.133  |
| 50                         | 566      | 8.492   | 8.628    | 0.136  |
| 50                         | 197      | 8.421   | 8.554    | 0.133  |
| 50                         | 793      | 8.480   | 8.648    | 0.168  |
| 50                         | 802      | 8.461   | 8.587    | 0.126  |
| 50                         | 61       | 8.498   | 8.633    | 0.135  |
| 55                         | 795      | 8.509   | 8.586    | 0.077  |
| 55                         | 921      | 8.586   | 8.581    | -0.005 |
| 55                         | 741      | 8.480   | 8.593    | 0.113  |
| 55                         | 809      | 8.496   | 8.585    | 0.089  |
| 55                         | 804      | 8.485   | 8.624    | 0.139  |
| 100                        | 449      | 8.511   | 8.682    | 0.171  |
| 100                        | 541      | 8.487   | 8.641    | 0.154  |
| 100                        | 476      | 8.453   | 8.641    | 0.188  |
| 100                        | 45       | 8.484   | 8.639    | 0.155  |
| 100                        | 642      | 8.520   | 8.662    | 0.142  |
| 105                        | 1036     | 8.463   | 8.677    | 0.214  |
| 105                        | 1038     | 8.426   | 8.636    | 0.210  |
| 105                        | 203      | 8.463   | 8.572    | 0.109  |
| 105                        | 1029     | 8.492   | 8.621    | 0.129  |
| 105                        | 1027     | 8.469   | 8.626    | 0.157  |
| 105                        | Max      | 8.586   | 8.682    | 0.214  |
| 105                        | Average  | 8.484   | 8.587    | 0.104  |
| 105                        | Min      | 8.420   | 8.503    | -0.005 |
| 105                        | Std Dev  | 0.030   | 0.042    | 0.046  |



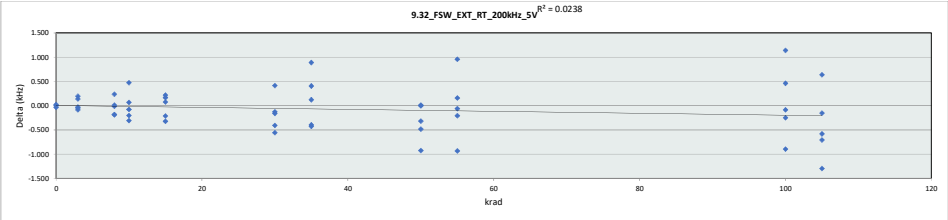
| 9.29_T_SYNC_RISE_200kHz_5                                    |         |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |  |
|--------------------------------------------------------------|---------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |         |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |  |
|                                                              | 14      |        | ns    |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |  |
|                                                              | 0       |        | ns    |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |  |
|                                                              | krad    |        | 3     |        | 8     |        | 10    |        | 15    |        | 30    |        | 35    |        | 50    |        | 55    |        | 100   |        | 105   |        |       |  |
|                                                              | LL      |        | 0.000 |        | 0.000 |        | 0.000 |        | 0.000 |        | 0.000 |        | 0.000 |        | 0.000 |        | 0.000 |        | 0.000 |        | 0.000 |        |       |  |
|                                                              | Min     |        | 8.508 |        | 8.518 |        | 8.554 |        | 8.547 |        | 8.503 |        | 8.539 |        | 8.553 |        | 8.554 |        | 8.581 |        | 8.639 |        | 8.572 |  |
|                                                              | Average |        | 8.548 |        | 8.547 |        | 8.570 |        | 8.579 |        | 8.559 |        | 8.572 |        | 8.587 |        | 8.610 |        | 8.594 |        | 8.653 |        | 8.626 |  |
| Max                                                          |         | 8.590  |       | 8.576  |       | 8.586  |       | 8.619  |       | 8.619  |       | 8.586  |       | 8.643  |       | 8.648  |       | 8.624  |       | 8.682  |       | 8.677  |       |  |
| UL                                                           |         | 14.000 |       | 14.000 |       | 14.000 |       | 14.000 |       | 14.000 |       | 14.000 |       | 14.000 |       | 14.000 |       | 14.000 |       | 14.000 |       | 14.000 |       |  |



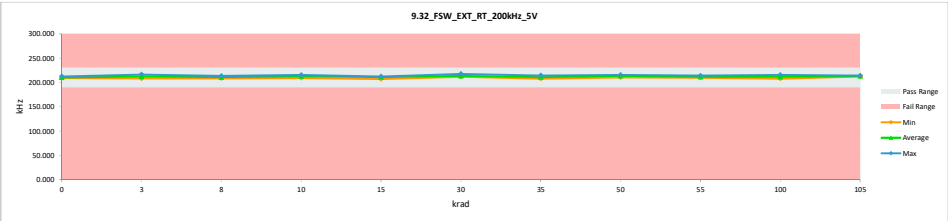
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.32_FSW_EXT_RT_200kHz_5V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      |          |         |          |        |
| Max Limit                 |          |         |          |        |
| Min Limit                 |          |         |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 208.886 | 208.849  | -0.037 |
| 0                         | 726      | 209.563 | 209.562  | -0.001 |
| 0                         | 791      | 212.433 | 212.457  | 0.024  |
| 3                         | 689      | 210.919 | 210.872  | -0.047 |
| 3                         | 688      | 212.379 | 212.349  | -0.030 |
| 3                         | 700      | 207.891 | 208.085  | 0.194  |
| 3                         | 482      | 216.229 | 216.367  | 0.138  |
| 3                         | 1033     | 212.163 | 212.076  | -0.087 |
| 8                         | 442      | 213.220 | 213.230  | 0.010  |
| 8                         | 699      | 211.323 | 211.138  | -0.185 |
| 8                         | 344      | 211.485 | 211.471  | -0.014 |
| 8                         | 355      | 209.994 | 210.230  | 0.236  |
| 8                         | 750      | 208.712 | 208.522  | -0.190 |
| 10                        | 537      | 209.377 | 209.394  | 0.067  |
| 10                        | 396      | 212.894 | 212.690  | -0.204 |
| 10                        | 521      | 215.338 | 215.028  | -0.310 |
| 10                        | 535      | 215.358 | 215.278  | -0.080 |
| 10                        | 526      | 212.667 | 213.139  | 0.472  |
| 15                        | 540      | 210.983 | 211.199  | 0.216  |
| 15                        | 387      | 212.208 | 211.885  | -0.323 |
| 15                        | 787      | 211.239 | 211.312  | 0.073  |
| 15                        | 1042     | 207.450 | 207.237  | -0.213 |
| 15                        | 483      | 212.139 | 212.304  | 0.165  |
| 30                        | 597      | 211.596 | 211.467  | -0.129 |
| 30                        | 853      | 217.234 | 217.647  | 0.413  |
| 30                        | 416      | 213.251 | 212.841  | -0.410 |
| 30                        | 949      | 213.648 | 213.090  | -0.558 |
| 30                        | 221      | 212.461 | 212.300  | -0.161 |
| 35                        | 538      | 214.924 | 214.527  | -0.397 |
| 35                        | 164      | 209.995 | 210.883  | 0.888  |
| 35                        | 1018     | 209.706 | 210.109  | 0.403  |
| 35                        | 462      | 207.499 | 207.620  | 0.121  |
| 35                        | 1032     | 210.801 | 210.376  | -0.425 |
| 50                        | 566      | 213.391 | 213.388  | -0.003 |
| 50                        | 197      | 215.397 | 215.407  | 0.010  |
| 50                        | 793      | 215.852 | 215.367  | -0.485 |
| 50                        | 802      | 213.462 | 212.536  | -0.926 |
| 50                        | 61       | 210.809 | 210.491  | -0.318 |
| 55                        | 795      | 210.701 | 209.768  | -0.933 |
| 55                        | 921      | 210.444 | 210.382  | -0.062 |
| 55                        | 741      | 214.065 | 213.856  | -0.209 |
| 55                        | 809      | 212.878 | 213.034  | 0.156  |
| 55                        | 804      | 209.290 | 210.246  | 0.956  |
| 100                       | 449      | 207.343 | 207.804  | 0.461  |
| 100                       | 541      | 211.497 | 211.246  | -0.251 |
| 100                       | 476      | 212.284 | 211.388  | -0.896 |
| 100                       | 45       | 215.498 | 215.411  | -0.087 |
| 100                       | 642      | 210.948 | 212.086  | 1.138  |
| 105                       | 1036     | 213.350 | 213.986  | 0.636  |
| 105                       | 1038     | 212.482 | 212.326  | -0.156 |
| 105                       | 203      | 214.366 | 213.656  | -0.710 |
| 105                       | 1029     | 214.803 | 213.506  | -1.297 |
| 105                       | 1027     | 212.856 | 212.273  | -0.583 |
| 105                       |          | 217.234 | 217.647  | 1.138  |
| Max                       |          | 212.031 | 211.956  | -0.074 |
| Average                   |          | 207.343 | 207.237  | -1.297 |
| Min                       |          | 207.343 | 207.237  | -1.297 |
| Std Dev                   |          | 2.376   | 2.283    | 0.458  |



| 9.32_FSW_EXT_RT_200kHz_5V |         |         |         |         |         |         |         |         |         |         |         |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site                 |         |         |         |         |         |         |         |         |         |         |         |
| Tester                    |         |         |         |         |         |         |         |         |         |         |         |
| Test Number               |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit                 |         |         |         |         |         |         |         |         |         |         |         |
| Min Limit                 |         |         |         |         |         |         |         |         |         |         |         |
| krad                      | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                        | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 |
| Min                       | 208.849 | 208.085 | 208.522 | 209.394 | 207.237 | 211.467 | 207.620 | 210.491 | 209.768 | 207.804 | 212.273 |
| Average                   | 210.289 | 211.950 | 210.918 | 213.106 | 210.787 | 213.469 | 210.703 | 213.438 | 211.457 | 211.587 | 213.149 |
| Max                       | 212.457 | 216.367 | 213.230 | 215.278 | 212.304 | 217.647 | 214.527 | 215.407 | 213.856 | 215.411 | 213.986 |
| UL                        | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 |

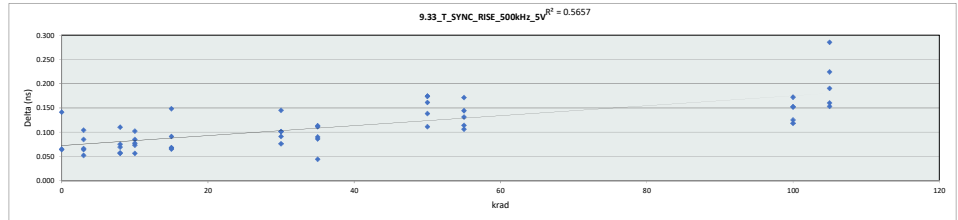


# HDR TID Report

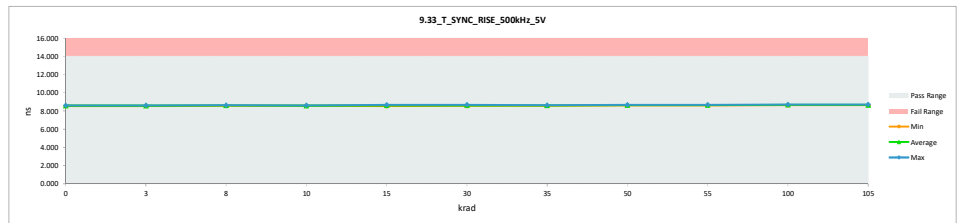
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.33_T_SYNC_RISE_500kHz_5V |          |         |          |       |
|----------------------------|----------|---------|----------|-------|
| Test Site                  |          |         |          |       |
| Tester                     |          |         |          |       |
| Test Number                |          |         |          |       |
| Unit                       |          |         |          |       |
| Max Limit                  |          |         |          |       |
| Min Limit                  |          |         |          |       |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                          | 552      | 8.529   | 8.593    | 0.064 |
| 0                          | 726      | 8.492   | 8.557    | 0.065 |
| 0                          | 791      | 8.465   | 8.606    | 0.141 |
| 3                          | 689      | 8.530   | 8.594    | 0.064 |
| 3                          | 688      | 8.496   | 8.548    | 0.052 |
| 3                          | 700      | 8.507   | 8.611    | 0.104 |
| 3                          | 482      | 8.536   | 8.602    | 0.066 |
| 3                          | 1033     | 8.589   | 8.589    | 0.085 |
| 8                          | 442      | 8.469   | 8.579    | 0.110 |
| 8                          | 699      | 8.539   | 8.608    | 0.069 |
| 8                          | 344      | 8.554   | 8.611    | 0.057 |
| 8                          | 355      | 8.518   | 8.574    | 0.056 |
| 8                          | 790      | 8.551   | 8.626    | 0.075 |
| 10                         | 537      | 8.485   | 8.562    | 0.077 |
| 10                         | 396      | 8.503   | 8.559    | 0.056 |
| 10                         | 521      | 8.476   | 8.578    | 0.102 |
| 10                         | 535      | 8.527   | 8.612    | 0.085 |
| 10                         | 526      | 8.548   | 8.621    | 0.073 |
| 15                         | 540      | 8.526   | 8.594    | 0.068 |
| 15                         | 387      | 8.516   | 8.664    | 0.148 |
| 15                         | 787      | 8.486   | 8.551    | 0.065 |
| 15                         | 1042     | 8.489   | 8.556    | 0.067 |
| 15                         | 483      | 8.532   | 8.623    | 0.091 |
| 30                         | 597      | 8.529   | 8.620    | 0.091 |
| 30                         | 853      | 8.494   | 8.570    | 0.076 |
| 30                         | 416      | 8.503   | 8.604    | 0.101 |
| 30                         | 949      | 8.483   | 8.584    | 0.101 |
| 30                         | 221      | 8.534   | 8.679    | 0.145 |
| 35                         | 538      | 8.518   | 8.604    | 0.086 |
| 35                         | 164      | 8.497   | 8.610    | 0.113 |
| 35                         | 1018     | 8.503   | 8.593    | 0.090 |
| 35                         | 462      | 8.515   | 8.626    | 0.111 |
| 35                         | 1032     | 8.526   | 8.570    | 0.044 |
| 50                         | 566      | 8.488   | 8.662    | 0.174 |
| 50                         | 197      | 8.438   | 8.599    | 0.161 |
| 50                         | 793      | 8.510   | 8.648    | 0.138 |
| 50                         | 802      | 8.486   | 8.660    | 0.174 |
| 50                         | 61       | 8.557   | 8.668    | 0.111 |
| 55                         | 795      | 8.503   | 8.617    | 0.114 |
| 55                         | 921      | 8.521   | 8.652    | 0.131 |
| 55                         | 741      | 8.532   | 8.676    | 0.144 |
| 55                         | 809      | 8.464   | 8.635    | 0.171 |
| 55                         | 804      | 8.545   | 8.651    | 0.106 |
| 100                        | 449      | 8.549   | 8.701    | 0.152 |
| 100                        | 541      | 8.547   | 8.665    | 0.118 |
| 100                        | 476      | 8.532   | 8.684    | 0.152 |
| 100                        | 45       | 8.509   | 8.634    | 0.125 |
| 100                        | 642      | 8.530   | 8.702    | 0.172 |
| 105                        | 1036     | 8.477   | 8.630    | 0.153 |
| 105                        | 1038     | 8.406   | 8.691    | 0.285 |
| 105                        | 203      | 8.477   | 8.637    | 0.160 |
| 105                        | 1029     | 8.488   | 8.678    | 0.190 |
| 105                        | 1027     | 8.478   | 8.702    | 0.224 |
| 105                        | Max      | 8.557   | 8.702    | 0.285 |
| Average                    |          | 8.508   | 8.620    | 0.112 |
| Min                        |          | 8.406   | 8.548    | 0.044 |
| Std Dev                    |          | 0.031   | 0.043    | 0.048 |



| 9.33_T_SYNC_RISE_500kHz_5 |                             |        |        |        |        |        |        |        |        |        |        |
|---------------------------|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |                             |        |        |        |        |        |        |        |        |        |        |
| Tester                    |                             |        |        |        |        |        |        |        |        |        |        |
| Test Number               |                             |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14                      ns  |        |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0                        ns |        |        |        |        |        |        |        |        |        |        |
| krad                      | 0                           | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000                       | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 8.557                       | 8.548  | 8.574  | 8.559  | 8.551  | 8.570  | 8.570  | 8.599  | 8.617  | 8.634  | 8.630  |
| Average                   | 8.585                       | 8.589  | 8.600  | 8.586  | 8.598  | 8.611  | 8.601  | 8.647  | 8.646  | 8.677  | 8.668  |
| Max                       | 8.606                       | 8.611  | 8.626  | 8.621  | 8.664  | 8.679  | 8.626  | 8.668  | 8.676  | 8.702  | 8.702  |
| UL                        | 14.000                      | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

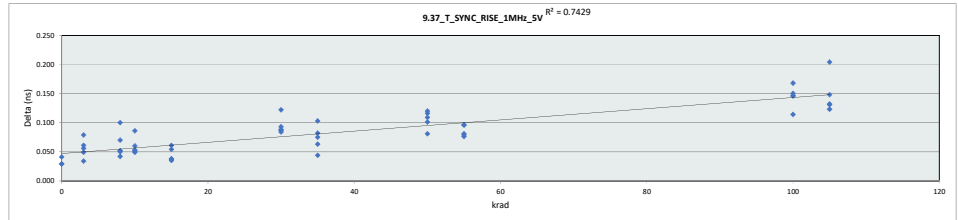


# HDR TID Report

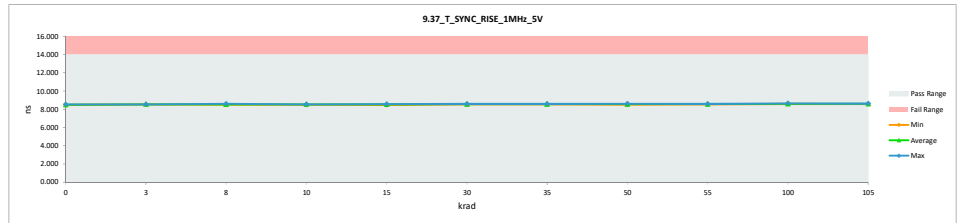
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.37_T_SYNC_RISE_1MHZ_5V |          |         |          |       |
|--------------------------|----------|---------|----------|-------|
| Test Site                |          |         |          |       |
| Tester                   |          |         |          |       |
| Test Number              |          |         |          |       |
| Unit                     | ns       | ns      |          |       |
| Max Limit                | 14       | 14      |          |       |
| Min Limit                | 0        | 0       |          |       |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                        | 552      | 8.508   | 8.537    | 0.029 |
| 0                        | 726      | 8.469   | 8.498    | 0.029 |
| 0                        | 791      | 8.436   | 8.477    | 0.041 |
| 3                        | 689      | 8.485   | 8.546    | 0.061 |
| 3                        | 688      | 8.444   | 8.523    | 0.079 |
| 3                        | 700      | 8.477   | 8.526    | 0.049 |
| 3                        | 482      | 8.486   | 8.520    | 0.034 |
| 3                        | 1033     | 8.514   | 8.514    | 0.055 |
| 8                        | 442      | 8.480   | 8.532    | 0.052 |
| 8                        | 699      | 8.476   | 8.546    | 0.070 |
| 8                        | 344      | 8.452   | 8.502    | 0.050 |
| 8                        | 355      | 8.488   | 8.530    | 0.042 |
| 8                        | 790      | 8.493   | 8.593    | 0.100 |
| 10                       | 537      | 8.491   | 8.540    | 0.049 |
| 10                       | 396      | 8.447   | 8.533    | 0.086 |
| 10                       | 521      | 8.455   | 8.508    | 0.053 |
| 10                       | 535      | 8.473   | 8.524    | 0.051 |
| 10                       | 526      | 8.470   | 8.530    | 0.060 |
| 15                       | 540      | 8.490   | 8.551    | 0.061 |
| 15                       | 387      | 8.489   | 8.527    | 0.038 |
| 15                       | 787      | 8.455   | 8.492    | 0.037 |
| 15                       | 1042     | 8.449   | 8.484    | 0.035 |
| 15                       | 483      | 8.472   | 8.526    | 0.054 |
| 30                       | 597      | 8.488   | 8.581    | 0.093 |
| 30                       | 853      | 8.452   | 8.536    | 0.084 |
| 30                       | 416      | 8.465   | 8.552    | 0.087 |
| 30                       | 949      | 8.442   | 8.564    | 0.122 |
| 30                       | 221      | 8.481   | 8.569    | 0.088 |
| 35                       | 538      | 8.455   | 8.537    | 0.082 |
| 35                       | 164      | 8.473   | 8.548    | 0.075 |
| 35                       | 1018     | 8.478   | 8.581    | 0.103 |
| 35                       | 462      | 8.529   | 8.573    | 0.044 |
| 35                       | 1032     | 8.466   | 8.529    | 0.063 |
| 50                       | 566      | 8.479   | 8.595    | 0.116 |
| 50                       | 197      | 8.399   | 8.508    | 0.109 |
| 50                       | 793      | 8.486   | 8.567    | 0.081 |
| 50                       | 802      | 8.435   | 8.555    | 0.120 |
| 50                       | 61       | 8.504   | 8.605    | 0.101 |
| 55                       | 795      | 8.488   | 8.564    | 0.076 |
| 55                       | 921      | 8.473   | 8.569    | 0.096 |
| 55                       | 741      | 8.480   | 8.576    | 0.096 |
| 55                       | 809      | 8.468   | 8.549    | 0.081 |
| 55                       | 804      | 8.503   | 8.582    | 0.079 |
| 100                      | 449      | 8.492   | 8.642    | 0.150 |
| 100                      | 541      | 8.471   | 8.585    | 0.114 |
| 100                      | 476      | 8.460   | 8.606    | 0.146 |
| 100                      | 45       | 8.418   | 8.586    | 0.168 |
| 100                      | 642      | 8.484   | 8.630    | 0.146 |
| 105                      | 1036     | 8.472   | 8.603    | 0.131 |
| 105                      | 1038     | 8.419   | 8.623    | 0.204 |
| 105                      | 203      | 8.436   | 8.568    | 0.132 |
| 105                      | 1029     | 8.445   | 8.593    | 0.148 |
| 105                      | 1027     | 8.471   | 8.594    | 0.123 |
| 105                      | Max      | 8.529   | 8.642    | 0.204 |
| 105                      | Average  | 8.469   | 8.553    | 0.084 |
| 105                      | Min      | 8.399   | 8.477    | 0.029 |
| 105                      | Std Dev  | 0.024   | 0.038    | 0.040 |



| 9.37_T_SYNC_RISE_1MHZ_5V |        |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 14     | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit                | 0      | ns     |        |        |        |        |        |        |        |        |        |        |
|                          | krad   | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                      | 8.477  | 8.514  | 8.502  | 8.508  | 8.484  | 8.536  | 8.529  | 8.508  | 8.549  | 8.585  | 8.568  | 8.568  |
| Average                  | 8.504  | 8.526  | 8.541  | 8.527  | 8.516  | 8.560  | 8.554  | 8.566  | 8.568  | 8.610  | 8.596  | 8.596  |
| Max                      | 8.537  | 8.546  | 8.593  | 8.540  | 8.551  | 8.581  | 8.581  | 8.605  | 8.582  | 8.642  | 8.623  | 8.623  |
| UL                       | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

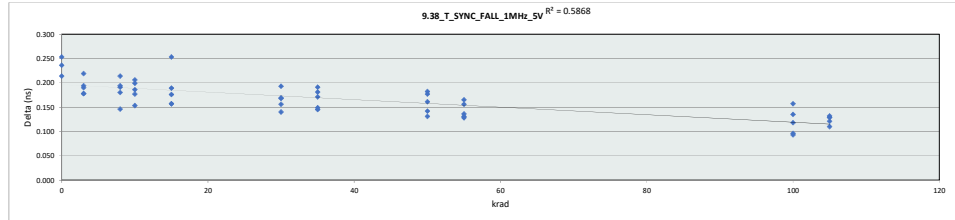


# HDR TID Report

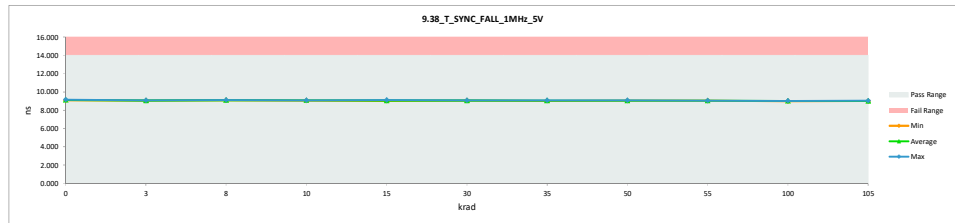
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.38_T_SYNC_FALL_1MHz_5V |          |         |          |       |
|--------------------------|----------|---------|----------|-------|
| Test Site                |          |         |          |       |
| Tester                   |          |         |          |       |
| Test Number              |          |         |          |       |
| Unit                     |          |         |          |       |
| Max Limit                |          |         |          |       |
| Min Limit                |          |         |          |       |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                        | 552      | 8.901   | 9.154    | 0.253 |
| 0                        | 726      | 8.870   | 9.106    | 0.236 |
| 0                        | 791      | 8.863   | 9.077    | 0.214 |
| 3                        | 689      | 8.884   | 9.078    | 0.194 |
| 3                        | 688      | 8.864   | 9.083    | 0.219 |
| 3                        | 700      | 8.881   | 9.059    | 0.178 |
| 3                        | 482      | 8.860   | 9.050    | 0.190 |
| 3                        | 1033     | 8.884   | 9.062    | 0.178 |
| 8                        | 442      | 8.937   | 9.117    | 0.180 |
| 8                        | 699      | 8.887   | 9.078    | 0.191 |
| 8                        | 344      | 8.894   | 9.108    | 0.214 |
| 8                        | 355      | 8.915   | 9.109    | 0.194 |
| 8                        | 750      | 8.929   | 9.075    | 0.146 |
| 10                       | 537      | 8.894   | 9.080    | 0.186 |
| 10                       | 396      | 8.881   | 9.087    | 0.206 |
| 10                       | 521      | 8.893   | 9.046    | 0.153 |
| 10                       | 535      | 8.889   | 9.066    | 0.177 |
| 10                       | 526      | 8.886   | 9.085    | 0.199 |
| 15                       | 540      | 8.883   | 9.072    | 0.189 |
| 15                       | 387      | 8.888   | 9.045    | 0.157 |
| 15                       | 787      | 8.855   | 9.108    | 0.253 |
| 15                       | 1042     | 8.869   | 9.026    | 0.157 |
| 15                       | 483      | 8.865   | 9.041    | 0.176 |
| 30                       | 597      | 8.898   | 9.054    | 0.156 |
| 30                       | 853      | 8.863   | 9.056    | 0.193 |
| 30                       | 416      | 8.907   | 9.076    | 0.169 |
| 30                       | 949      | 8.899   | 9.067    | 0.168 |
| 30                       | 221      | 8.904   | 9.044    | 0.140 |
| 35                       | 538      | 8.875   | 9.046    | 0.171 |
| 35                       | 164      | 8.905   | 9.050    | 0.145 |
| 35                       | 1018     | 8.868   | 9.017    | 0.149 |
| 35                       | 462      | 8.889   | 9.080    | 0.191 |
| 35                       | 1032     | 8.881   | 9.062    | 0.181 |
| 50                       | 566      | 8.900   | 9.031    | 0.131 |
| 50                       | 197      | 8.867   | 9.049    | 0.182 |
| 50                       | 793      | 8.892   | 9.069    | 0.177 |
| 50                       | 802      | 8.913   | 9.055    | 0.142 |
| 50                       | 61       | 8.896   | 9.057    | 0.161 |
| 55                       | 795      | 8.902   | 9.033    | 0.131 |
| 55                       | 921      | 8.893   | 9.049    | 0.156 |
| 55                       | 741      | 8.900   | 9.036    | 0.136 |
| 55                       | 809      | 8.916   | 9.044    | 0.128 |
| 55                       | 804      | 8.888   | 9.053    | 0.165 |
| 100                      | 449      | 8.907   | 9.025    | 0.118 |
| 100                      | 541      | 8.922   | 9.015    | 0.093 |
| 100                      | 476      | 8.889   | 9.024    | 0.135 |
| 100                      | 45       | 8.868   | 9.025    | 0.157 |
| 100                      | 642      | 8.894   | 8.990    | 0.096 |
| 105                      | 1036     | 8.880   | 9.009    | 0.129 |
| 105                      | 1038     | 8.880   | 9.001    | 0.121 |
| 105                      | 203      | 8.923   | 9.033    | 0.110 |
| 105                      | 1029     | 8.889   | 9.018    | 0.129 |
| 105                      | 1027     | 8.931   | 9.023    | 0.132 |
| 105                      | Max      | 8.937   | 9.154    | 0.253 |
| Average                  |          | 8.890   | 9.057    | 0.167 |
| Min                      |          | 8.855   | 8.990    | 0.093 |
| Std Dev                  |          | 0.018   | 0.032    | 0.036 |



| 9.38_T_SYNC_FALL_1MHz_5V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 14     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                     | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                      | 9.077  | 9.050  | 9.075  | 9.046  | 9.026  | 9.044  | 9.017  | 9.031  | 9.033  | 8.990  | 9.001  |
| Average                  | 9.112  | 9.066  | 9.097  | 9.073  | 9.058  | 9.059  | 9.051  | 9.052  | 9.043  | 9.016  | 9.017  |
| Max                      | 9.154  | 9.083  | 9.117  | 9.087  | 9.108  | 9.076  | 9.080  | 9.069  | 9.053  | 9.025  | 9.033  |
| UL                       | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

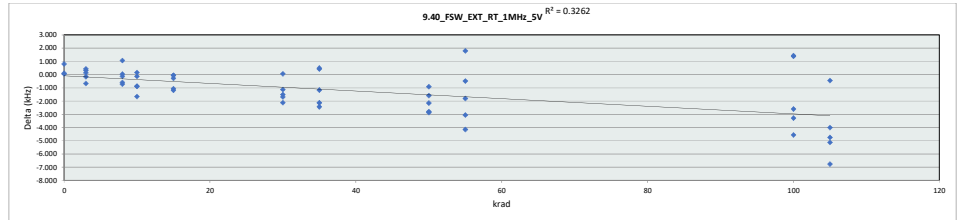


# HDR TID Report

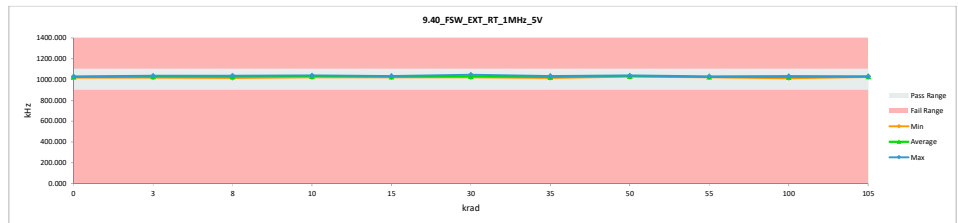
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.40_FSW_EXT_RT_1MHz_5V |          |          |          |        |
|-------------------------|----------|----------|----------|--------|
| Test Site               |          |          |          |        |
| Tester                  |          |          |          |        |
| Test Number             |          |          |          |        |
| Unit                    | kHz      | kHz      |          |        |
| Max Limit               | 1100     | 1100     |          |        |
| Min Limit               | 900      | 900      |          |        |
| krad                    | Serial # | PRE_HDR  | POST_HDR | Delta  |
| 0                       | 552      | 1017.855 | 1018.650 | 0.795  |
| 0                       | 726      | 1025.529 | 1025.631 | 0.102  |
| 0                       | 791      | 1028.749 | 1028.797 | 0.048  |
| 3                       | 689      | 1026.433 | 1026.562 | 0.129  |
| 3                       | 688      | 1029.074 | 1029.383 | 0.309  |
| 3                       | 700      | 1018.357 | 1018.782 | 0.425  |
| 3                       | 482      | 1036.346 | 1036.184 | -0.162 |
| 3                       | 1033     | 1027.605 | 1026.922 | -0.683 |
| 8                       | 442      | 1036.453 | 1036.487 | 0.034  |
| 8                       | 699      | 1026.421 | 1025.698 | -0.723 |
| 8                       | 344      | 1031.330 | 1030.731 | -0.599 |
| 8                       | 355      | 1024.276 | 1025.329 | 1.053  |
| 8                       | 750      | 1016.383 | 1016.249 | -0.134 |
| 10                      | 537      | 1022.471 | 1022.335 | -0.136 |
| 10                      | 396      | 1034.969 | 1034.089 | -0.880 |
| 10                      | 521      | 1040.953 | 1039.287 | -1.666 |
| 10                      | 535      | 1038.305 | 1037.410 | -0.895 |
| 10                      | 526      | 1028.378 | 1028.528 | 0.150  |
| 15                      | 540      | 1021.634 | 1021.343 | -0.291 |
| 15                      | 387      | 1034.835 | 1033.645 | -1.190 |
| 15                      | 787      | 1027.515 | 1027.457 | -0.058 |
| 15                      | 1042     | 1024.139 | 1023.061 | -1.078 |
| 15                      | 483      | 1028.238 | 1028.175 | -0.063 |
| 30                      | 597      | 1023.894 | 1022.755 | -1.139 |
| 30                      | 853      | 1045.594 | 1045.649 | 0.055  |
| 30                      | 416      | 1030.250 | 1028.735 | -1.515 |
| 30                      | 949      | 1030.506 | 1028.374 | -2.132 |
| 30                      | 221      | 1029.691 | 1027.999 | -1.692 |
| 35                      | 538      | 1035.806 | 1033.668 | -2.138 |
| 35                      | 164      | 1017.538 | 1017.958 | 0.420  |
| 35                      | 1018     | 1024.279 | 1024.766 | 0.487  |
| 35                      | 462      | 1016.778 | 1015.604 | -1.174 |
| 35                      | 1032     | 1027.671 | 1025.233 | -2.438 |
| 50                      | 566      | 1033.223 | 1031.629 | -1.594 |
| 50                      | 197      | 1037.726 | 1035.568 | -2.158 |
| 50                      | 793      | 1041.016 | 1038.211 | -2.805 |
| 50                      | 802      | 1035.052 | 1032.181 | -2.871 |
| 50                      | 61       | 1027.312 | 1026.387 | -0.925 |
| 55                      | 795      | 1025.991 | 1021.839 | -4.152 |
| 55                      | 921      | 1023.266 | 1021.457 | -1.809 |
| 55                      | 741      | 1030.404 | 1027.339 | -3.065 |
| 55                      | 809      | 1031.800 | 1031.306 | -0.494 |
| 55                      | 804      | 1021.295 | 1023.084 | 1.789  |
| 100                     | 449      | 1012.327 | 1013.749 | 1.422  |
| 100                     | 541      | 1027.546 | 1024.940 | -2.606 |
| 100                     | 476      | 1028.533 | 1023.966 | -4.567 |
| 100                     | 45       | 1035.649 | 1032.351 | -3.298 |
| 100                     | 642      | 1020.773 | 1022.150 | 1.377  |
| 105                     | 1036     | 1031.370 | 1030.911 | -0.459 |
| 105                     | 1038     | 1030.714 | 1025.959 | -4.755 |
| 105                     | 203      | 1035.127 | 1029.998 | -5.129 |
| 105                     | 1029     | 1032.340 | 1025.573 | -6.767 |
| 105                     | 1027     | 1032.571 | 1028.563 | -4.008 |
| 105                     | Max      | 1045.594 | 1045.649 | 1.789  |
| 105                     | Average  | 1028.722 | 1027.521 | -1.201 |
| 105                     | Min      | 1012.327 | 1013.749 | -6.767 |
| 105                     | Std Dev  | 6.917    | 6.378    | 1.799  |



| 9.40_FSW_EXT_RT_1MHz_5V |          |          |          |          |          |          |          |          |          |          |          |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site               |          |          |          |          |          |          |          |          |          |          |          |
| Tester                  |          |          |          |          |          |          |          |          |          |          |          |
| Test Number             |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit               | 1100     | kHz      |          |          |          |          |          |          |          |          |          |
| Min Limit               | 900      | kHz      |          |          |          |          |          |          |          |          |          |
| krad                    | 0        | 3        | 8        | 10       | 15       | 30       | 35       | 50       | 55       | 100      | 105      |
| LL                      | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  |
| Min                     | 1018.650 | 1018.782 | 1016.249 | 1022.335 | 1021.343 | 1022.755 | 1015.604 | 1026.387 | 1021.457 | 1013.749 | 1025.579 |
| Average                 | 1024.359 | 1027.567 | 1026.899 | 1032.330 | 1026.736 | 1030.702 | 1023.446 | 1032.795 | 1025.005 | 1023.431 | 1028.201 |
| Max                     | 1028.797 | 1036.184 | 1036.487 | 1039.287 | 1033.645 | 1045.649 | 1033.668 | 1038.211 | 1031.306 | 1032.351 | 1030.911 |
| UL                      | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 |

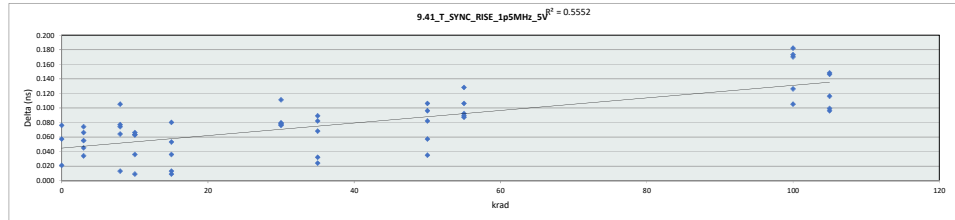


# HDR TID Report

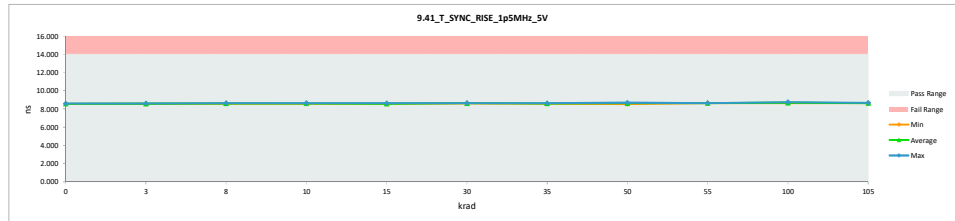
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.41_T_SYNC_RISE_1p5MHz_5V |          |         |          |       |
|----------------------------|----------|---------|----------|-------|
| Test Site                  |          |         |          |       |
| Tester                     |          |         |          |       |
| Test Number                |          |         |          |       |
| Unit                       |          |         |          |       |
| Max Limit                  |          |         |          |       |
| Min Limit                  |          |         |          |       |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                          | 552      | 8.570   | 8.591    | 0.021 |
| 0                          | 726      | 8.521   | 8.578    | 0.057 |
| 0                          | 791      | 8.484   | 8.560    | 0.076 |
| 3                          | 689      | 8.540   | 8.574    | 0.034 |
| 3                          | 688      | 8.543   | 8.617    | 0.074 |
| 3                          | 700      | 8.517   | 8.583    | 0.066 |
| 3                          | 482      | 8.544   | 8.599    | 0.055 |
| 3                          | 1033     | 8.542   | 8.557    | 0.045 |
| 8                          | 442      | 8.560   | 8.637    | 0.077 |
| 8                          | 699      | 8.524   | 8.598    | 0.074 |
| 8                          | 344      | 8.519   | 8.624    | 0.105 |
| 8                          | 355      | 8.524   | 8.588    | 0.064 |
| 8                          | 790      | 8.582   | 8.595    | 0.013 |
| 10                         | 537      | 8.542   | 8.578    | 0.036 |
| 10                         | 396      | 8.564   | 8.627    | 0.063 |
| 10                         | 521      | 8.576   | 8.642    | 0.066 |
| 10                         | 535      | 8.568   | 8.631    | 0.063 |
| 10                         | 526      | 8.576   | 8.585    | 0.009 |
| 15                         | 540      | 8.531   | 8.611    | 0.080 |
| 15                         | 387      | 8.581   | 8.634    | 0.053 |
| 15                         | 787      | 8.548   | 8.557    | 0.009 |
| 15                         | 1042     | 8.546   | 8.582    | 0.036 |
| 15                         | 483      | 8.564   | 8.577    | 0.013 |
| 30                         | 597      | 8.531   | 8.642    | 0.111 |
| 30                         | 853      | 8.546   | 8.623    | 0.077 |
| 30                         | 416      | 8.546   | 8.622    | 0.076 |
| 30                         | 949      | 8.525   | 8.604    | 0.079 |
| 30                         | 221      | 8.543   | 8.622    | 0.079 |
| 35                         | 538      | 8.543   | 8.632    | 0.089 |
| 35                         | 164      | 8.556   | 8.588    | 0.032 |
| 35                         | 1018     | 8.556   | 8.624    | 0.068 |
| 35                         | 462      | 8.534   | 8.616    | 0.082 |
| 35                         | 1032     | 8.541   | 8.565    | 0.024 |
| 50                         | 566      | 8.562   | 8.644    | 0.082 |
| 50                         | 197      | 8.520   | 8.555    | 0.035 |
| 50                         | 793      | 8.550   | 8.646    | 0.096 |
| 50                         | 802      | 8.558   | 8.615    | 0.057 |
| 50                         | 61       | 8.582   | 8.688    | 0.106 |
| 55                         | 795      | 8.538   | 8.630    | 0.092 |
| 55                         | 921      | 8.522   | 8.650    | 0.128 |
| 55                         | 741      | 8.555   | 8.644    | 0.089 |
| 55                         | 809      | 8.538   | 8.644    | 0.106 |
| 55                         | 804      | 8.557   | 8.644    | 0.087 |
| 100                        | 449      | 8.561   | 8.743    | 0.182 |
| 100                        | 541      | 8.530   | 8.656    | 0.126 |
| 100                        | 476      | 8.527   | 8.700    | 0.173 |
| 100                        | 45       | 8.559   | 8.664    | 0.105 |
| 100                        | 642      | 8.538   | 8.708    | 0.170 |
| 105                        | 1036     | 8.538   | 8.654    | 0.116 |
| 105                        | 1038     | 8.514   | 8.662    | 0.148 |
| 105                        | 203      | 8.503   | 8.649    | 0.146 |
| 105                        | 1029     | 8.545   | 8.641    | 0.096 |
| 105                        | 1027     | 8.563   | 8.662    | 0.099 |
| 105                        | Max      | 8.582   | 8.743    | 0.182 |
| 105                        | Average  | 8.544   | 8.622    | 0.078 |
| 105                        | Min      | 8.484   | 8.555    | 0.009 |
| 105                        | Std Dev  | 0.021   | 0.040    | 0.041 |



| 9.41_T_SYNC_RISE_1p5MHz_5V |        |        |        |        |        |        |        |        |        |        |        |        |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                  |        |        |        |        |        |        |        |        |        |        |        |        |
| Tester                     |        |        |        |        |        |        |        |        |        |        |        |        |
| Test Number                |        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                  |        |        |        |        |        |        |        |        |        |        |        |        |
| Min Limit                  |        |        |        |        |        |        |        |        |        |        |        |        |
|                            | krad   | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                         | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                        | 8.560  | 8.557  | 8.588  | 8.578  | 8.578  | 8.557  | 8.604  | 8.565  | 8.555  | 8.630  | 8.656  | 8.641  |
| Average                    | 8.576  | 8.586  | 8.608  | 8.613  | 8.592  | 8.623  | 8.605  | 8.630  | 8.642  | 8.694  | 8.654  | 8.654  |
| Max                        | 8.591  | 8.617  | 8.637  | 8.642  | 8.634  | 8.642  | 8.632  | 8.688  | 8.650  | 8.743  | 8.662  | 8.662  |
| UL                         | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

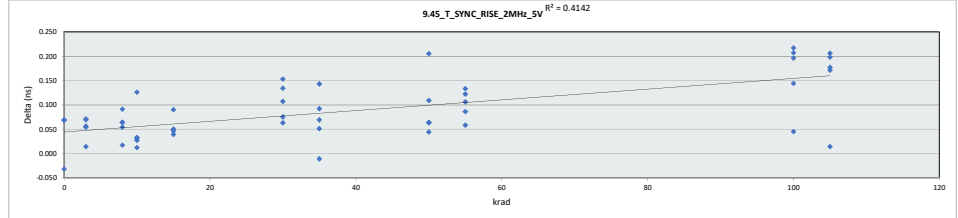


# HDR TID Report

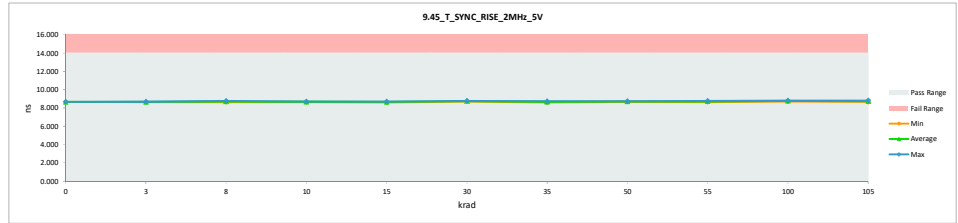
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.45_T_SYNC_RISE_2MHz_5V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 8.685   | 8.653    | -0.032 |
| 0                        | 726      | 8.603   | 8.671    | 0.068  |
| 0                        | 791      | 8.592   | 8.661    | 0.069  |
| 3                        | 689      | 8.628   | 8.682    | 0.054  |
| 3                        | 688      | 8.578   | 8.647    | 0.069  |
| 3                        | 700      | 8.564   | 8.620    | 0.056  |
| 3                        | 482      | 8.659   | 8.673    | 0.014  |
| 3                        | 1033     | 8.611   | 8.682    | 0.071  |
| 8                        | 442      | 8.657   | 8.711    | 0.054  |
| 8                        | 699      | 8.606   | 8.670    | 0.064  |
| 8                        | 344      | 8.623   | 8.640    | 0.017  |
| 8                        | 355      | 8.632   | 8.696    | 0.064  |
| 8                        | 750      | 8.686   | 8.777    | 0.091  |
| 10                       | 537      | 8.590   | 8.716    | 0.126  |
| 10                       | 396      | 8.641   | 8.668    | 0.027  |
| 10                       | 521      | 8.644   | 8.675    | 0.031  |
| 10                       | 535      | 8.668   | 8.701    | 0.033  |
| 10                       | 526      | 8.638   | 8.650    | 0.012  |
| 15                       | 540      | 8.597   | 8.687    | 0.090  |
| 15                       | 387      | 8.649   | 8.699    | 0.050  |
| 15                       | 787      | 8.604   | 8.650    | 0.046  |
| 15                       | 1042     | 8.564   | 8.603    | 0.039  |
| 15                       | 483      | 8.627   | 8.676    | 0.049  |
| 30                       | 597      | 8.633   | 8.740    | 0.107  |
| 30                       | 853      | 8.647   | 8.710    | 0.063  |
| 30                       | 416      | 8.608   | 8.761    | 0.153  |
| 30                       | 949      | 8.634   | 8.768    | 0.134  |
| 30                       | 221      | 8.621   | 8.696    | 0.075  |
| 35                       | 538      | 8.621   | 8.690    | 0.069  |
| 35                       | 164      | 8.639   | 8.731    | 0.092  |
| 35                       | 1018     | 8.605   | 8.656    | 0.051  |
| 35                       | 462      | 8.594   | 8.737    | 0.143  |
| 35                       | 1032     | 8.599   | 8.588    | -0.011 |
| 50                       | 566      | 8.648   | 8.692    | 0.044  |
| 50                       | 197      | 8.525   | 8.730    | 0.205  |
| 50                       | 793      | 8.622   | 8.731    | 0.109  |
| 50                       | 802      | 8.622   | 8.685    | 0.063  |
| 50                       | 61       | 8.626   | 8.690    | 0.064  |
| 55                       | 795      | 8.628   | 8.750    | 0.122  |
| 55                       | 921      | 8.613   | 8.719    | 0.106  |
| 55                       | 741      | 8.639   | 8.772    | 0.133  |
| 55                       | 809      | 8.557   | 8.643    | 0.086  |
| 55                       | 804      | 8.642   | 8.700    | 0.058  |
| 100                      | 449      | 8.667   | 8.811    | 0.144  |
| 100                      | 541      | 8.600   | 8.807    | 0.207  |
| 100                      | 476      | 8.580   | 8.797    | 0.217  |
| 100                      | 45       | 8.603   | 8.799    | 0.196  |
| 100                      | 642      | 8.652   | 8.697    | 0.045  |
| 105                      | 1036     | 8.644   | 8.821    | 0.177  |
| 105                      | 1038     | 8.502   | 8.700    | 0.198  |
| 105                      | 203      | 8.596   | 8.802    | 0.206  |
| 105                      | 1029     | 8.605   | 8.776    | 0.171  |
| 105                      | 1027     | 8.642   | 8.656    | 0.014  |
| 105                      | Max      | 8.686   | 8.821    | 0.217  |
| 105                      | Average  | 8.618   | 8.705    | 0.087  |
| 105                      | Min      | 8.502   | 8.588    | -0.032 |
| 105                      | Std Dev  | 0.036   | 0.055    | 0.061  |



| 9.45_T_SYNC_RISE_2MHz_5V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 14     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                     | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                      | 8.653  | 8.620  | 8.640  | 8.650  | 8.603  | 8.696  | 8.588  | 8.685  | 8.643  | 8.697  | 8.656  |
| Average                  | 8.662  | 8.661  | 8.699  | 8.682  | 8.663  | 8.735  | 8.680  | 8.706  | 8.717  | 8.782  | 8.751  |
| Max                      | 8.671  | 8.682  | 8.777  | 8.716  | 8.699  | 8.768  | 8.737  | 8.731  | 8.772  | 8.811  | 8.821  |
| UL                       | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

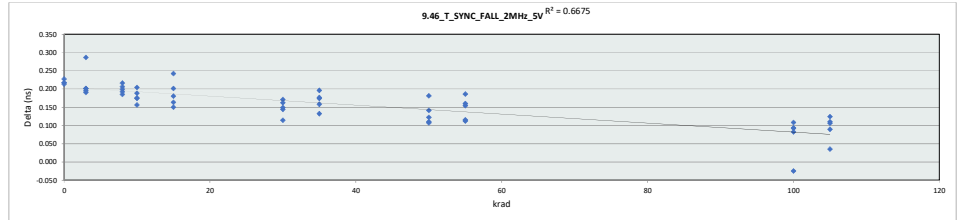


# HDR TID Report

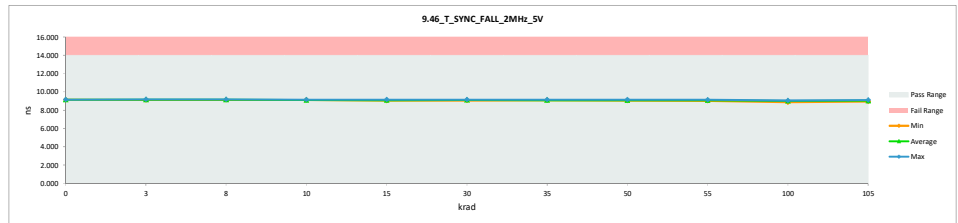
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.46_T_SYNC_FALL_2MHz_5V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 8.921   | 9.138    | 0.217  |
| 0                        | 726      | 8.946   | 9.159    | 0.213  |
| 0                        | 791      | 8.930   | 9.157    | 0.227  |
| 3                        | 689      | 8.908   | 9.194    | 0.286  |
| 3                        | 688      | 8.958   | 9.153    | 0.195  |
| 3                        | 700      | 8.915   | 9.116    | 0.201  |
| 3                        | 482      | 8.957   | 9.147    | 0.190  |
| 3                        | 1033     | 8.945   | 9.146    | 0.201  |
| 8                        | 442      | 8.978   | 9.163    | 0.185  |
| 8                        | 699      | 8.930   | 9.136    | 0.206  |
| 8                        | 344      | 8.983   | 9.182    | 0.199  |
| 8                        | 355      | 8.971   | 9.163    | 0.192  |
| 8                        | 750      | 8.904   | 9.120    | 0.216  |
| 10                       | 537      | 8.951   | 9.155    | 0.204  |
| 10                       | 396      | 8.972   | 9.128    | 0.156  |
| 10                       | 521      | 8.932   | 9.107    | 0.175  |
| 10                       | 535      | 8.963   | 9.137    | 0.174  |
| 10                       | 526      | 8.938   | 9.126    | 0.188  |
| 15                       | 540      | 8.889   | 9.090    | 0.201  |
| 15                       | 387      | 8.957   | 9.120    | 0.163  |
| 15                       | 787      | 8.926   | 9.168    | 0.242  |
| 15                       | 1042     | 8.878   | 9.028    | 0.150  |
| 15                       | 483      | 8.940   | 9.120    | 0.180  |
| 30                       | 597      | 8.952   | 9.066    | 0.114  |
| 30                       | 853      | 8.950   | 9.094    | 0.144  |
| 30                       | 416      | 8.984   | 9.146    | 0.162  |
| 30                       | 949      | 8.987   | 9.158    | 0.171  |
| 30                       | 221      | 8.931   | 9.080    | 0.149  |
| 35                       | 538      | 8.931   | 9.105    | 0.174  |
| 35                       | 164      | 8.926   | 9.084    | 0.158  |
| 35                       | 1018     | 8.945   | 9.077    | 0.132  |
| 35                       | 462      | 8.959   | 9.155    | 0.196  |
| 35                       | 1032     | 8.920   | 9.096    | 0.176  |
| 50                       | 566      | 8.941   | 9.048    | 0.107  |
| 50                       | 197      | 8.969   | 9.150    | 0.181  |
| 50                       | 793      | 8.955   | 9.077    | 0.122  |
| 50                       | 802      | 8.982   | 9.092    | 0.110  |
| 50                       | 61       | 8.915   | 9.056    | 0.141  |
| 55                       | 795      | 8.947   | 9.133    | 0.186  |
| 55                       | 921      | 8.923   | 9.035    | 0.112  |
| 55                       | 741      | 8.954   | 9.114    | 0.160  |
| 55                       | 809      | 8.908   | 9.023    | 0.115  |
| 55                       | 804      | 8.952   | 9.106    | 0.154  |
| 100                      | 449      | 8.952   | 9.060    | 0.108  |
| 100                      | 541      | 8.971   | 9.064    | 0.093  |
| 100                      | 476      | 8.956   | 9.048    | 0.092  |
| 100                      | 45       | 8.948   | 9.030    | 0.082  |
| 100                      | 642      | 8.981   | 8.856    | -0.025 |
| 105                      | 1036     | 8.939   | 9.045    | 0.106  |
| 105                      | 1038     | 8.906   | 8.995    | 0.089  |
| 105                      | 203      | 8.990   | 9.114    | 0.124  |
| 105                      | 1029     | 8.947   | 9.057    | 0.110  |
| 105                      | 1027     | 8.925   | 8.960    | 0.035  |
| 105                      | Max      | 8.990   | 9.194    | 0.286  |
| Average                  |          | 8.942   | 9.100    | 0.157  |
| Min                      |          | 8.878   | 8.856    | -0.025 |
| Std Dev                  |          | 0.026   | 0.061    | 0.054  |



| 9.46_T_SYNC_FALL_2MHz_5V |      |        |        |        |        |        |        |        |        |        |        |
|--------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |      |        |        |        |        |        |        |        |        |        |        |
| Tester                   |      |        |        |        |        |        |        |        |        |        |        |
| Test Number              |      |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 14   | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 0    | ns     |        |        |        |        |        |        |        |        |        |
|                          | krad |        |        |        |        |        |        |        |        |        |        |
|                          |      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    |
| Average                  | LL   | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|                          | Min  | 9.138  | 9.116  | 9.120  | 9.107  | 9.028  | 9.066  | 9.077  | 9.048  | 9.023  | 8.856  |
|                          |      | 9.151  | 9.151  | 9.153  | 9.131  | 9.105  | 9.109  | 9.103  | 9.085  | 9.082  | 9.012  |
|                          | Max  | 9.159  | 9.194  | 9.182  | 9.155  | 9.168  | 9.158  | 9.155  | 9.150  | 9.133  | 9.064  |
|                          | UL   | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

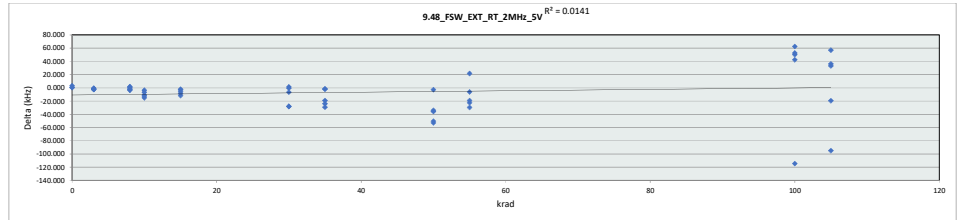


# HDR TID Report

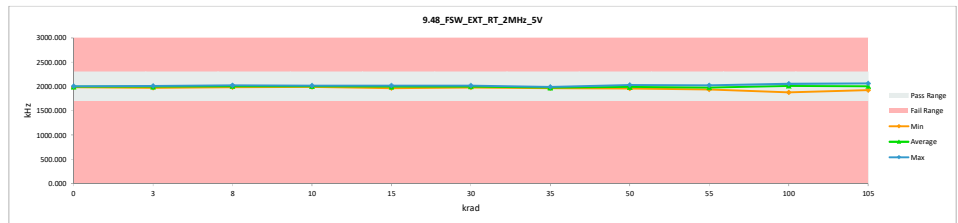
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.48_FSW_EXT_RT_2MHz_5V |          |          |          |          |
|-------------------------|----------|----------|----------|----------|
| Test Site               |          |          |          |          |
| Tester                  |          |          |          |          |
| Test Number             |          |          |          |          |
| Unit                    | kHz      | kHz      |          |          |
| Max Limit               | 2300     | 2300     |          |          |
| Min Limit               | 1700     | 1700     |          |          |
| krad                    | Serial # | PRE_HDR  | POST_HDR | Delta    |
| 0                       | 552      | 1979.744 | 1982.823 | 3.079    |
| 0                       | 726      | 2004.993 | 2005.577 | 0.584    |
| 0                       | 791      | 1996.262 | 1996.430 | 0.168    |
| 3                       | 689      | 1988.463 | 1987.926 | -0.537   |
| 3                       | 688      | 2007.246 | 2006.070 | -1.176   |
| 3                       | 700      | 1975.030 | 1972.665 | -2.365   |
| 3                       | 482      | 2011.936 | 2009.463 | -2.473   |
| 3                       | 1033     | 1998.724 | 1995.999 | -2.725   |
| 8                       | 442      | 2023.670 | 2021.916 | -1.754   |
| 8                       | 699      | 2005.583 | 2001.994 | -3.589   |
| 8                       | 344      | 2014.771 | 2011.792 | -2.979   |
| 8                       | 355      | 2004.249 | 2005.958 | 1.709    |
| 8                       | 750      | 1982.255 | 1982.860 | 0.605    |
| 10                      | 537      | 1995.013 | 1995.145 | -3.868   |
| 10                      | 396      | 2023.932 | 2017.107 | -6.825   |
| 10                      | 521      | 2020.364 | 2005.151 | -15.213  |
| 10                      | 535      | 2014.923 | 2003.859 | -11.064  |
| 10                      | 526      | 2001.459 | 1989.022 | -12.437  |
| 15                      | 540      | 1984.904 | 1979.184 | -5.720   |
| 15                      | 387      | 2029.291 | 2017.360 | -11.931  |
| 15                      | 787      | 2013.625 | 2011.356 | -2.269   |
| 15                      | 1042     | 1975.613 | 1966.900 | -8.713   |
| 15                      | 483      | 2006.865 | 2003.790 | -3.075   |
| 30                      | 597      | 1984.809 | 1978.096 | -6.713   |
| 30                      | 853      | 2045.500 | 2017.470 | -28.030  |
| 30                      | 416      | 2003.038 | 2004.383 | 1.345    |
| 30                      | 949      | 2006.894 | 2006.211 | -0.683   |
| 30                      | 221      | 2008.411 | 1979.910 | -28.501  |
| 35                      | 538      | 2013.921 | 1989.740 | -24.181  |
| 35                      | 164      | 1968.706 | 1967.103 | -1.603   |
| 35                      | 1018     | 1998.121 | 1968.759 | -29.362  |
| 35                      | 462      | 1988.257 | 1986.158 | -2.099   |
| 35                      | 1032     | 1985.914 | 1966.483 | -19.431  |
| 50                      | 566      | 2023.296 | 1987.431 | -35.865  |
| 50                      | 197      | 2031.391 | 2028.389 | -3.002   |
| 50                      | 793      | 2029.213 | 1985.209 | -34.004  |
| 50                      | 802      | 2019.265 | 1968.728 | -50.537  |
| 50                      | 61       | 2009.129 | 1956.076 | -53.053  |
| 55                      | 795      | 2002.601 | 1996.297 | -6.304   |
| 55                      | 921      | 1986.353 | 1963.671 | -22.682  |
| 55                      | 741      | 2000.262 | 2021.895 | 21.633   |
| 55                      | 809      | 1966.928 | 1937.150 | -29.778  |
| 55                      | 804      | 1990.701 | 1971.278 | -19.423  |
| 100                     | 449      | 1963.713 | 2026.042 | 62.329   |
| 100                     | 541      | 1996.705 | 2049.266 | 52.561   |
| 100                     | 476      | 2004.396 | 2054.378 | 49.982   |
| 100                     | 45       | 2012.416 | 2054.682 | 42.266   |
| 100                     | 642      | 1991.366 | 1876.725 | -114.641 |
| 105                     | 1036     | 2004.840 | 2061.700 | 56.860   |
| 105                     | 1038     | 1970.465 | 1950.905 | -19.560  |
| 105                     | 203      | 2024.286 | 2060.406 | 36.120   |
| 105                     | 1029     | 2001.983 | 2035.028 | 33.045   |
| 105                     | 1027     | 2018.364 | 1923.175 | -95.189  |
| 105                     | Max      | 2045.500 | 2061.700 | 62.329   |
| 105                     | Average  | 2002.154 | 1995.341 | -6.813   |
| 105                     | Min      | 1963.713 | 1876.725 | -114.641 |
| 105                     | Std Dev  | 18.070   | 33.991   | 31.368   |



| 9.48_FSW_EXT_RT_2MHz_5V |          |          |          |          |          |          |          |          |          |          |          |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site               |          |          |          |          |          |          |          |          |          |          |          |
| Tester                  |          |          |          |          |          |          |          |          |          |          |          |
| Test Number             |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit               | 2300     | kHz      |          |          |          |          |          |          |          |          |          |
| Min Limit               | 1700     | kHz      |          |          |          |          |          |          |          |          |          |
| krad                    | 0        | 3        | 8        | 10       | 15       | 30       | 35       | 50       | 55       | 100      | 105      |
| LL                      | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 |
| Min                     | 1982.823 | 1972.665 | 1982.860 | 1989.022 | 1966.900 | 1978.096 | 1966.483 | 1956.076 | 1937.150 | 1876.725 | 1923.175 |
| Average                 | 1994.943 | 1994.425 | 2004.904 | 2002.057 | 1995.718 | 1997.214 | 1975.649 | 1987.167 | 1978.058 | 2012.219 | 2006.243 |
| Max                     | 2005.577 | 2009.463 | 2021.916 | 2017.107 | 2017.360 | 2017.470 | 1989.740 | 2028.389 | 2021.895 | 2054.682 | 2061.700 |
| UL                      | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 |

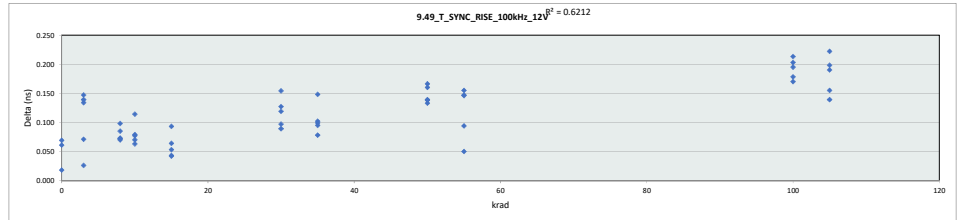


# HDR TID Report

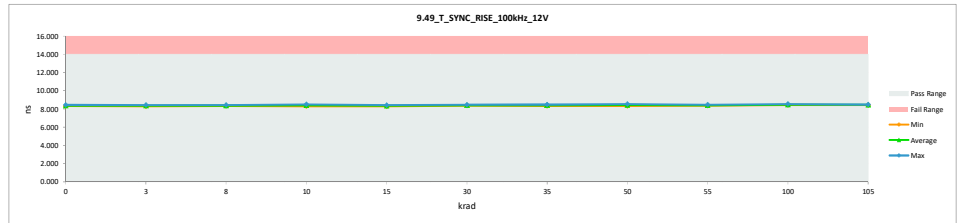
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.49_T_SYNC_RISE_100kHz_12V |          |         |          |       |
|-----------------------------|----------|---------|----------|-------|
| Test Site                   |          |         |          |       |
| Tester                      |          |         |          |       |
| Test Number                 |          |         |          |       |
| Unit                        | ns       | ns      |          |       |
| Max Limit                   | 14       | 14      |          |       |
| Min Limit                   | 0        | 0       |          |       |
| krad                        | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                           | 552      | 8.385   | 8.446    | 0.061 |
| 0                           | 726      | 8.280   | 8.349    | 0.069 |
| 0                           | 791      | 8.291   | 8.309    | 0.018 |
| 3                           | 689      | 8.290   | 8.437    | 0.147 |
| 3                           | 688      | 8.312   | 8.338    | 0.026 |
| 3                           | 700      | 8.211   | 8.282    | 0.071 |
| 3                           | 482      | 8.285   | 8.424    | 0.139 |
| 3                           | 1033     | 8.229   | 8.363    | 0.134 |
| 8                           | 442      | 8.279   | 8.352    | 0.073 |
| 8                           | 699      | 8.339   | 8.437    | 0.098 |
| 8                           | 344      | 8.289   | 8.361    | 0.072 |
| 8                           | 355      | 8.261   | 8.331    | 0.070 |
| 8                           | 750      | 8.338   | 8.423    | 0.085 |
| 10                          | 537      | 8.383   | 8.507    | 0.114 |
| 10                          | 396      | 8.344   | 8.423    | 0.079 |
| 10                          | 521      | 8.293   | 8.370    | 0.077 |
| 10                          | 535      | 8.373   | 8.436    | 0.063 |
| 10                          | 526      | 8.229   | 8.299    | 0.070 |
| 15                          | 540      | 8.286   | 8.379    | 0.093 |
| 15                          | 387      | 8.342   | 8.395    | 0.053 |
| 15                          | 787      | 8.211   | 8.275    | 0.064 |
| 15                          | 1042     | 8.378   | 8.420    | 0.042 |
| 15                          | 483      | 8.244   | 8.287    | 0.043 |
| 30                          | 597      | 8.337   | 8.464    | 0.127 |
| 30                          | 853      | 8.266   | 8.363    | 0.097 |
| 30                          | 416      | 8.295   | 8.414    | 0.119 |
| 30                          | 949      | 8.309   | 8.398    | 0.089 |
| 30                          | 221      | 8.263   | 8.417    | 0.154 |
| 35                          | 538      | 8.388   | 8.483    | 0.095 |
| 35                          | 164      | 8.224   | 8.372    | 0.148 |
| 35                          | 1018     | 8.303   | 8.381    | 0.078 |
| 35                          | 462      | 8.313   | 8.415    | 0.102 |
| 35                          | 1032     | 8.246   | 8.345    | 0.099 |
| 50                          | 566      | 8.326   | 8.486    | 0.160 |
| 50                          | 197      | 8.160   | 8.326    | 0.166 |
| 50                          | 793      | 8.247   | 8.385    | 0.138 |
| 50                          | 802      | 8.391   | 8.500    | 0.109 |
| 50                          | 61       | 8.381   | 8.514    | 0.133 |
| 55                          | 795      | 8.308   | 8.454    | 0.146 |
| 55                          | 921      | 8.244   | 8.391    | 0.147 |
| 55                          | 741      | 8.286   | 8.380    | 0.094 |
| 55                          | 809      | 8.308   | 8.358    | 0.050 |
| 55                          | 804      | 8.316   | 8.471    | 0.155 |
| 100                         | 449      | 8.340   | 8.543    | 0.203 |
| 100                         | 541      | 8.317   | 8.487    | 0.170 |
| 100                         | 476      | 8.241   | 8.454    | 0.213 |
| 100                         | 45       | 8.274   | 8.452    | 0.178 |
| 100                         | 642      | 8.255   | 8.450    | 0.195 |
| 105                         | 1036     | 8.332   | 8.471    | 0.139 |
| 105                         | 1038     | 8.274   | 8.464    | 0.190 |
| 105                         | 203      | 8.264   | 8.419    | 0.155 |
| 105                         | 1029     | 8.241   | 8.463    | 0.222 |
| 105                         | 1027     | 8.288   | 8.486    | 0.198 |
| 105                         | Max      | 8.393   | 8.543    | 0.222 |
| 105                         | Average  | 8.295   | 8.409    | 0.114 |
| 105                         | Min      | 8.160   | 8.275    | 0.018 |
| 105                         | Std Dev  | 0.052   | 0.065    | 0.051 |



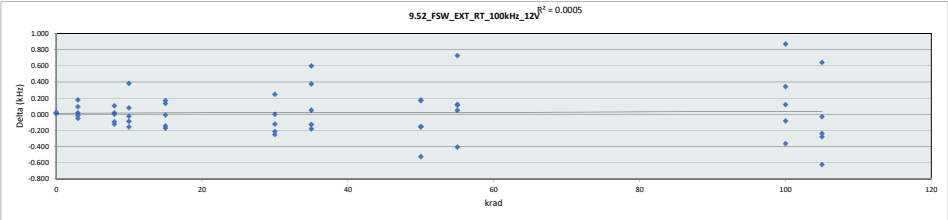
| 9.49_T_SYNC_RISE_100kHz_1 |      |        |        |        |        |        |        |        |        |        |        |
|---------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |      |        |        |        |        |        |        |        |        |        |        |
| Tester                    |      |        |        |        |        |        |        |        |        |        |        |
| Test Number               |      |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14   | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0    | ns     |        |        |        |        |        |        |        |        |        |
|                           | krad |        |        |        |        |        |        |        |        |        |        |
| Average                   | LL   | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|                           | Min  | 8.309  | 8.282  | 8.331  | 8.299  | 8.275  | 8.363  | 8.345  | 8.326  | 8.358  | 8.450  |
|                           |      | 8.368  | 8.369  | 8.381  | 8.407  | 8.351  | 8.411  | 8.399  | 8.448  | 8.411  | 8.477  |
|                           | Max  | 8.446  | 8.437  | 8.437  | 8.507  | 8.420  | 8.464  | 8.483  | 8.530  | 8.471  | 8.543  |
|                           | UL   | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |



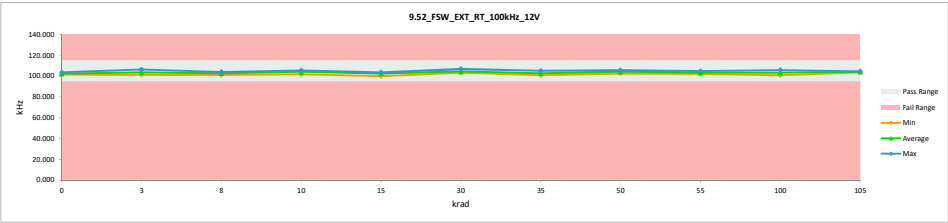
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.52_FSW_EXT_RT_100kHz_12V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 101.435 | 101.446  | 0.011  |
| 0                          | 726      | 101.635 | 101.659  | 0.024  |
| 0                          | 791      | 103.560 | 103.570  | 0.010  |
| 3                          | 689      | 102.634 | 102.649  | 0.015  |
| 3                          | 688      | 103.917 | 103.898  | -0.019 |
| 3                          | 700      | 101.072 | 101.249  | 0.177  |
| 3                          | 482      | 106.074 | 106.166  | 0.092  |
| 3                          | 1033     | 103.496 | 103.442  | -0.054 |
| 8                          | 442      | 103.811 | 103.808  | -0.003 |
| 8                          | 699      | 103.232 | 103.137  | -0.095 |
| 8                          | 344      | 102.656 | 102.672  | 0.016  |
| 8                          | 355      | 101.890 | 101.993  | 0.103  |
| 8                          | 750      | 101.217 | 101.094  | -0.123 |
| 10                         | 537      | 101.651 | 101.728  | 0.077  |
| 10                         | 396      | 103.712 | 103.623  | -0.089 |
| 10                         | 521      | 105.196 | 105.039  | -0.157 |
| 10                         | 535      | 105.480 | 105.455  | -0.025 |
| 10                         | 526      | 104.011 | 104.392  | 0.381  |
| 15                         | 540      | 103.140 | 103.307  | 0.167  |
| 15                         | 387      | 103.085 | 102.913  | -0.172 |
| 15                         | 787      | 102.916 | 102.905  | -0.011 |
| 15                         | 1042     | 100.030 | 99.884   | -0.146 |
| 15                         | 483      | 103.420 | 103.552  | 0.132  |
| 30                         | 597      | 103.251 | 103.128  | -0.123 |
| 30                         | 853      | 106.511 | 106.756  | 0.245  |
| 30                         | 416      | 104.026 | 103.811  | -0.215 |
| 30                         | 949      | 104.522 | 104.269  | -0.253 |
| 30                         | 221      | 103.674 | 103.673  | -0.001 |
| 35                         | 538      | 105.121 | 104.993  | -0.128 |
| 35                         | 164      | 102.173 | 102.770  | 0.597  |
| 35                         | 1018     | 101.761 | 102.135  | 0.374  |
| 35                         | 462      | 100.723 | 100.772  | 0.049  |
| 35                         | 1032     | 102.425 | 102.242  | -0.183 |
| 50                         | 566      | 104.232 | 104.400  | 0.168  |
| 50                         | 197      | 105.372 | 105.546  | 0.174  |
| 50                         | 793      | 105.570 | 105.416  | -0.154 |
| 50                         | 802      | 104.065 | 103.540  | -0.525 |
| 50                         | 61       | 102.589 | 102.431  | -0.158 |
| 55                         | 795      | 102.433 | 102.027  | -0.406 |
| 55                         | 921      | 102.512 | 102.559  | 0.047  |
| 55                         | 741      | 104.636 | 104.747  | 0.111  |
| 55                         | 809      | 103.937 | 104.057  | 0.120  |
| 55                         | 804      | 101.503 | 102.227  | 0.724  |
| 100                        | 449      | 100.400 | 100.742  | 0.342  |
| 100                        | 541      | 102.899 | 102.815  | -0.084 |
| 100                        | 476      | 103.529 | 103.165  | -0.364 |
| 100                        | 45       | 105.623 | 105.741  | 0.118  |
| 100                        | 642      | 103.031 | 103.899  | 0.868  |
| 105                        | 1036     | 103.923 | 104.562  | 0.639  |
| 105                        | 1038     | 103.737 | 103.706  | -0.031 |
| 105                        | 203      | 104.597 | 104.317  | -0.280 |
| 105                        | 1029     | 105.157 | 104.533  | -0.624 |
| 105                        | 1027     | 103.872 | 103.832  | -0.040 |
| Max                        |          | 106.511 | 106.756  | 0.868  |
| Average                    |          | 103.341 | 103.362  | 0.021  |
| Min                        |          | 100.030 | 99.884   | -0.624 |
| Std Dev                    |          | 1.484   | 1.457    | 0.282  |



| 9.52_FSW_EXT_RT_100kHz_12V |         |         |         |         |         |         |         |         |         |         |         |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site                  |         |         |         |         |         |         |         |         |         |         |         |
| Tester                     |         |         |         |         |         |         |         |         |         |         |         |
| Test Number                |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit                  |         |         |         |         |         |         |         |         |         |         |         |
| Min Limit                  |         |         |         |         |         |         |         |         |         |         |         |
| krad                       | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                         | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  |
| Min                        | 101.446 | 101.249 | 101.094 | 101.728 | 99.884  | 103.128 | 100.772 | 102.431 | 102.027 | 100.742 | 103.632 |
| Average                    | 102.225 | 103.481 | 102.541 | 104.047 | 102.512 | 104.327 | 102.582 | 104.267 | 103.123 | 103.272 | 104.150 |
| Max                        | 103.570 | 106.166 | 103.808 | 105.455 | 103.552 | 106.756 | 104.993 | 105.546 | 104.747 | 105.741 | 104.562 |
| UL                         | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 |

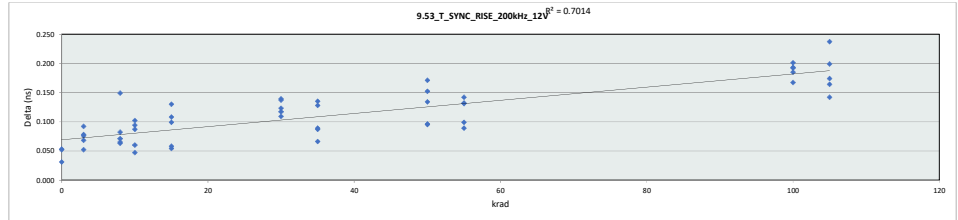


# HDR TID Report

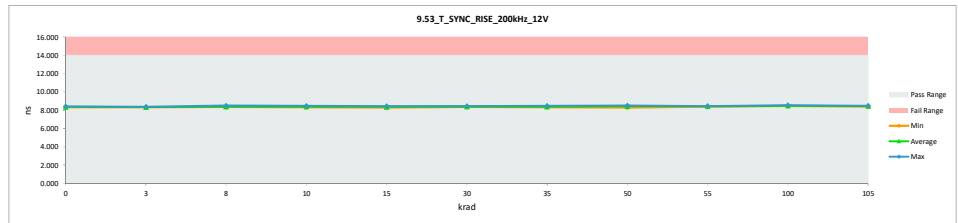
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.53_T_SYNC_RISE_200kHz_12V |          |         |          |       |
|-----------------------------|----------|---------|----------|-------|
| Test Site                   |          |         |          |       |
| Tester                      |          |         |          |       |
| Test Number                 |          |         |          |       |
| Unit                        |          |         |          |       |
| Max Limit                   |          |         |          |       |
| Min Limit                   |          |         |          |       |
| krad                        | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                           | 552      | 8.394   | 8.425    | 0.031 |
| 0                           | 726      | 8.300   | 8.352    | 0.052 |
| 0                           | 791      | 8.271   | 8.324    | 0.053 |
| 3                           | 689      | 8.321   | 8.373    | 0.052 |
| 3                           | 688      | 8.281   | 8.349    | 0.068 |
| 3                           | 700      | 8.214   | 8.306    | 0.092 |
| 3                           | 482      | 8.272   | 8.350    | 0.078 |
| 3                           | 1033     | 8.245   | 8.321    | 0.076 |
| 8                           | 442      | 8.281   | 8.346    | 0.065 |
| 8                           | 699      | 8.326   | 8.408    | 0.082 |
| 8                           | 344      | 8.263   | 8.334    | 0.071 |
| 8                           | 355      | 8.299   | 8.362    | 0.063 |
| 8                           | 750      | 8.350   | 8.499    | 0.149 |
| 10                          | 537      | 8.372   | 8.474    | 0.102 |
| 10                          | 396      | 8.338   | 8.385    | 0.047 |
| 10                          | 521      | 8.257   | 8.344    | 0.087 |
| 10                          | 535      | 8.328   | 8.422    | 0.094 |
| 10                          | 526      | 8.250   | 8.310    | 0.060 |
| 15                          | 540      | 8.299   | 8.357    | 0.058 |
| 15                          | 387      | 8.326   | 8.434    | 0.108 |
| 15                          | 787      | 8.220   | 8.319    | 0.099 |
| 15                          | 1042     | 8.317   | 8.447    | 0.130 |
| 15                          | 483      | 8.238   | 8.292    | 0.054 |
| 30                          | 597      | 8.340   | 8.449    | 0.109 |
| 30                          | 853      | 8.225   | 8.348    | 0.123 |
| 30                          | 416      | 8.261   | 8.400    | 0.139 |
| 30                          | 949      | 8.269   | 8.386    | 0.117 |
| 30                          | 221      | 8.245   | 8.382    | 0.137 |
| 35                          | 538      | 8.391   | 8.480    | 0.089 |
| 35                          | 164      | 8.246   | 8.374    | 0.128 |
| 35                          | 1018     | 8.263   | 8.350    | 0.087 |
| 35                          | 462      | 8.268   | 8.403    | 0.135 |
| 35                          | 1032     | 8.252   | 8.318    | 0.066 |
| 50                          | 566      | 8.365   | 8.460    | 0.095 |
| 50                          | 197      | 8.199   | 8.295    | 0.096 |
| 50                          | 793      | 8.296   | 8.430    | 0.134 |
| 50                          | 802      | 8.366   | 8.518    | 0.152 |
| 50                          | 61       | 8.312   | 8.483    | 0.171 |
| 55                          | 795      | 8.321   | 8.420    | 0.099 |
| 55                          | 921      | 8.273   | 8.415    | 0.142 |
| 55                          | 741      | 8.267   | 8.399    | 0.132 |
| 55                          | 809      | 8.286   | 8.375    | 0.089 |
| 55                          | 804      | 8.332   | 8.463    | 0.131 |
| 100                         | 449      | 8.381   | 8.548    | 0.167 |
| 100                         | 541      | 8.305   | 8.497    | 0.192 |
| 100                         | 476      | 8.246   | 8.447    | 0.201 |
| 100                         | 45       | 8.285   | 8.470    | 0.185 |
| 100                         | 642      | 8.272   | 8.465    | 0.193 |
| 105                         | 1036     | 8.328   | 8.492    | 0.164 |
| 105                         | 1038     | 8.236   | 8.473    | 0.237 |
| 105                         | 203      | 8.225   | 8.424    | 0.199 |
| 105                         | 1029     | 8.263   | 8.405    | 0.142 |
| 105                         | 1027     | 8.258   | 8.432    | 0.174 |
| 105                         | Max      | 8.394   | 8.548    | 0.237 |
| 105                         | Average  | 8.289   | 8.403    | 0.113 |
| 105                         | Min      | 8.199   | 8.292    | 0.031 |
| 105                         | Std Dev  | 0.048   | 0.064    | 0.048 |



| 9.53_T_SYNC_RISE_200kHz_1 |       |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |       |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |       |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |       |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 |       |        |        |        |        |        |        |        |        |        |        |        |
| Min Limit                 |       |        |        |        |        |        |        |        |        |        |        |        |
|                           | 14    | ns     |        |        |        |        |        |        |        |        |        |        |
|                           | 0     | ns     |        |        |        |        |        |        |        |        |        |        |
|                           | krad  |        |        |        |        |        |        |        |        |        |        |        |
| Average                   | 0.000 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |        |
|                           | Min   | 8.324  | 8.306  | 8.334  | 8.310  | 8.292  | 8.348  | 8.318  | 8.295  | 8.375  | 8.447  | 8.405  |
|                           | 8.367 | 8.340  | 8.390  | 8.387  | 8.370  | 8.393  | 8.385  | 8.437  | 8.414  | 8.485  | 8.445  |        |
|                           | 8.425 | 8.373  | 8.499  | 8.474  | 8.447  | 8.449  | 8.480  | 8.518  | 8.463  | 8.548  | 8.492  |        |
|                           | UL    | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

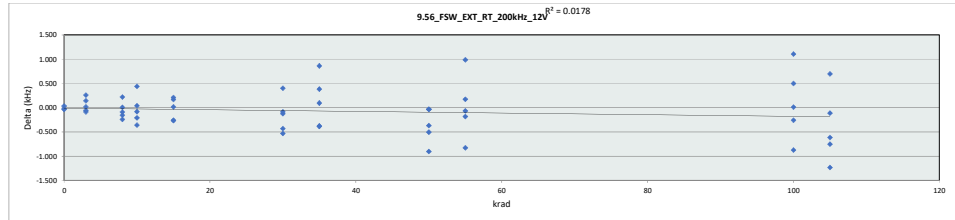


# HDR TID Report

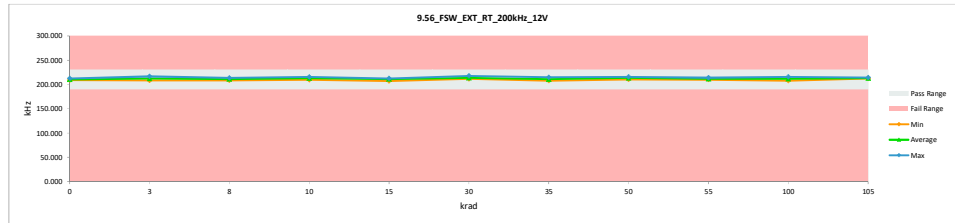
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.56_FSW_EXT_RT_200kHz_12V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       | kHz      | kHz     |          |        |
| Max Limit                  | 230      | 230     |          |        |
| Min Limit                  | 190      | 190     |          |        |
| krad                       | Serial # | PRE HDR | POST HDR | Delta  |
| 0                          | 552      | 208.931 | 208.904  | -0.027 |
| 0                          | 726      | 209.631 | 209.662  | 0.031  |
| 0                          | 791      | 212.573 | 212.533  | -0.040 |
| 3                          | 689      | 210.965 | 210.981  | 0.016  |
| 3                          | 688      | 212.480 | 212.390  | -0.090 |
| 3                          | 700      | 208.005 | 208.261  | 0.256  |
| 3                          | 482      | 216.338 | 216.478  | 0.140  |
| 3                          | 1033     | 212.256 | 212.197  | -0.059 |
| 8                          | 442      | 213.317 | 213.323  | 0.006  |
| 8                          | 699      | 211.377 | 211.218  | -0.159 |
| 8                          | 344      | 211.628 | 211.536  | -0.092 |
| 8                          | 355      | 210.110 | 210.327  | 0.217  |
| 8                          | 750      | 208.787 | 208.544  | -0.243 |
| 10                         | 537      | 209.397 | 209.435  | 0.038  |
| 10                         | 396      | 212.937 | 212.725  | -0.212 |
| 10                         | 521      | 215.470 | 215.108  | -0.362 |
| 10                         | 535      | 215.441 | 215.357  | -0.084 |
| 10                         | 526      | 212.824 | 213.262  | 0.438  |
| 15                         | 540      | 211.054 | 211.262  | 0.208  |
| 15                         | 387      | 212.263 | 211.994  | -0.269 |
| 15                         | 787      | 211.400 | 211.416  | 0.016  |
| 15                         | 1042     | 207.496 | 207.234  | -0.262 |
| 15                         | 483      | 212.271 | 212.436  | 0.165  |
| 30                         | 597      | 211.635 | 211.509  | -0.126 |
| 30                         | 853      | 217.371 | 217.769  | 0.398  |
| 30                         | 416      | 213.371 | 212.536  | -0.435 |
| 30                         | 949      | 213.731 | 213.197  | -0.534 |
| 30                         | 221      | 212.550 | 212.462  | -0.088 |
| 35                         | 538      | 214.968 | 214.587  | -0.381 |
| 35                         | 164      | 210.112 | 210.972  | 0.860  |
| 35                         | 1018     | 209.835 | 210.216  | 0.381  |
| 35                         | 462      | 207.582 | 207.675  | 0.093  |
| 35                         | 1032     | 210.892 | 210.506  | -0.386 |
| 50                         | 566      | 213.460 | 213.420  | -0.040 |
| 50                         | 197      | 215.532 | 215.497  | -0.035 |
| 50                         | 793      | 216.000 | 215.493  | -0.507 |
| 50                         | 802      | 213.509 | 212.605  | -0.904 |
| 50                         | 61       | 210.939 | 210.568  | -0.371 |
| 55                         | 795      | 210.736 | 209.907  | -0.829 |
| 55                         | 921      | 210.585 | 210.516  | -0.069 |
| 55                         | 741      | 214.156 | 213.970  | -0.186 |
| 55                         | 809      | 212.966 | 213.136  | 0.170  |
| 55                         | 804      | 209.372 | 210.355  | 0.983  |
| 100                        | 449      | 207.380 | 207.876  | 0.496  |
| 100                        | 541      | 211.596 | 211.334  | -0.262 |
| 100                        | 476      | 212.377 | 211.502  | -0.875 |
| 100                        | 45       | 215.500 | 215.511  | 0.011  |
| 100                        | 642      | 211.055 | 212.159  | 1.104  |
| 105                        | 1036     | 213.414 | 214.108  | 0.694  |
| 105                        | 1038     | 212.604 | 212.489  | -0.115 |
| 105                        | 203      | 214.470 | 213.716  | -0.754 |
| 105                        | 1029     | 214.891 | 213.657  | -1.234 |
| 105                        | 1027     | 212.975 | 212.358  | -0.617 |
| 105                        | Max      | 217.371 | 217.769  | 1.104  |
|                            | Average  | 212.123 | 212.049  | -0.074 |
|                            | Min      | 207.380 | 207.234  | -1.234 |
|                            | Std Dev  | 2.383   | 2.291    | 0.451  |



| 9.56_FSW_EXT_RT_200kHz_12V |         |         |         |         |         |         |         |         |         |         |         |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site                  |         |         |         |         |         |         |         |         |         |         |         |
| Tester                     |         |         |         |         |         |         |         |         |         |         |         |
| Test Number                |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit                  | 230     | kHz     |         |         |         |         |         |         |         |         |         |
| Min Limit                  | 190     | kHz     |         |         |         |         |         |         |         |         |         |
| krad                       | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                         | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 |
| Min                        | 208.904 | 208.261 | 208.544 | 209.435 | 207.234 | 211.509 | 207.675 | 210.568 | 209.907 | 207.876 | 212.358 |
| Average                    | 210.366 | 212.061 | 210.990 | 213.177 | 210.868 | 213.575 | 210.791 | 213.517 | 211.577 | 211.676 | 213.266 |
| Max                        | 212.533 | 216.478 | 213.323 | 215.357 | 212.436 | 217.769 | 214.587 | 215.497 | 213.970 | 215.511 | 214.108 |
| UL                         | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 |

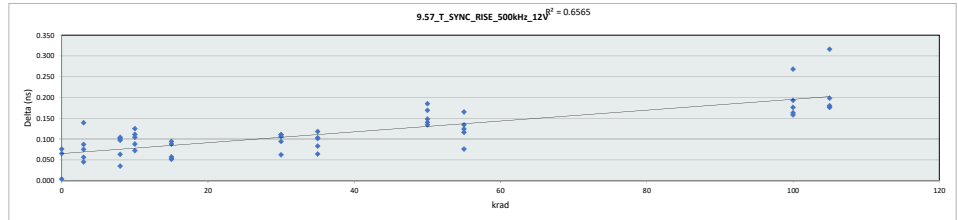


# HDR TID Report

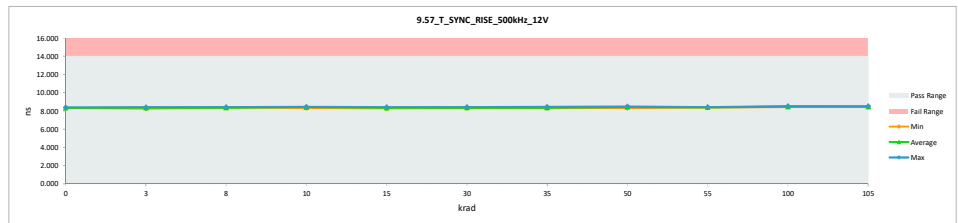
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.57_T_SYNC_RISE_500kHz_12V |          |         |          |       |
|-----------------------------|----------|---------|----------|-------|
| Test Site                   |          |         |          |       |
| Tester                      |          |         |          |       |
| Test Number                 |          |         |          |       |
| Unit                        | ns       | ns      |          |       |
| Max Limit                   | 14       | 14      |          |       |
| Min Limit                   | 0        | 0       |          |       |
| krad                        | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                           | 552      | 8.397   | 8.401    | 0.004 |
| 0                           | 726      | 8.266   | 8.331    | 0.065 |
| 0                           | 791      | 8.264   | 8.340    | 0.076 |
| 3                           | 689      | 8.328   | 8.415    | 0.087 |
| 3                           | 688      | 8.276   | 8.415    | 0.139 |
| 3                           | 700      | 8.193   | 8.268    | 0.075 |
| 3                           | 482      | 8.294   | 8.350    | 0.056 |
| 3                           | 1033     | 8.291   | 8.299    | 0.045 |
| 8                           | 442      | 8.284   | 8.347    | 0.063 |
| 8                           | 699      | 8.324   | 8.428    | 0.104 |
| 8                           | 344      | 8.311   | 8.346    | 0.035 |
| 8                           | 355      | 8.260   | 8.357    | 0.097 |
| 8                           | 750      | 8.319   | 8.420    | 0.101 |
| 10                          | 537      | 8.364   | 8.475    | 0.111 |
| 10                          | 396      | 8.366   | 8.454    | 0.088 |
| 10                          | 521      | 8.282   | 8.386    | 0.104 |
| 10                          | 535      | 8.327   | 8.452    | 0.125 |
| 10                          | 526      | 8.268   | 8.340    | 0.072 |
| 15                          | 540      | 8.280   | 8.337    | 0.057 |
| 15                          | 387      | 8.380   | 8.431    | 0.051 |
| 15                          | 787      | 8.212   | 8.306    | 0.094 |
| 15                          | 1042     | 8.304   | 8.392    | 0.088 |
| 15                          | 483      | 8.263   | 8.316    | 0.053 |
| 30                          | 597      | 8.355   | 8.449    | 0.094 |
| 30                          | 853      | 8.235   | 8.341    | 0.106 |
| 30                          | 416      | 8.270   | 8.380    | 0.110 |
| 30                          | 949      | 8.288   | 8.398    | 0.110 |
| 30                          | 221      | 8.291   | 8.353    | 0.062 |
| 35                          | 538      | 8.388   | 8.471    | 0.083 |
| 35                          | 164      | 8.273   | 8.337    | 0.064 |
| 35                          | 1018     | 8.248   | 8.351    | 0.103 |
| 35                          | 462      | 8.285   | 8.403    | 0.118 |
| 35                          | 1032     | 8.211   | 8.312    | 0.101 |
| 50                          | 566      | 8.309   | 8.478    | 0.169 |
| 50                          | 197      | 8.192   | 8.340    | 0.148 |
| 50                          | 793      | 8.261   | 8.395    | 0.134 |
| 50                          | 802      | 8.327   | 8.512    | 0.185 |
| 50                          | 61       | 8.311   | 8.451    | 0.140 |
| 55                          | 795      | 8.300   | 8.416    | 0.116 |
| 55                          | 921      | 8.232   | 8.356    | 0.124 |
| 55                          | 741      | 8.256   | 8.421    | 0.165 |
| 55                          | 809      | 8.284   | 8.360    | 0.076 |
| 55                          | 804      | 8.314   | 8.448    | 0.134 |
| 100                         | 449      | 8.368   | 8.531    | 0.163 |
| 100                         | 541      | 8.313   | 8.506    | 0.193 |
| 100                         | 476      | 8.201   | 8.469    | 0.268 |
| 100                         | 45       | 8.298   | 8.456    | 0.158 |
| 100                         | 642      | 8.274   | 8.450    | 0.176 |
| 105                         | 1036     | 8.302   | 8.479    | 0.177 |
| 105                         | 1038     | 8.212   | 8.528    | 0.316 |
| 105                         | 203      | 8.231   | 8.429    | 0.198 |
| 105                         | 1029     | 8.251   | 8.431    | 0.180 |
| 105                         | 1027     | 8.273   | 8.449    | 0.176 |
| 105                         | Max      | 8.397   | 8.531    | 0.316 |
| Average                     |          | 8.286   | 8.402    | 0.116 |
| Min                         |          | 8.192   | 8.268    | 0.004 |
| Std Dev                     |          | 0.049   | 0.063    | 0.057 |



|                           |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 9.57_T_SYNC_RISE_500kHz_1 |        |        |        |        |        |        |        |        |        |        |        |
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 8.331  | 8.268  | 8.346  | 8.340  | 8.306  | 8.341  | 8.312  | 8.340  | 8.356  | 8.450  | 8.429  |
| Average                   | 8.357  | 8.349  | 8.380  | 8.421  | 8.356  | 8.384  | 8.375  | 8.435  | 8.400  | 8.482  | 8.463  |
| Max                       | 8.401  | 8.415  | 8.428  | 8.475  | 8.431  | 8.449  | 8.471  | 8.512  | 8.448  | 8.531  | 8.528  |
| UL                        | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

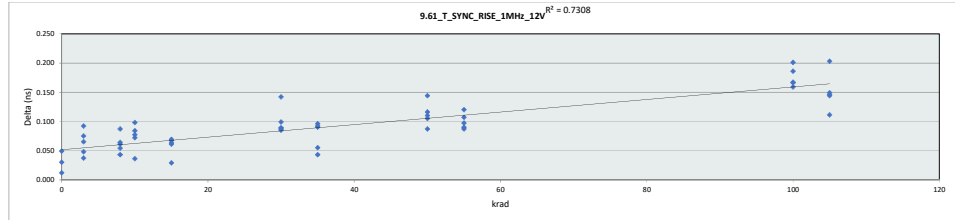


# HDR TID Report

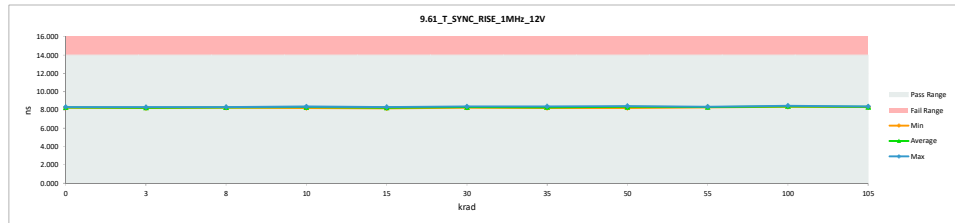
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.61_T_SYNC_RISE_1MHz_12V |          |         |          |       |
|---------------------------|----------|---------|----------|-------|
| Test Site                 |          |         |          |       |
| Tester                    |          |         |          |       |
| Test Number               |          |         |          |       |
| Unit                      | ns       | ns      |          |       |
| Max Limit                 | 14       | 14      |          |       |
| Min Limit                 | 0        | 0       |          |       |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                         | 552      | 8.317   | 8.329    | 0.012 |
| 0                         | 726      | 8.202   | 8.251    | 0.049 |
| 0                         | 791      | 8.214   | 8.244    | 0.030 |
| 3                         | 689      | 8.247   | 8.312    | 0.065 |
| 3                         | 688      | 8.220   | 8.268    | 0.048 |
| 3                         | 700      | 8.133   | 8.208    | 0.075 |
| 3                         | 482      | 8.249   | 8.286    | 0.037 |
| 3                         | 1033     | 8.149   | 8.241    | 0.092 |
| 8                         | 442      | 8.176   | 8.263    | 0.087 |
| 8                         | 699      | 8.256   | 8.320    | 0.064 |
| 8                         | 344      | 8.184   | 8.238    | 0.054 |
| 8                         | 355      | 8.198   | 8.259    | 0.061 |
| 8                         | 750      | 8.270   | 8.313    | 0.043 |
| 10                        | 537      | 8.305   | 8.377    | 0.072 |
| 10                        | 396      | 8.273   | 8.309    | 0.036 |
| 10                        | 521      | 8.182   | 8.266    | 0.084 |
| 10                        | 535      | 8.235   | 8.333    | 0.098 |
| 10                        | 526      | 8.143   | 8.220    | 0.077 |
| 15                        | 540      | 8.223   | 8.286    | 0.063 |
| 15                        | 387      | 8.246   | 8.313    | 0.067 |
| 15                        | 787      | 8.148   | 8.177    | 0.029 |
| 15                        | 1042     | 8.255   | 8.324    | 0.069 |
| 15                        | 483      | 8.174   | 8.235    | 0.061 |
| 30                        | 597      | 8.246   | 8.388    | 0.142 |
| 30                        | 853      | 8.180   | 8.267    | 0.087 |
| 30                        | 416      | 8.205   | 8.304    | 0.099 |
| 30                        | 949      | 8.216   | 8.301    | 0.085 |
| 30                        | 221      | 8.200   | 8.289    | 0.089 |
| 35                        | 538      | 8.302   | 8.392    | 0.090 |
| 35                        | 164      | 8.186   | 8.278    | 0.092 |
| 35                        | 1018     | 8.216   | 8.259    | 0.043 |
| 35                        | 462      | 8.227   | 8.323    | 0.096 |
| 35                        | 1032     | 8.169   | 8.224    | 0.055 |
| 50                        | 566      | 8.248   | 8.392    | 0.144 |
| 50                        | 197      | 8.116   | 8.226    | 0.110 |
| 50                        | 793      | 8.205   | 8.292    | 0.087 |
| 50                        | 802      | 8.306   | 8.422    | 0.116 |
| 50                        | 61       | 8.275   | 8.380    | 0.105 |
| 55                        | 795      | 8.223   | 8.330    | 0.107 |
| 55                        | 921      | 8.180   | 8.300    | 0.120 |
| 55                        | 741      | 8.237   | 8.324    | 0.087 |
| 55                        | 809      | 8.197   | 8.294    | 0.097 |
| 55                        | 804      | 8.262   | 8.352    | 0.090 |
| 100                       | 449      | 8.301   | 8.460    | 0.159 |
| 100                       | 541      | 8.239   | 8.405    | 0.166 |
| 100                       | 476      | 8.182   | 8.383    | 0.201 |
| 100                       | 45       | 8.194   | 8.380    | 0.186 |
| 100                       | 642      | 8.179   | 8.346    | 0.167 |
| 105                       | 1036     | 8.257   | 8.368    | 0.111 |
| 105                       | 1038     | 8.184   | 8.387    | 0.203 |
| 105                       | 203      | 8.171   | 8.317    | 0.146 |
| 105                       | 1029     | 8.191   | 8.335    | 0.144 |
| 105                       | 1027     | 8.183   | 8.332    | 0.149 |
| 105                       | Max      | 8.317   | 8.460    | 0.203 |
|                           | Average  | 8.217   | 8.310    | 0.093 |
|                           | Min      | 8.116   | 8.177    | 0.012 |
|                           | Std Dev  | 0.047   | 0.060    | 0.045 |



| 9.61_T_SYNC_RISE_1MHz_12V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 8.244  | 8.208  | 8.238  | 8.220  | 8.177  | 8.267  | 8.224  | 8.226  | 8.294  | 8.346  | 8.317  |
| Average                   | 8.275  | 8.263  | 8.279  | 8.301  | 8.267  | 8.310  | 8.295  | 8.342  | 8.320  | 8.395  | 8.348  |
| Max                       | 8.329  | 8.312  | 8.320  | 8.377  | 8.324  | 8.388  | 8.392  | 8.422  | 8.352  | 8.460  | 8.387  |
| UL                        | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

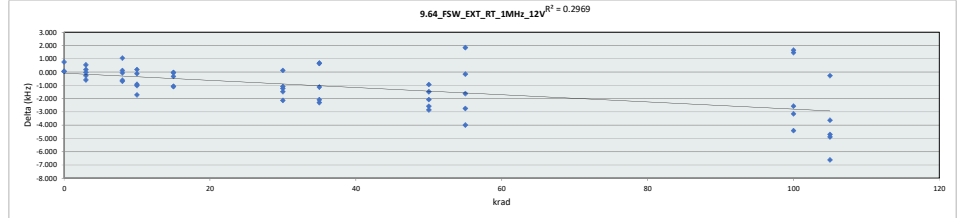


# HDR TID Report

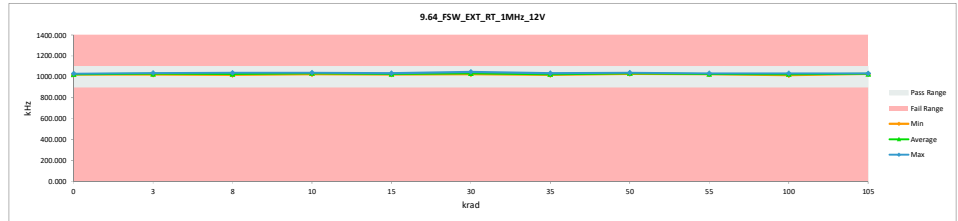
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.64_FSW_EXT_RT_1MHz_12V |          |          |          |        |
|--------------------------|----------|----------|----------|--------|
| Test Site                |          |          |          |        |
| Tester                   |          |          |          |        |
| Test Number              |          |          |          |        |
| Unit                     |          | kHz      | kHz      |        |
| Max Limit                |          | 1100     | 1100     |        |
| Min Limit                |          | 900      | 900      |        |
| krad                     | Serial # | PRE_HDR  | POST_HDR | Delta  |
| 0                        | 552      | 1018.984 | 1019.740 | 0.756  |
| 0                        | 726      | 1026.846 | 1026.900 | 0.054  |
| 0                        | 791      | 1029.889 | 1029.930 | 0.041  |
| 3                        | 689      | 1027.779 | 1027.748 | -0.031 |
| 3                        | 688      | 1030.464 | 1030.640 | 0.176  |
| 3                        | 700      | 1020.135 | 1020.664 | 0.529  |
| 3                        | 482      | 1037.764 | 1037.478 | -0.286 |
| 3                        | 1033     | 1028.432 | 1028.432 | -0.606 |
| 8                        | 442      | 1037.935 | 1038.041 | 0.106  |
| 8                        | 699      | 1027.658 | 1026.952 | -0.706 |
| 8                        | 344      | 1032.830 | 1032.206 | -0.624 |
| 8                        | 355      | 1025.648 | 1026.698 | 1.050  |
| 8                        | 750      | 1017.401 | 1017.332 | -0.069 |
| 10                       | 537      | 1023.425 | 1023.290 | -0.135 |
| 10                       | 396      | 1036.256 | 1035.222 | -1.034 |
| 10                       | 521      | 1042.574 | 1040.846 | -1.728 |
| 10                       | 535      | 1039.678 | 1038.751 | -0.927 |
| 10                       | 526      | 1030.300 | 1030.484 | 0.184  |
| 15                       | 540      | 1023.175 | 1022.841 | -0.334 |
| 15                       | 387      | 1036.254 | 1035.164 | -1.090 |
| 15                       | 787      | 1029.159 | 1029.098 | -0.061 |
| 15                       | 1042     | 1025.336 | 1024.233 | -1.103 |
| 15                       | 483      | 1029.821 | 1029.783 | -0.038 |
| 30                       | 597      | 1025.020 | 1023.928 | -1.092 |
| 30                       | 853      | 1047.245 | 1047.365 | 0.120  |
| 30                       | 416      | 1031.322 | 1030.077 | -1.245 |
| 30                       | 949      | 1031.815 | 1029.667 | -2.148 |
| 30                       | 221      | 1031.263 | 1029.776 | -1.487 |
| 35                       | 538      | 1036.800 | 1034.701 | -2.099 |
| 35                       | 164      | 1018.724 | 1019.365 | 0.641  |
| 35                       | 1018     | 1025.775 | 1026.440 | 0.665  |
| 35                       | 462      | 1018.114 | 1016.977 | -1.137 |
| 35                       | 1032     | 1029.320 | 1027.009 | -2.311 |
| 50                       | 566      | 1034.464 | 1032.968 | -1.496 |
| 50                       | 197      | 1039.160 | 1037.076 | -2.084 |
| 50                       | 793      | 1042.428 | 1039.845 | -2.583 |
| 50                       | 802      | 1036.013 | 1033.147 | -2.866 |
| 50                       | 61       | 1028.906 | 1027.951 | -0.955 |
| 55                       | 795      | 1027.312 | 1023.309 | -4.003 |
| 55                       | 921      | 1024.773 | 1023.138 | -1.635 |
| 55                       | 741      | 1031.716 | 1028.962 | -2.754 |
| 55                       | 809      | 1033.497 | 1033.328 | -0.169 |
| 55                       | 804      | 1022.593 | 1024.428 | 1.835  |
| 100                      | 449      | 1013.368 | 1014.821 | 1.453  |
| 100                      | 541      | 1028.698 | 1026.117 | -2.581 |
| 100                      | 476      | 1029.934 | 1025.505 | -4.429 |
| 100                      | 45       | 1036.945 | 1033.788 | -3.157 |
| 100                      | 642      | 1022.419 | 1024.062 | 1.643  |
| 105                      | 1036     | 1032.544 | 1032.260 | -0.284 |
| 105                      | 1038     | 1032.345 | 1027.638 | -4.707 |
| 105                      | 203      | 1036.477 | 1031.575 | -4.902 |
| 105                      | 1029     | 1033.784 | 1027.154 | -6.630 |
| 105                      | 1027     | 1034.162 | 1030.518 | -3.644 |
| 105                      | Max      | 1047.245 | 1047.365 | 1.835  |
| Average                  |          | 1030.100 | 1028.969 | -1.131 |
| Min                      |          | 1013.368 | 1014.821 | -6.630 |
| Std Dev                  |          | 6.965    | 6.423    | 1.761  |



| 9.64_FSW_EXT_RT_1MHz_12V |          |          |          |          |          |          |          |          |          |          |          |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site                |          |          |          |          |          |          |          |          |          |          |          |
| Tester                   |          |          |          |          |          |          |          |          |          |          |          |
| Test Number              |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit                | 1100     | kHz      |          |          |          |          |          |          |          |          |          |
| Min Limit                | 900      | kHz      |          |          |          |          |          |          |          |          |          |
| krad                     |          |          | 8        | 10       | 15       | 30       | 35       | 50       | 55       | 100      | 105      |
| LL                       | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  |
| Min                      | 1019.740 | 1020.664 | 1017.332 | 1023.290 | 1022.841 | 1023.928 | 1016.977 | 1027.951 | 1023.138 | 1014.821 | 1027.154 |
| Average                  | 1025.523 | 1028.992 | 1028.246 | 1033.719 | 1028.224 | 1032.163 | 1024.898 | 1034.197 | 1026.633 | 1024.859 | 1029.829 |
| Max                      | 1029.930 | 1037.478 | 1038.041 | 1040.846 | 1035.164 | 1047.365 | 1034.701 | 1039.845 | 1033.328 | 1033.788 | 1032.260 |
| UL                       | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 |

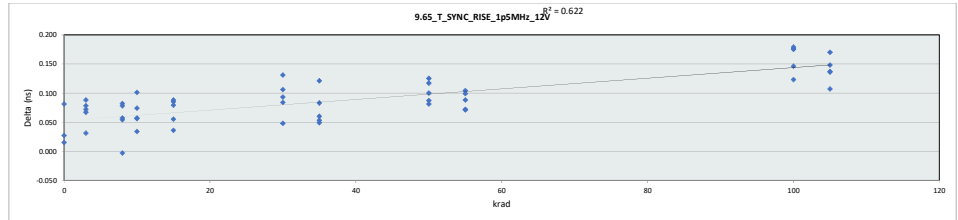


# HDR TID Report

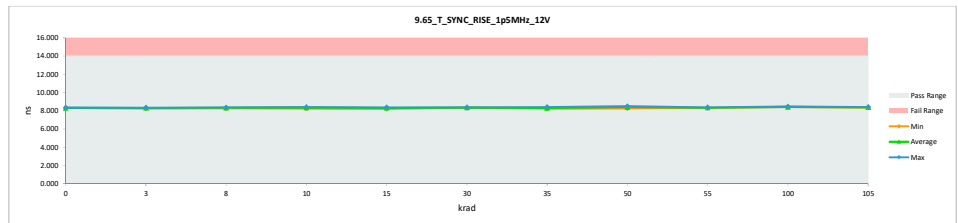
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.65_T_SYNC_RISE_1p5MHz_12V |          |         |          |        |
|-----------------------------|----------|---------|----------|--------|
| Test Site                   |          |         |          |        |
| Tester                      |          |         |          |        |
| Test Number                 |          |         |          |        |
| Unit                        |          |         |          |        |
| Max Limit                   |          |         |          |        |
| Min Limit                   |          |         |          |        |
| krad                        | Serial # | PRE HDR | POST HDR | Delta  |
| 0                           | 552      | 8.339   | 8.354    | 0.015  |
| 0                           | 726      | 8.254   | 8.281    | 0.027  |
| 0                           | 791      | 8.231   | 8.312    | 0.081  |
| 3                           | 689      | 8.281   | 8.348    | 0.067  |
| 3                           | 688      | 8.258   | 8.289    | 0.031  |
| 3                           | 700      | 8.146   | 8.234    | 0.088  |
| 3                           | 482      | 8.263   | 8.341    | 0.078  |
| 3                           | 1033     | 8.253   | 8.276    | 0.022  |
| 8                           | 442      | 8.253   | 8.331    | 0.078  |
| 8                           | 699      | 8.315   | 8.369    | 0.054  |
| 8                           | 344      | 8.282   | 8.279    | -0.003 |
| 8                           | 355      | 8.203   | 8.260    | 0.057  |
| 8                           | 750      | 8.286   | 8.368    | 0.082  |
| 10                          | 537      | 8.360   | 8.394    | 0.034  |
| 10                          | 396      | 8.312   | 8.369    | 0.057  |
| 10                          | 521      | 8.261   | 8.362    | 0.101  |
| 10                          | 535      | 8.328   | 8.402    | 0.074  |
| 10                          | 526      | 8.184   | 8.240    | 0.056  |
| 15                          | 540      | 8.226   | 8.311    | 0.085  |
| 15                          | 387      | 8.290   | 8.369    | 0.079  |
| 15                          | 787      | 8.170   | 8.206    | 0.036  |
| 15                          | 1042     | 8.287   | 8.375    | 0.088  |
| 15                          | 483      | 8.200   | 8.255    | 0.055  |
| 30                          | 597      | 8.272   | 8.378    | 0.106  |
| 30                          | 853      | 8.242   | 8.326    | 0.084  |
| 30                          | 416      | 8.235   | 8.366    | 0.131  |
| 30                          | 949      | 8.248   | 8.341    | 0.093  |
| 30                          | 221      | 8.293   | 8.341    | 0.048  |
| 35                          | 538      | 8.338   | 8.421    | 0.083  |
| 35                          | 164      | 8.192   | 8.252    | 0.060  |
| 35                          | 1018     | 8.253   | 8.306    | 0.053  |
| 35                          | 462      | 8.223   | 8.344    | 0.121  |
| 35                          | 1032     | 8.189   | 8.238    | 0.049  |
| 50                          | 566      | 8.313   | 8.413    | 0.100  |
| 50                          | 197      | 8.176   | 8.257    | 0.081  |
| 50                          | 793      | 8.259   | 8.376    | 0.117  |
| 50                          | 802      | 8.366   | 8.491    | 0.125  |
| 50                          | 61       | 8.314   | 8.401    | 0.087  |
| 55                          | 795      | 8.266   | 8.365    | 0.099  |
| 55                          | 921      | 8.225   | 8.297    | 0.072  |
| 55                          | 741      | 8.242   | 8.330    | 0.088  |
| 55                          | 809      | 8.274   | 8.345    | 0.071  |
| 55                          | 804      | 8.277   | 8.381    | 0.104  |
| 100                         | 449      | 8.327   | 8.473    | 0.146  |
| 100                         | 541      | 8.303   | 8.426    | 0.123  |
| 100                         | 476      | 8.226   | 8.405    | 0.179  |
| 100                         | 45       | 8.229   | 8.405    | 0.176  |
| 100                         | 642      | 8.224   | 8.399    | 0.175  |
| 105                         | 1036     | 8.280   | 8.416    | 0.136  |
| 105                         | 1038     | 8.234   | 8.404    | 0.170  |
| 105                         | 203      | 8.215   | 8.352    | 0.137  |
| 105                         | 1029     | 8.211   | 8.359    | 0.148  |
| 105                         | 1027     | 8.245   | 8.352    | 0.107  |
| 105                         | Max      | 8.366   | 8.491    | 0.179  |
| 105                         | Average  | 8.257   | 8.345    | 0.088  |
| 105                         | Min      | 8.146   | 8.206    | -0.003 |
| 105                         | Std Dev  | 0.050   | 0.062    | 0.041  |



| 9.65_T_SYNC_RISE_1p5MHz_12V                                  |      |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |      |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |      |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |      |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |      |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |      |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |      |        |        |        |        |        |        |        |        |        |        |        |
|                                                              | krad |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL<br>Min<br>Average<br>Max<br>UL                            |      | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|                                                              |      | 8.281  | 8.234  | 8.260  | 8.240  | 8.206  | 8.326  | 8.238  | 8.257  | 8.297  | 8.399  | 8.352  |
|                                                              |      | 8.316  | 8.298  | 8.321  | 8.353  | 8.303  | 8.350  | 8.312  | 8.388  | 8.344  | 8.422  | 8.377  |
|                                                              |      | 8.354  | 8.348  | 8.369  | 8.402  | 8.375  | 8.378  | 8.421  | 8.491  | 8.381  | 8.473  | 8.416  |
|                                                              |      | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

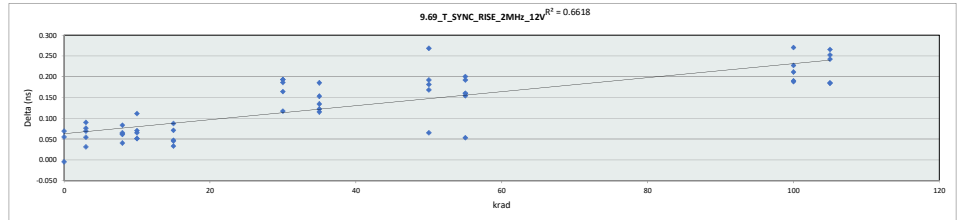


# HDR TID Report

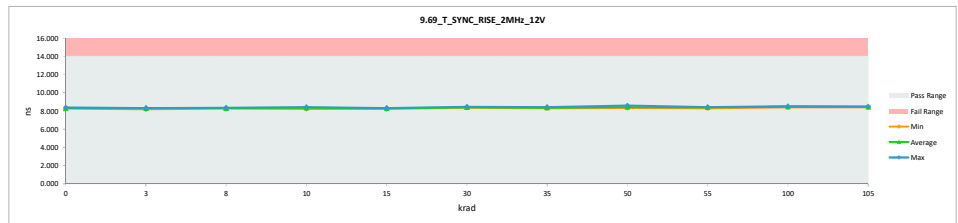
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.69_T_SYNC_RISE_2MHz_12V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      |          |         |          |        |
| Max Limit                 |          |         |          |        |
| Min Limit                 |          |         |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 8.379   | 8.374    | -0.005 |
| 0                         | 726      | 8.212   | 8.267    | 0.055  |
| 0                         | 791      | 8.235   | 8.304    | 0.069  |
| 3                         | 689      | 8.244   | 8.320    | 0.076  |
| 3                         | 688      | 8.234   | 8.303    | 0.069  |
| 3                         | 700      | 8.154   | 8.185    | 0.031  |
| 3                         | 482      | 8.243   | 8.333    | 0.090  |
| 3                         | 1033     | 8.202   | 8.260    | 0.054  |
| 8                         | 442      | 8.251   | 8.316    | 0.065  |
| 8                         | 699      | 8.286   | 8.369    | 0.083  |
| 8                         | 344      | 8.210   | 8.250    | 0.040  |
| 8                         | 355      | 8.209   | 8.270    | 0.061  |
| 8                         | 790      | 8.272   | 8.335    | 0.063  |
| 10                        | 537      | 8.368   | 8.433    | 0.065  |
| 10                        | 396      | 8.304   | 8.374    | 0.070  |
| 10                        | 521      | 8.231   | 8.342    | 0.111  |
| 10                        | 535      | 8.331   | 8.382    | 0.051  |
| 10                        | 526      | 8.175   | 8.226    | 0.051  |
| 15                        | 540      | 8.229   | 8.300    | 0.071  |
| 15                        | 387      | 8.297   | 8.330    | 0.033  |
| 15                        | 787      | 8.157   | 8.204    | 0.047  |
| 15                        | 1042     | 8.291   | 8.336    | 0.045  |
| 15                        | 483      | 8.167   | 8.254    | 0.087  |
| 30                        | 597      | 8.275   | 8.468    | 0.193  |
| 30                        | 853      | 8.232   | 8.349    | 0.117  |
| 30                        | 416      | 8.221   | 8.407    | 0.186  |
| 30                        | 949      | 8.242   | 8.435    | 0.193  |
| 30                        | 221      | 8.197   | 8.361    | 0.164  |
| 35                        | 538      | 8.321   | 8.436    | 0.115  |
| 35                        | 164      | 8.195   | 8.380    | 0.185  |
| 35                        | 1018     | 8.202   | 8.324    | 0.122  |
| 35                        | 462      | 8.259   | 8.412    | 0.153  |
| 35                        | 1032     | 8.170   | 8.304    | 0.134  |
| 50                        | 566      | 8.270   | 8.462    | 0.192  |
| 50                        | 197      | 8.141   | 8.322    | 0.181  |
| 50                        | 793      | 8.238   | 8.406    | 0.168  |
| 50                        | 802      | 8.323   | 8.591    | 0.268  |
| 50                        | 61       | 8.267   | 8.332    | 0.065  |
| 55                        | 795      | 8.242   | 8.434    | 0.192  |
| 55                        | 921      | 8.179   | 8.379    | 0.200  |
| 55                        | 741      | 8.229   | 8.383    | 0.154  |
| 55                        | 809      | 8.245   | 8.298    | 0.053  |
| 55                        | 804      | 8.281   | 8.441    | 0.160  |
| 100                       | 449      | 8.326   | 8.516    | 0.190  |
| 100                       | 541      | 8.304   | 8.515    | 0.211  |
| 100                       | 476      | 8.178   | 8.448    | 0.270  |
| 100                       | 45       | 8.218   | 8.406    | 0.188  |
| 100                       | 642      | 8.215   | 8.442    | 0.227  |
| 105                       | 1036     | 8.307   | 8.491    | 0.184  |
| 105                       | 1038     | 8.209   | 8.474    | 0.265  |
| 105                       | 203      | 8.205   | 8.447    | 0.242  |
| 105                       | 1029     | 8.204   | 8.389    | 0.185  |
| 105                       | 1027     | 8.225   | 8.477    | 0.252  |
| 105                       | Max      | 8.370   | 8.591    | 0.270  |
|                           | Average  | 8.242   | 8.370    | 0.128  |
|                           | Min      | 8.141   | 8.185    | -0.005 |
|                           | Std Dev  | 0.054   | 0.085    | 0.074  |



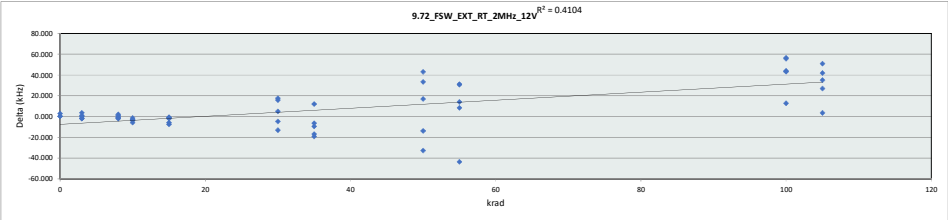
| 9.69_T_SYNC_RISE_2MHz_12V                                    |        |        |        |        |        |        |        |        |        |        |        |       |
|--------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |        |        |        |        |        |        |        |        |        |        |        |       |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |       |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |       |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |       |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |       |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |       |
|                                                              | krad   | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105   |
| LL<br>Min<br>Average<br>Max<br>UL                            | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000 |
|                                                              | 8.267  | 8.185  | 8.250  | 8.226  | 8.204  | 8.349  | 8.304  | 8.322  | 8.298  | 8.406  | 8.389  |       |
|                                                              | 8.315  | 8.280  | 8.308  | 8.351  | 8.285  | 8.404  | 8.371  | 8.423  | 8.387  | 8.465  | 8.456  |       |
|                                                              | 8.374  | 8.333  | 8.369  | 8.433  | 8.336  | 8.468  | 8.436  | 8.591  | 8.441  | 8.516  | 8.491  |       |
|                                                              | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |       |



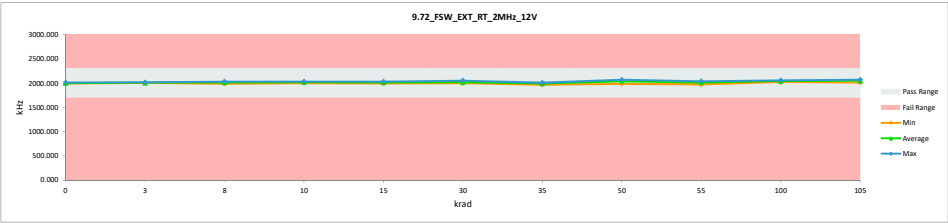
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.72_FSW_EXT_RT_2MHz_12V |          |          |          |         |
|--------------------------|----------|----------|----------|---------|
| Test Site                |          |          |          |         |
| Tester                   |          |          |          |         |
| Test Number              |          |          |          |         |
| Unit                     |          |          |          |         |
| Max Limit                |          |          |          |         |
| Min Limit                |          |          |          |         |
| krad                     | Serial # | PRE HDR  | POST HDR | Delta   |
| 0                        | 552      | 1982.692 | 1985.504 | 2.812   |
| 0                        | 726      | 2008.453 | 2008.635 | 0.182   |
| 0                        | 791      | 1996.470 | 1996.684 | 0.214   |
| 3                        | 689      | 2001.562 | 2001.320 | -0.242  |
| 3                        | 688      | 2012.373 | 2013.358 | 0.985   |
| 3                        | 700      | 1999.101 | 2002.619 | 3.518   |
| 3                        | 482      | 2015.094 | 2012.847 | -2.247  |
| 3                        | 1033     | 2003.592 | 2001.643 | -1.862  |
| 8                        | 442      | 2029.633 | 2028.651 | -0.982  |
| 8                        | 699      | 2012.054 | 2009.855 | -2.199  |
| 8                        | 344      | 2020.226 | 2018.764 | -1.462  |
| 8                        | 355      | 2007.990 | 2009.988 | 1.998   |
| 8                        | 750      | 1983.020 | 1983.540 | 0.520   |
| 10                       | 537      | 1998.616 | 1998.120 | -1.496  |
| 10                       | 396      | 2025.382 | 2021.502 | -3.880  |
| 10                       | 521      | 2034.710 | 2028.727 | -5.983  |
| 10                       | 535      | 2027.273 | 2024.010 | -3.263  |
| 10                       | 526      | 2011.576 | 2008.688 | -2.888  |
| 15                       | 540      | 1991.661 | 1989.578 | -2.083  |
| 15                       | 387      | 2032.815 | 2026.863 | -5.952  |
| 15                       | 787      | 2020.783 | 2019.501 | -1.282  |
| 15                       | 1042     | 2009.170 | 2001.561 | -7.609  |
| 15                       | 483      | 2012.163 | 2011.440 | -0.723  |
| 30                       | 597      | 1988.297 | 1993.112 | 4.815   |
| 30                       | 853      | 2051.266 | 2046.447 | -4.819  |
| 30                       | 416      | 2004.609 | 2022.095 | 17.486  |
| 30                       | 949      | 2007.793 | 2023.438 | 15.645  |
| 30                       | 221      | 2013.454 | 2000.212 | -13.242 |
| 35                       | 538      | 2013.447 | 1994.164 | -19.283 |
| 35                       | 164      | 1971.374 | 1964.884 | -6.490  |
| 35                       | 1018     | 2004.172 | 1994.626 | -9.546  |
| 35                       | 462      | 1992.122 | 2004.075 | 11.953  |
| 35                       | 1032     | 2004.264 | 1987.257 | -17.007 |
| 50                       | 566      | 2026.231 | 2012.332 | -13.899 |
| 50                       | 197      | 2035.232 | 2052.082 | 16.850  |
| 50                       | 793      | 2032.796 | 2066.012 | 33.216  |
| 50                       | 802      | 2018.727 | 2061.680 | 42.953  |
| 50                       | 61       | 2013.647 | 1980.810 | -32.837 |
| 55                       | 795      | 2007.591 | 2021.514 | 13.923  |
| 55                       | 921      | 1992.007 | 2000.325 | 8.318   |
| 55                       | 741      | 2003.397 | 2034.500 | 31.103  |
| 55                       | 809      | 2014.832 | 1971.179 | -43.653 |
| 55                       | 804      | 1993.184 | 2023.653 | 30.469  |
| 100                      | 449      | 1963.073 | 2018.595 | 55.522  |
| 100                      | 541      | 1999.227 | 2042.247 | 43.020  |
| 100                      | 476      | 2009.490 | 2053.457 | 43.967  |
| 100                      | 45       | 2015.302 | 2027.882 | 12.580  |
| 100                      | 642      | 1995.895 | 2053.218 | 56.323  |
| 105                      | 1036     | 2005.379 | 2056.161 | 50.782  |
| 105                      | 1038     | 2008.934 | 2043.811 | 34.877  |
| 105                      | 203      | 2028.335 | 2055.228 | 26.893  |
| 105                      | 1029     | 2005.076 | 2008.465 | 3.389   |
| 105                      | 1027     | 2026.782 | 2068.561 | 41.779  |
| 105                      | Max      | 2051.266 | 2068.561 | 56.323  |
| 105                      | Average  | 2009.137 | 2016.706 | 7.569   |
| 105                      | Min      | 1963.073 | 1964.884 | -43.653 |
| 105                      | Std Dev  | 16.465   | 24.587   | 21.451  |



| 9.72_FSW_EXT_RT_2MHz_12V |          |          |          |          |          |          |          |          |          |          |          |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site                |          |          |          |          |          |          |          |          |          |          |          |
| Tester                   |          |          |          |          |          |          |          |          |          |          |          |
| Test Number              |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit                |          |          |          |          |          |          |          |          |          |          |          |
| Min Limit                |          |          |          |          |          |          |          |          |          |          |          |
| krad                     | 0        | 3        | 8        | 10       | 15       | 30       | 35       | 50       | 55       | 100      | 105      |
| LL                       | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 |
| Min                      | 1985.504 | 2001.320 | 1983.540 | 1998.120 | 1989.578 | 1993.112 | 1964.884 | 1980.810 | 1971.179 | 2018.595 | 2008.465 |
| Average                  | 1996.941 | 2006.357 | 2010.160 | 2016.209 | 2009.789 | 2017.061 | 1989.001 | 2034.583 | 2010.234 | 2039.080 | 2046.445 |
| Max                      | 2008.635 | 2013.358 | 2028.651 | 2028.727 | 2026.863 | 2046.447 | 2004.075 | 2066.012 | 2034.500 | 2053.457 | 2068.561 |
| UL                       | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 |

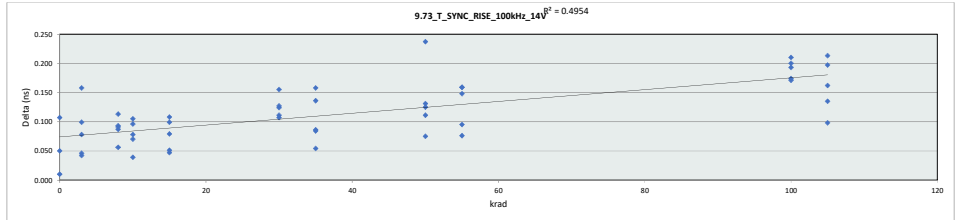


# HDR TID Report

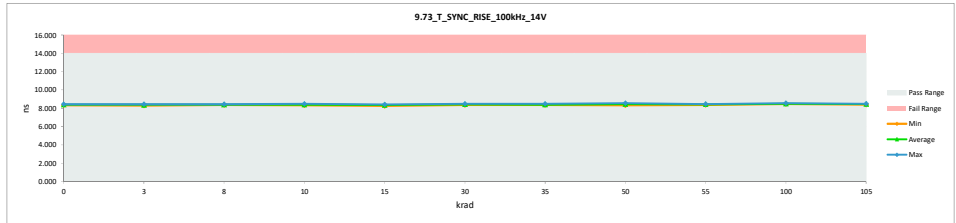
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.73_T_SYNC_RISE_100kHz_14V |          |         |          |       |
|-----------------------------|----------|---------|----------|-------|
| Test Site                   |          |         |          |       |
| Tester                      |          |         |          |       |
| Test Number                 |          |         |          |       |
| Unit                        |          |         |          |       |
| Max Limit                   |          |         |          |       |
| Min Limit                   |          |         |          |       |
| krad                        | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                           | 552      | 8.426   | 8.436    | 0.010 |
| 0                           | 726      | 8.287   | 8.337    | 0.050 |
| 0                           | 791      | 8.253   | 8.360    | 0.107 |
| 3                           | 689      | 8.322   | 8.421    | 0.099 |
| 3                           | 688      | 8.348   | 8.390    | 0.042 |
| 3                           | 700      | 8.235   | 8.281    | 0.046 |
| 3                           | 482      | 8.281   | 8.439    | 0.158 |
| 3                           | 1033     | 8.298   | 8.336    | 0.038 |
| 8                           | 442      | 8.307   | 8.363    | 0.056 |
| 8                           | 699      | 8.343   | 8.430    | 0.087 |
| 8                           | 344      | 8.255   | 8.348    | 0.093 |
| 8                           | 355      | 8.228   | 8.341    | 0.113 |
| 8                           | 750      | 8.336   | 8.427    | 0.091 |
| 10                          | 537      | 8.378   | 8.478    | 0.105 |
| 10                          | 396      | 8.368   | 8.438    | 0.070 |
| 10                          | 521      | 8.298   | 8.337    | 0.039 |
| 10                          | 535      | 8.333   | 8.429    | 0.096 |
| 10                          | 526      | 8.233   | 8.311    | 0.078 |
| 15                          | 540      | 8.268   | 8.376    | 0.108 |
| 15                          | 387      | 8.348   | 8.395    | 0.047 |
| 15                          | 787      | 8.193   | 8.244    | 0.051 |
| 15                          | 1042     | 8.325   | 8.404    | 0.079 |
| 15                          | 483      | 8.261   | 8.360    | 0.099 |
| 30                          | 597      | 8.344   | 8.471    | 0.127 |
| 30                          | 853      | 8.238   | 8.349    | 0.111 |
| 30                          | 416      | 8.280   | 8.435    | 0.155 |
| 30                          | 949      | 8.302   | 8.409    | 0.107 |
| 30                          | 221      | 8.271   | 8.395    | 0.124 |
| 35                          | 538      | 8.418   | 8.472    | 0.054 |
| 35                          | 164      | 8.233   | 8.391    | 0.158 |
| 35                          | 1018     | 8.284   | 8.370    | 0.086 |
| 35                          | 462      | 8.310   | 8.394    | 0.084 |
| 35                          | 1032     | 8.217   | 8.353    | 0.136 |
| 50                          | 566      | 8.282   | 8.519    | 0.237 |
| 50                          | 197      | 8.226   | 8.301    | 0.075 |
| 50                          | 793      | 8.265   | 8.376    | 0.111 |
| 50                          | 802      | 8.431   | 8.556    | 0.125 |
| 50                          | 61       | 8.336   | 8.467    | 0.131 |
| 55                          | 795      | 8.303   | 8.462    | 0.159 |
| 55                          | 921      | 8.259   | 8.418    | 0.159 |
| 55                          | 741      | 8.282   | 8.358    | 0.076 |
| 55                          | 809      | 8.251   | 8.399    | 0.148 |
| 55                          | 804      | 8.330   | 8.425    | 0.095 |
| 100                         | 449      | 8.374   | 8.548    | 0.174 |
| 100                         | 541      | 8.310   | 8.510    | 0.200 |
| 100                         | 476      | 8.247   | 8.457    | 0.210 |
| 100                         | 45       | 8.299   | 8.470    | 0.171 |
| 100                         | 642      | 8.295   | 8.488    | 0.193 |
| 105                         | 1036     | 8.339   | 8.474    | 0.135 |
| 105                         | 1038     | 8.286   | 8.483    | 0.197 |
| 105                         | 203      | 8.271   | 8.433    | 0.162 |
| 105                         | 1029     | 8.241   | 8.454    | 0.213 |
| 105                         | 1027     | 8.295   | 8.393    | 0.098 |
| 105                         | Max      | 8.431   | 8.556    | 0.237 |
| Average                     |          | 8.296   | 8.410    | 0.113 |
| Min                         |          | 8.193   | 8.244    | 0.010 |
| Std Dev                     |          | 0.053   | 0.065    | 0.051 |



| 9.73_T_SYNC_RISE_100kHz_1 |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 8.337  | 8.281  | 8.341  | 8.311  | 8.244  | 8.349  | 8.353  | 8.301  | 8.358  | 8.457  | 8.393  |
| Average                   | 8.378  | 8.373  | 8.382  | 8.399  | 8.356  | 8.412  | 8.396  | 8.444  | 8.412  | 8.495  | 8.447  |
| Max                       | 8.436  | 8.439  | 8.430  | 8.478  | 8.404  | 8.471  | 8.472  | 8.556  | 8.462  | 8.548  | 8.483  |
| UL                        | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

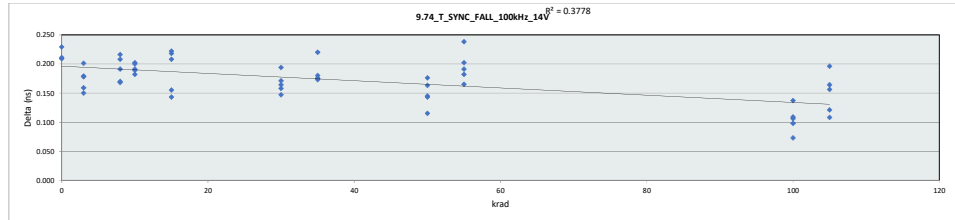


# HDR TID Report

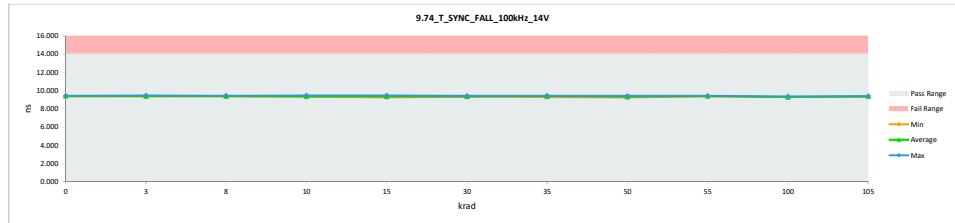
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.74_T_SYNC_FALL_100kHz_14V |          |         |          |       |
|-----------------------------|----------|---------|----------|-------|
| Test Site                   |          |         |          |       |
| Tester                      |          |         |          |       |
| Test Number                 |          |         |          |       |
| Unit                        |          |         |          |       |
| Max Limit                   |          |         |          |       |
| Min Limit                   |          |         |          |       |
| krad                        | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                           | 552      | 9.141   | 9.370    | 0.229 |
| 0                           | 726      | 9.211   | 9.420    | 0.209 |
| 0                           | 791      | 9.182   | 9.393    | 0.211 |
| 3                           | 689      | 9.175   | 9.354    | 0.179 |
| 3                           | 688      | 9.182   | 9.383    | 0.201 |
| 3                           | 700      | 9.273   | 9.451    | 0.178 |
| 3                           | 482      | 9.190   | 9.349    | 0.159 |
| 3                           | 1033     | 9.209   | 9.359    | 0.150 |
| 8                           | 442      | 9.219   | 9.435    | 0.216 |
| 8                           | 699      | 9.175   | 9.366    | 0.191 |
| 8                           | 344      | 9.204   | 9.412    | 0.208 |
| 8                           | 355      | 9.248   | 9.416    | 0.168 |
| 8                           | 750      | 9.196   | 9.366    | 0.170 |
| 10                          | 537      | 9.108   | 9.310    | 0.202 |
| 10                          | 396      | 9.136   | 9.336    | 0.200 |
| 10                          | 521      | 9.186   | 9.377    | 0.191 |
| 10                          | 535      | 9.177   | 9.366    | 0.189 |
| 10                          | 526      | 9.277   | 9.459    | 0.182 |
| 15                          | 540      | 9.176   | 9.398    | 0.222 |
| 15                          | 387      | 9.139   | 9.357    | 0.218 |
| 15                          | 787      | 9.241   | 9.449    | 0.208 |
| 15                          | 1042     | 9.100   | 9.243    | 0.143 |
| 15                          | 483      | 9.246   | 9.401    | 0.155 |
| 30                          | 597      | 9.154   | 9.318    | 0.164 |
| 30                          | 853      | 9.198   | 9.345    | 0.147 |
| 30                          | 416      | 9.208   | 9.379    | 0.171 |
| 30                          | 949      | 9.203   | 9.397    | 0.194 |
| 30                          | 221      | 9.222   | 9.380    | 0.158 |
| 35                          | 538      | 9.102   | 9.282    | 0.180 |
| 35                          | 164      | 9.234   | 9.409    | 0.175 |
| 35                          | 1018     | 9.194   | 9.367    | 0.173 |
| 35                          | 462      | 9.231   | 9.406    | 0.175 |
| 35                          | 1032     | 9.214   | 9.434    | 0.220 |
| 50                          | 566      | 9.140   | 9.316    | 0.176 |
| 50                          | 197      | 9.258   | 9.373    | 0.115 |
| 50                          | 793      | 9.240   | 9.403    | 0.163 |
| 50                          | 802      | 9.121   | 9.264    | 0.143 |
| 50                          | 61       | 9.199   | 9.344    | 0.145 |
| 55                          | 795      | 9.189   | 9.354    | 0.165 |
| 55                          | 921      | 9.229   | 9.420    | 0.191 |
| 55                          | 741      | 9.202   | 9.404    | 0.202 |
| 55                          | 809      | 9.186   | 9.368    | 0.182 |
| 55                          | 804      | 9.179   | 9.417    | 0.238 |
| 100                         | 449      | 9.159   | 9.268    | 0.109 |
| 100                         | 541      | 9.179   | 9.277    | 0.098 |
| 100                         | 476      | 9.213   | 9.350    | 0.137 |
| 100                         | 45       | 9.174   | 9.280    | 0.106 |
| 100                         | 642      | 9.231   | 9.304    | 0.073 |
| 105                         | 1036     | 9.170   | 9.326    | 0.156 |
| 105                         | 1038     | 9.200   | 9.321    | 0.121 |
| 105                         | 203      | 9.259   | 9.367    | 0.108 |
| 105                         | 1029     | 9.210   | 9.374    | 0.164 |
| 105                         | 1027     | 9.192   | 9.388    | 0.196 |
| 105                         | Max      | 9.277   | 9.459    | 0.238 |
| 105                         | Average  | 9.194   | 9.366    | 0.172 |
| 105                         | Min      | 9.100   | 9.243    | 0.073 |
| 105                         | Std Dev  | 0.041   | 0.050    | 0.036 |



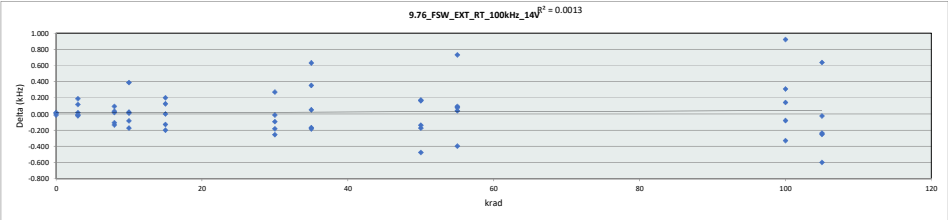
| 9.74_T_SYNC_FALL_100kHz_1 |        |        |        |  |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |  |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |  |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |  |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14     | ns     |        |  |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |  |        |        |        |        |        |        |        |        |        |
| krad                      | 0      | 3      | 8      |  |        | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  |  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 9.370  | 9.349  | 9.366  |  | 9.310  | 9.243  | 9.318  | 9.282  | 9.264  | 9.354  | 9.268  | 9.321  | 9.321  |
| Average                   | 9.394  | 9.379  | 9.399  |  | 9.370  | 9.370  | 9.364  | 9.380  | 9.340  | 9.393  | 9.296  | 9.355  | 9.355  |
| Max                       | 9.420  | 9.451  | 9.435  |  | 9.459  | 9.449  | 9.397  | 9.434  | 9.403  | 9.420  | 9.350  | 9.388  | 9.388  |
| UL                        | 14.000 | 14.000 | 14.000 |  | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |



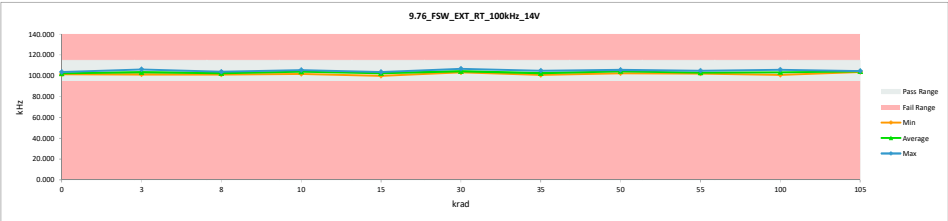
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.76_FSW_EXT_RT_100kHz_14V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 101.424 | 101.440  | 0.016  |
| 0                          | 726      | 101.644 | 101.649  | -0.015 |
| 0                          | 791      | 103.564 | 103.571  | 0.007  |
| 3                          | 689      | 102.638 | 102.653  | 0.015  |
| 3                          | 688      | 103.899 | 103.886  | -0.013 |
| 3                          | 700      | 101.059 | 101.247  | 0.188  |
| 3                          | 482      | 106.057 | 106.173  | 0.116  |
| 3                          | 1033     | 103.445 | 103.420  | -0.025 |
| 8                          | 442      | 103.766 | 103.798  | 0.032  |
| 8                          | 699      | 103.205 | 103.095  | -0.110 |
| 8                          | 344      | 102.643 | 102.661  | 0.018  |
| 8                          | 355      | 101.906 | 101.999  | 0.093  |
| 8                          | 750      | 101.249 | 101.111  | -0.138 |
| 10                         | 537      | 101.673 | 101.695  | 0.022  |
| 10                         | 396      | 103.684 | 103.597  | -0.087 |
| 10                         | 521      | 105.224 | 105.048  | -0.176 |
| 10                         | 535      | 105.474 | 105.483  | 0.009  |
| 10                         | 526      | 104.013 | 104.400  | 0.387  |
| 15                         | 540      | 103.125 | 103.324  | 0.199  |
| 15                         | 387      | 103.097 | 102.895  | -0.202 |
| 15                         | 787      | 102.916 | 102.915  | -0.001 |
| 15                         | 1042     | 100.029 | 99.898   | -0.131 |
| 15                         | 483      | 103.433 | 103.558  | 0.125  |
| 30                         | 597      | 103.248 | 103.151  | -0.097 |
| 30                         | 853      | 106.499 | 106.768  | 0.269  |
| 30                         | 416      | 104.008 | 103.824  | -0.184 |
| 30                         | 949      | 104.491 | 104.234  | -0.257 |
| 30                         | 221      | 103.666 | 103.652  | -0.014 |
| 35                         | 538      | 105.114 | 104.943  | -0.171 |
| 35                         | 164      | 102.153 | 102.783  | 0.630  |
| 35                         | 1018     | 101.766 | 102.118  | 0.352  |
| 35                         | 462      | 100.693 | 100.743  | 0.050  |
| 35                         | 1032     | 102.418 | 102.233  | -0.185 |
| 50                         | 566      | 104.221 | 104.382  | 0.161  |
| 50                         | 197      | 105.362 | 105.532  | 0.170  |
| 50                         | 793      | 105.598 | 105.423  | -0.175 |
| 50                         | 802      | 104.046 | 103.568  | -0.478 |
| 50                         | 61       | 102.590 | 102.449  | -0.141 |
| 55                         | 795      | 102.413 | 102.014  | -0.399 |
| 55                         | 921      | 102.497 | 102.535  | 0.038  |
| 55                         | 741      | 104.649 | 104.741  | 0.092  |
| 55                         | 809      | 103.950 | 104.026  | 0.076  |
| 55                         | 804      | 101.489 | 102.218  | 0.729  |
| 100                        | 449      | 100.450 | 100.758  | 0.308  |
| 100                        | 541      | 102.895 | 102.812  | -0.083 |
| 100                        | 476      | 103.515 | 103.184  | -0.331 |
| 100                        | 45       | 105.611 | 105.752  | 0.141  |
| 100                        | 642      | 103.004 | 103.923  | 0.919  |
| 105                        | 1036     | 103.931 | 104.566  | 0.635  |
| 105                        | 1038     | 103.707 | 103.681  | -0.026 |
| 105                        | 203      | 104.589 | 104.335  | -0.254 |
| 105                        | 1029     | 105.141 | 104.540  | -0.601 |
| 105                        | 1027     | 103.897 | 103.659  | -0.238 |
| Max                        |          | 106.499 | 106.768  | 0.919  |
| Average                    |          | 103.336 | 103.360  | 0.024  |
| Min                        |          | 100.029 | 99.898   | -0.601 |
| Std Dev                    |          | 1.481   | 1.458    | 0.282  |



| 9.76_FSW_EXT_RT_100kHz_14V |         |         |         |         |         |         |         |         |         |         |         |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site                  |         |         |         |         |         |         |         |         |         |         |         |
| Tester                     |         |         |         |         |         |         |         |         |         |         |         |
| Test Number                |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit                  |         |         |         |         |         |         |         |         |         |         |         |
| Min Limit                  |         |         |         |         |         |         |         |         |         |         |         |
| krad                       | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                         | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  | 95.000  |
| Min                        | 101.440 | 101.247 | 101.111 | 101.695 | 99.898  | 103.151 | 100.743 | 102.449 | 102.014 | 100.758 | 103.659 |
| Average                    | 102.220 | 103.476 | 102.533 | 104.045 | 102.518 | 104.326 | 102.564 | 104.271 | 103.107 | 103.286 | 104.156 |
| Max                        | 103.571 | 106.173 | 103.798 | 105.483 | 103.558 | 106.768 | 104.943 | 105.532 | 104.741 | 105.752 | 104.566 |
| UL                         | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 | 115.000 |

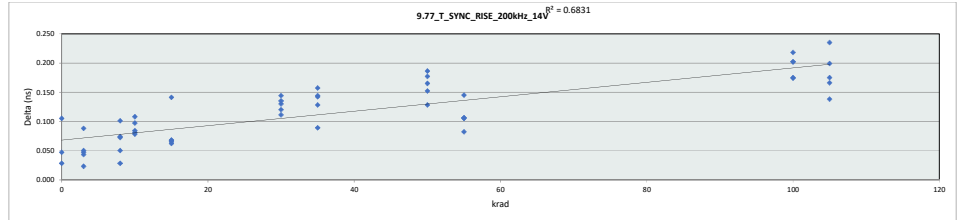


# HDR TID Report

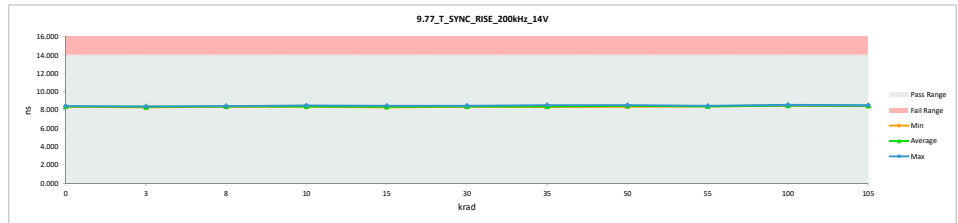
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.77_T_SYNC_RISE_200kHz_14V |          |         |          |       |
|-----------------------------|----------|---------|----------|-------|
| Test Site                   |          |         |          |       |
| Tester                      |          |         |          |       |
| Test Number                 |          |         |          |       |
| Unit                        |          |         |          |       |
| Max Limit                   |          |         |          |       |
| Min Limit                   |          |         |          |       |
| krad                        | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                           | 552      | 8.380   | 8.427    | 0.047 |
| 0                           | 726      | 8.333   | 8.361    | 0.028 |
| 0                           | 791      | 8.254   | 8.359    | 0.105 |
| 3                           | 689      | 8.341   | 8.391    | 0.050 |
| 3                           | 688      | 8.303   | 8.350    | 0.047 |
| 3                           | 700      | 8.195   | 8.283    | 0.088 |
| 3                           | 482      | 8.332   | 8.355    | 0.023 |
| 3                           | 1033     | 8.252   | 8.335    | 0.043 |
| 8                           | 442      | 8.295   | 8.367    | 0.072 |
| 8                           | 699      | 8.320   | 8.421    | 0.101 |
| 8                           | 344      | 8.298   | 8.348    | 0.050 |
| 8                           | 355      | 8.295   | 8.369    | 0.074 |
| 8                           | 750      | 8.380   | 8.408    | 0.028 |
| 10                          | 537      | 8.257   | 8.484    | 0.081 |
| 10                          | 396      | 8.355   | 8.433    | 0.078 |
| 10                          | 521      | 8.272   | 8.356    | 0.084 |
| 10                          | 535      | 8.343   | 8.440    | 0.097 |
| 10                          | 526      | 8.229   | 8.337    | 0.108 |
| 15                          | 540      | 8.285   | 8.352    | 0.067 |
| 15                          | 387      | 8.321   | 8.462    | 0.141 |
| 15                          | 787      | 8.248   | 8.310    | 0.062 |
| 15                          | 1042     | 8.330   | 8.395    | 0.065 |
| 15                          | 483      | 8.241   | 8.309    | 0.068 |
| 30                          | 597      | 8.349   | 8.460    | 0.111 |
| 30                          | 853      | 8.225   | 8.355    | 0.130 |
| 30                          | 416      | 8.280   | 8.415    | 0.135 |
| 30                          | 949      | 8.268   | 8.412    | 0.144 |
| 30                          | 221      | 8.259   | 8.379    | 0.120 |
| 35                          | 538      | 8.396   | 8.538    | 0.142 |
| 35                          | 164      | 8.233   | 8.377    | 0.144 |
| 35                          | 1018     | 8.257   | 8.414    | 0.157 |
| 35                          | 462      | 8.284   | 8.412    | 0.128 |
| 35                          | 1032     | 8.224   | 8.313    | 0.089 |
| 50                          | 566      | 8.337   | 8.465    | 0.128 |
| 50                          | 197      | 8.161   | 8.338    | 0.177 |
| 50                          | 793      | 8.271   | 8.457    | 0.186 |
| 50                          | 802      | 8.376   | 8.528    | 0.152 |
| 50                          | 61       | 8.308   | 8.473    | 0.165 |
| 55                          | 795      | 8.321   | 8.427    | 0.106 |
| 55                          | 921      | 8.296   | 8.378    | 0.082 |
| 55                          | 741      | 8.279   | 8.424    | 0.145 |
| 55                          | 809      | 8.270   | 8.375    | 0.105 |
| 55                          | 804      | 8.342   | 8.448    | 0.106 |
| 100                         | 449      | 8.372   | 8.546    | 0.174 |
| 100                         | 541      | 8.310   | 8.512    | 0.202 |
| 100                         | 476      | 8.261   | 8.463    | 0.202 |
| 100                         | 45       | 8.268   | 8.486    | 0.218 |
| 100                         | 642      | 8.271   | 8.446    | 0.175 |
| 105                         | 1036     | 8.309   | 8.508    | 0.199 |
| 105                         | 1038     | 8.249   | 8.484    | 0.235 |
| 105                         | 203      | 8.240   | 8.415    | 0.175 |
| 105                         | 1029     | 8.288   | 8.426    | 0.138 |
| 105                         | 1027     | 8.270   | 8.436    | 0.166 |
| 105                         | Max      | 8.403   | 8.546    | 0.235 |
| Average                     |          | 8.295   | 8.411    | 0.116 |
| Min                         |          | 8.161   | 8.283    | 0.023 |
| Std Dev                     |          | 0.051   | 0.063    | 0.053 |



| 9.77_T_SYNC_RISE_200kHz_1 |       |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |       |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |       |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |       |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14 ns |        |        |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0 ns  |        |        |        |        |        |        |        |        |        |        |        |
|                           | krad  |        |        |        |        |        |        |        |        |        |        |        |
|                           |       | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        |       | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       |       | 8.359  | 8.283  | 8.348  | 8.337  | 8.309  | 8.355  | 8.313  | 8.338  | 8.375  | 8.446  | 8.415  |
| Average                   |       | 8.382  | 8.343  | 8.383  | 8.410  | 8.366  | 8.404  | 8.411  | 8.452  | 8.410  | 8.491  | 8.454  |
| Max                       |       | 8.427  | 8.391  | 8.421  | 8.484  | 8.462  | 8.460  | 8.538  | 8.528  | 8.448  | 8.546  | 8.508  |
| UL                        |       | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

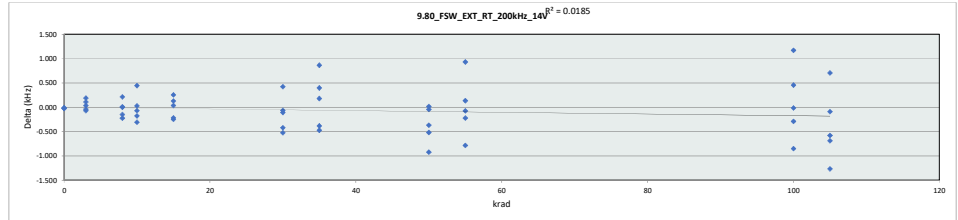


# HDR TID Report

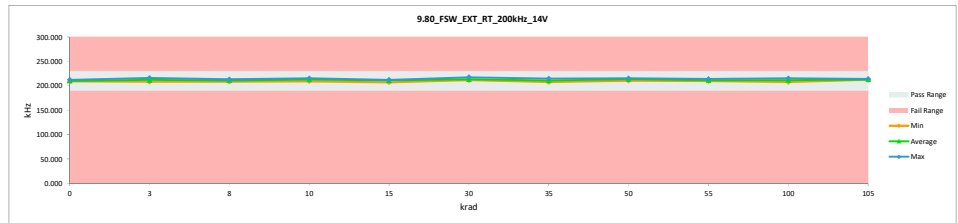
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.80_FSW_EXT_RT_200kHz_14V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       | kHz      | kHz     |          |        |
| Max Limit                  | 230      | 230     |          |        |
| Min Limit                  | 190      | 190     |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 208.934 | 208.925  | -0.009 |
| 0                          | 726      | 209.652 | 209.626  | -0.026 |
| 0                          | 791      | 212.561 | 212.536  | -0.025 |
| 3                          | 689      | 210.946 | 210.977  | 0.031  |
| 3                          | 688      | 212.441 | 212.401  | -0.040 |
| 3                          | 700      | 208.011 | 208.198  | 0.187  |
| 3                          | 482      | 216.355 | 216.463  | 0.108  |
| 3                          | 1033     | 212.167 | 212.165  | -0.002 |
| 8                          | 442      | 213.288 | 213.285  | -0.003 |
| 8                          | 699      | 211.342 | 211.191  | -0.151 |
| 8                          | 344      | 211.549 | 211.557  | 0.008  |
| 8                          | 355      | 210.099 | 210.311  | 0.212  |
| 8                          | 750      | 208.789 | 208.563  | -0.226 |
| 10                         | 537      | 209.399 | 209.427  | 0.028  |
| 10                         | 396      | 212.907 | 212.727  | -0.180 |
| 10                         | 521      | 215.447 | 215.139  | -0.308 |
| 10                         | 535      | 215.436 | 215.364  | -0.072 |
| 10                         | 526      | 212.814 | 213.257  | 0.443  |
| 15                         | 540      | 211.035 | 211.288  | 0.253  |
| 15                         | 387      | 212.248 | 211.997  | -0.251 |
| 15                         | 787      | 211.402 | 211.437  | 0.035  |
| 15                         | 1042     | 207.492 | 207.272  | -0.220 |
| 15                         | 483      | 212.288 | 212.415  | 0.127  |
| 30                         | 597      | 211.611 | 211.545  | -0.066 |
| 30                         | 853      | 217.331 | 217.752  | 0.421  |
| 30                         | 416      | 213.345 | 212.921  | -0.424 |
| 30                         | 949      | 213.729 | 213.203  | -0.526 |
| 30                         | 221      | 212.577 | 212.468  | -0.109 |
| 35                         | 538      | 214.954 | 214.569  | -0.385 |
| 35                         | 164      | 210.114 | 210.977  | 0.863  |
| 35                         | 1018     | 209.822 | 210.220  | 0.398  |
| 35                         | 462      | 207.516 | 207.695  | 0.179  |
| 35                         | 1032     | 210.904 | 210.429  | -0.475 |
| 50                         | 566      | 213.434 | 213.448  | 0.014  |
| 50                         | 197      | 215.534 | 215.489  | -0.045 |
| 50                         | 793      | 216.003 | 215.482  | -0.521 |
| 50                         | 802      | 213.517 | 212.592  | -0.925 |
| 50                         | 61       | 210.926 | 210.557  | -0.369 |
| 55                         | 795      | 210.683 | 209.897  | -0.786 |
| 55                         | 921      | 210.562 | 210.486  | -0.076 |
| 55                         | 741      | 214.171 | 213.948  | -0.223 |
| 55                         | 809      | 212.992 | 213.127  | 0.135  |
| 55                         | 804      | 209.367 | 210.296  | 0.929  |
| 100                        | 449      | 207.398 | 207.850  | 0.452  |
| 100                        | 541      | 211.593 | 211.300  | -0.293 |
| 100                        | 476      | 212.351 | 211.500  | -0.851 |
| 100                        | 45       | 215.534 | 215.518  | -0.016 |
| 100                        | 642      | 211.020 | 212.189  | 1.169  |
| 105                        | 1036     | 213.388 | 214.091  | 0.703  |
| 105                        | 1038     | 212.550 | 212.457  | -0.093 |
| 105                        | 203      | 214.434 | 213.744  | -0.690 |
| 105                        | 1029     | 214.904 | 213.635  | -1.269 |
| 105                        | 1027     | 212.938 | 212.356  | -0.582 |
| 105                        |          | 217.331 | 217.752  | 1.169  |
|                            | Max      | 212.111 | 212.043  | -0.068 |
|                            | Average  | 207.398 | 207.272  | -1.269 |
|                            | Min      | 2.384   | 2.292    | 0.450  |
|                            | Std Dev  |         |          |        |



| 9.80_FSW_EXT_RT_200kHz_14V |         |         |         |         |         |         |         |         |         |         |         |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site                  |         |         |         |         |         |         |         |         |         |         |         |
| Tester                     |         |         |         |         |         |         |         |         |         |         |         |
| Test Number                |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit                  | 230     | kHz     |         |         |         |         |         |         |         |         |         |
| Min Limit                  | 190     | kHz     |         |         |         |         |         |         |         |         |         |
| krad                       | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                         | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 | 190.000 |
| Min                        | 208.925 | 208.198 | 208.563 | 209.427 | 207.272 | 211.545 | 207.695 | 210.557 | 209.897 | 207.850 | 212.356 |
| Average                    | 210.362 | 212.041 | 210.981 | 213.183 | 210.882 | 213.578 | 210.778 | 213.514 | 211.551 | 211.671 | 213.257 |
| Max                        | 212.536 | 216.463 | 213.285 | 215.364 | 212.415 | 217.752 | 214.569 | 215.489 | 213.948 | 215.518 | 214.091 |
| UL                         | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 | 230.000 |

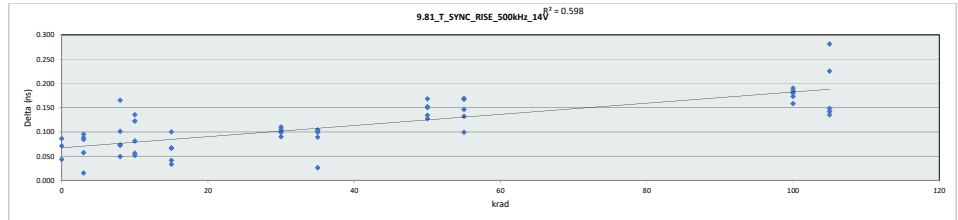


# HDR TID Report

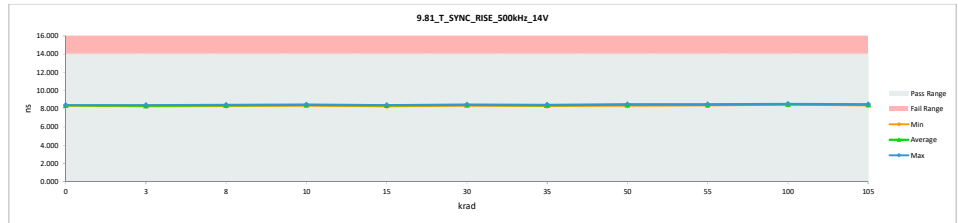
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.81_T_SYNC_RISE_500kHz_14V |          |         |          |       |
|-----------------------------|----------|---------|----------|-------|
| Test Site                   |          |         |          |       |
| Tester                      |          |         |          |       |
| Test Number                 |          |         |          |       |
| Unit                        | ns       | ns      |          |       |
| Max Limit                   | 14       | 14      |          |       |
| Min Limit                   | 0        | 0       |          |       |
| krad                        | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                           | 552      | 8.371   | 8.414    | 0.043 |
| 0                           | 726      | 8.247   | 8.333    | 0.086 |
| 0                           | 791      | 8.252   | 8.323    | 0.071 |
| 3                           | 689      | 8.323   | 8.418    | 0.095 |
| 3                           | 688      | 8.293   | 8.377    | 0.084 |
| 3                           | 700      | 8.209   | 8.266    | 0.057 |
| 3                           | 482      | 8.292   | 8.380    | 0.088 |
| 3                           | 1033     | 8.274   | 8.286    | 0.015 |
| 8                           | 442      | 8.226   | 8.391    | 0.165 |
| 8                           | 699      | 8.320   | 8.421    | 0.101 |
| 8                           | 344      | 8.311   | 8.384    | 0.073 |
| 8                           | 355      | 8.266   | 8.315    | 0.049 |
| 8                           | 790      | 8.343   | 8.415    | 0.072 |
| 10                          | 537      | 8.376   | 8.457    | 0.081 |
| 10                          | 396      | 8.322   | 8.378    | 0.056 |
| 10                          | 521      | 8.292   | 8.343    | 0.051 |
| 10                          | 535      | 8.346   | 8.468    | 0.122 |
| 10                          | 526      | 8.236   | 8.371    | 0.135 |
| 15                          | 540      | 8.296   | 8.363    | 0.067 |
| 15                          | 387      | 8.377   | 8.410    | 0.033 |
| 15                          | 787      | 8.225   | 8.266    | 0.041 |
| 15                          | 1042     | 8.341   | 8.407    | 0.066 |
| 15                          | 483      | 8.257   | 8.357    | 0.100 |
| 30                          | 597      | 8.357   | 8.462    | 0.105 |
| 30                          | 853      | 8.253   | 8.343    | 0.090 |
| 30                          | 416      | 8.279   | 8.389    | 0.110 |
| 30                          | 949      | 8.273   | 8.372    | 0.099 |
| 30                          | 221      | 8.318   | 8.418    | 0.100 |
| 35                          | 538      | 8.356   | 8.455    | 0.099 |
| 35                          | 164      | 8.253   | 8.357    | 0.104 |
| 35                          | 1018     | 8.254   | 8.343    | 0.089 |
| 35                          | 462      | 8.290   | 8.392    | 0.102 |
| 35                          | 1032     | 8.283   | 8.309    | 0.026 |
| 50                          | 566      | 8.292   | 8.460    | 0.168 |
| 50                          | 197      | 8.212   | 8.339    | 0.127 |
| 50                          | 793      | 8.246   | 8.380    | 0.134 |
| 50                          | 802      | 8.337   | 8.489    | 0.152 |
| 50                          | 61       | 8.339   | 8.489    | 0.150 |
| 55                          | 795      | 8.285   | 8.452    | 0.167 |
| 55                          | 921      | 8.227   | 8.359    | 0.132 |
| 55                          | 741      | 8.268   | 8.437    | 0.169 |
| 55                          | 809      | 8.312   | 8.411    | 0.099 |
| 55                          | 804      | 8.341   | 8.487    | 0.146 |
| 100                         | 449      | 8.358   | 8.531    | 0.173 |
| 100                         | 541      | 8.339   | 8.497    | 0.158 |
| 100                         | 476      | 8.280   | 8.464    | 0.184 |
| 100                         | 45       | 8.296   | 8.476    | 0.180 |
| 100                         | 642      | 8.265   | 8.455    | 0.190 |
| 105                         | 1036     | 8.319   | 8.461    | 0.142 |
| 105                         | 1038     | 8.215   | 8.496    | 0.281 |
| 105                         | 203      | 8.251   | 8.386    | 0.135 |
| 105                         | 1029     | 8.252   | 8.477    | 0.225 |
| 105                         | 1027     | 8.258   | 8.406    | 0.148 |
| 105                         | Max      | 8.377   | 8.531    | 0.281 |
| 105                         | Average  | 8.291   | 8.403    | 0.112 |
| 105                         | Min      | 8.209   | 8.266    | 0.015 |
| 105                         | Std Dev  | 0.046   | 0.063    | 0.053 |



| 9.81_T_SYNC_RISE_500kHz_1 |         |        |        |        |        |        |        |        |        |        |        |
|---------------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |         |        |        |        |        |        |        |        |        |        |        |
| Tester                    |         |        |        |        |        |        |        |        |        |        |        |
| Test Number               |         |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14      | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0       | ns     |        |        |        |        |        |        |        |        |        |
|                           | krad    |        |        |        |        |        |        |        |        |        |        |
| Average                   | LL      | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|                           | Min     | 8.323  | 8.266  | 8.315  | 8.343  | 8.266  | 8.343  | 8.309  | 8.339  | 8.359  | 8.455  |
|                           | Average | 8.357  | 8.345  | 8.385  | 8.403  | 8.361  | 8.397  | 8.371  | 8.431  | 8.429  | 8.485  |
|                           | Max     | 8.414  | 8.418  | 8.421  | 8.468  | 8.410  | 8.462  | 8.455  | 8.489  | 8.487  | 8.531  |
|                           | UL      | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

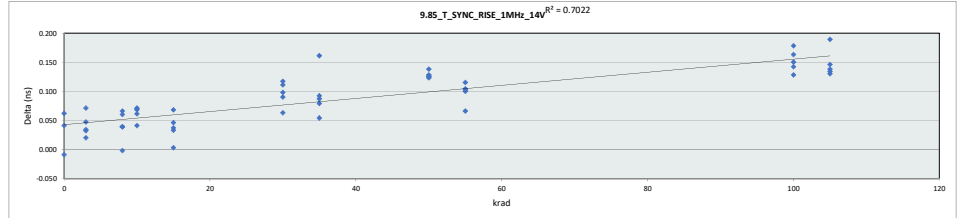


# HDR TID Report

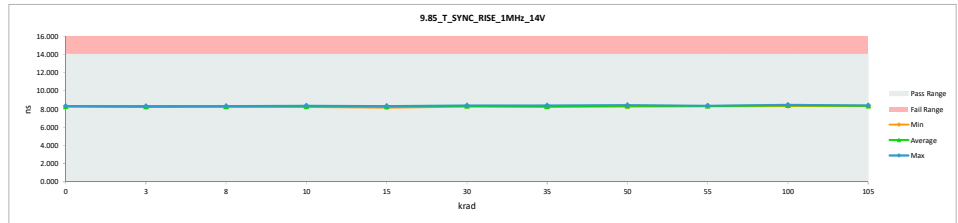
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.85_T_SYNC_RISE_1MHz_14V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      |          |         |          |        |
| Max Limit                 |          |         |          |        |
| Min Limit                 |          |         |          |        |
| krad                      | Serial # | PRE HDR | POST HDR | Delta  |
| 0                         | 552      | 8.330   | 8.321    | -0.009 |
| 0                         | 726      | 8.219   | 8.260    | 0.041  |
| 0                         | 791      | 8.191   | 8.253    | 0.062  |
| 3                         | 689      | 8.274   | 8.308    | 0.034  |
| 3                         | 688      | 8.244   | 8.264    | 0.020  |
| 3                         | 700      | 8.132   | 8.203    | 0.071  |
| 3                         | 482      | 8.224   | 8.271    | 0.047  |
| 3                         | 1033     | 8.207   | 8.249    | 0.032  |
| 8                         | 442      | 8.207   | 8.267    | 0.060  |
| 8                         | 699      | 8.283   | 8.322    | 0.039  |
| 8                         | 344      | 8.204   | 8.243    | 0.039  |
| 8                         | 355      | 8.190   | 8.256    | 0.066  |
| 8                         | 750      | 8.286   | 8.284    | -0.002 |
| 10                        | 537      | 8.332   | 8.373    | 0.041  |
| 10                        | 396      | 8.261   | 8.329    | 0.068  |
| 10                        | 521      | 8.219   | 8.280    | 0.061  |
| 10                        | 535      | 8.263   | 8.333    | 0.070  |
| 10                        | 526      | 8.153   | 8.224    | 0.071  |
| 15                        | 540      | 8.222   | 8.255    | 0.033  |
| 15                        | 387      | 8.262   | 8.308    | 0.046  |
| 15                        | 787      | 8.159   | 8.162    | 0.003  |
| 15                        | 1042     | 8.264   | 8.332    | 0.068  |
| 15                        | 483      | 8.172   | 8.209    | 0.037  |
| 30                        | 597      | 8.277   | 8.388    | 0.111  |
| 30                        | 853      | 8.186   | 8.276    | 0.090  |
| 30                        | 416      | 8.196   | 8.313    | 0.117  |
| 30                        | 949      | 8.266   | 8.329    | 0.063  |
| 30                        | 221      | 8.198   | 8.296    | 0.098  |
| 35                        | 538      | 8.316   | 8.395    | 0.079  |
| 35                        | 164      | 8.190   | 8.282    | 0.092  |
| 35                        | 1018     | 8.203   | 8.290    | 0.087  |
| 35                        | 462      | 8.218   | 8.379    | 0.161  |
| 35                        | 1032     | 8.176   | 8.230    | 0.054  |
| 50                        | 566      | 8.282   | 8.407    | 0.125  |
| 50                        | 197      | 8.107   | 8.245    | 0.138  |
| 50                        | 793      | 8.164   | 8.290    | 0.126  |
| 50                        | 802      | 8.301   | 8.429    | 0.128  |
| 50                        | 61       | 8.268   | 8.391    | 0.123  |
| 55                        | 795      | 8.237   | 8.337    | 0.100  |
| 55                        | 921      | 8.195   | 8.299    | 0.104  |
| 55                        | 741      | 8.237   | 8.303    | 0.066  |
| 55                        | 809      | 8.199   | 8.302    | 0.103  |
| 55                        | 804      | 8.254   | 8.369    | 0.115  |
| 100                       | 449      | 8.312   | 8.454    | 0.142  |
| 100                       | 541      | 8.260   | 8.410    | 0.150  |
| 100                       | 476      | 8.188   | 8.366    | 0.178  |
| 100                       | 45       | 8.212   | 8.340    | 0.128  |
| 100                       | 642      | 8.195   | 8.358    | 0.163  |
| 105                       | 1036     | 8.245   | 8.375    | 0.130  |
| 105                       | 1038     | 8.195   | 8.384    | 0.189  |
| 105                       | 203      | 8.184   | 8.322    | 0.138  |
| 105                       | 1029     | 8.196   | 8.342    | 0.146  |
| 105                       | 1027     | 8.184   | 8.318    | 0.134  |
| 105                       | Max      | 8.332   | 8.454    | 0.189  |
| 105                       | Average  | 8.225   | 8.312    | 0.086  |
| 105                       | Min      | 8.107   | 8.162    | -0.009 |
| 105                       | Std Dev  | 0.050   | 0.062    | 0.048  |



| 9.85_T_SYNC_RISE_1MHz_14V |         |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |         |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |         |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |         |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14      | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0       | ns     |        |        |        |        |        |        |        |        |        |        |
|                           | krad    |        | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |        |
| Average                   | LL      | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |        |
|                           | Min     | 8.253  | 8.203  | 8.243  | 8.224  | 8.162  | 8.276  | 8.230  | 8.245  | 8.299  | 8.340  | 8.318  |
|                           | Average | 8.278  | 8.259  | 8.274  | 8.308  | 8.253  | 8.320  | 8.315  | 8.352  | 8.322  | 8.386  | 8.348  |
|                           | Max     | 8.321  | 8.308  | 8.322  | 8.373  | 8.332  | 8.388  | 8.395  | 8.429  | 8.369  | 8.454  | 8.384  |
|                           | UL      | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

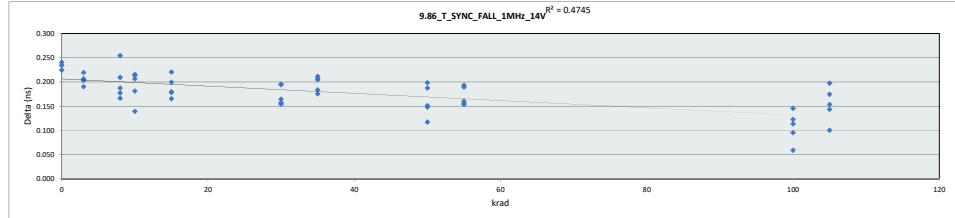


# HDR TID Report

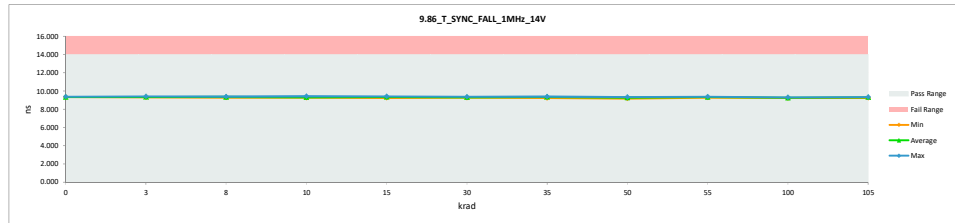
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.86_T_SYNC_FALL_1MHz_14V |          |         |          |       |
|---------------------------|----------|---------|----------|-------|
| Test Site                 |          |         |          |       |
| Tester                    |          |         |          |       |
| Test Number               |          |         |          |       |
| Unit                      |          |         |          |       |
| Max Limit                 |          |         |          |       |
| Min Limit                 |          |         |          |       |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                         | 552      | 9.098   | 9.338    | 0.240 |
| 0                         | 726      | 9.143   | 9.377    | 0.234 |
| 0                         | 791      | 9.122   | 9.346    | 0.224 |
| 3                         | 689      | 9.107   | 9.313    | 0.206 |
| 3                         | 688      | 9.134   | 9.353    | 0.219 |
| 3                         | 700      | 9.198   | 9.401    | 0.203 |
| 3                         | 482      | 9.129   | 9.319    | 0.190 |
| 3                         | 1033     | 9.131   | 9.335    | 0.204 |
| 8                         | 442      | 9.179   | 9.366    | 0.187 |
| 8                         | 699      | 9.123   | 9.289    | 0.166 |
| 8                         | 344      | 9.134   | 9.388    | 0.254 |
| 8                         | 355      | 9.186   | 9.395    | 0.209 |
| 8                         | 790      | 9.158   | 9.335    | 0.177 |
| 10                        | 537      | 9.054   | 9.260    | 0.206 |
| 10                        | 396      | 9.115   | 9.296    | 0.181 |
| 10                        | 521      | 9.170   | 9.309    | 0.139 |
| 10                        | 535      | 9.059   | 9.274    | 0.215 |
| 10                        | 526      | 9.216   | 9.429    | 0.213 |
| 15                        | 540      | 9.160   | 9.338    | 0.178 |
| 15                        | 387      | 9.111   | 9.310    | 0.199 |
| 15                        | 787      | 9.193   | 9.413    | 0.220 |
| 15                        | 1042     | 9.079   | 9.244    | 0.165 |
| 15                        | 483      | 9.191   | 9.370    | 0.179 |
| 30                        | 597      | 9.111   | 9.265    | 0.154 |
| 30                        | 853      | 9.126   | 9.283    | 0.157 |
| 30                        | 416      | 9.152   | 9.347    | 0.195 |
| 30                        | 949      | 9.182   | 9.346    | 0.164 |
| 30                        | 221      | 9.172   | 9.366    | 0.194 |
| 35                        | 538      | 9.027   | 9.238    | 0.211 |
| 35                        | 164      | 9.188   | 9.363    | 0.175 |
| 35                        | 1018     | 9.153   | 9.336    | 0.183 |
| 35                        | 462      | 9.185   | 9.389    | 0.204 |
| 35                        | 1032     | 9.171   | 9.377    | 0.206 |
| 50                        | 566      | 9.123   | 9.271    | 0.148 |
| 50                        | 197      | 9.158   | 9.345    | 0.187 |
| 50                        | 793      | 9.194   | 9.345    | 0.151 |
| 50                        | 802      | 9.067   | 9.184    | 0.117 |
| 50                        | 61       | 9.110   | 9.308    | 0.198 |
| 55                        | 795      | 9.157   | 9.317    | 0.160 |
| 55                        | 921      | 9.185   | 9.378    | 0.193 |
| 55                        | 741      | 9.182   | 9.335    | 0.153 |
| 55                        | 809      | 9.157   | 9.346    | 0.189 |
| 55                        | 804      | 9.138   | 9.294    | 0.156 |
| 100                       | 449      | 9.106   | 9.228    | 0.122 |
| 100                       | 541      | 9.145   | 9.240    | 0.095 |
| 100                       | 476      | 9.164   | 9.309    | 0.145 |
| 100                       | 45       | 9.141   | 9.254    | 0.113 |
| 100                       | 642      | 9.217   | 9.276    | 0.059 |
| 105                       | 1036     | 9.115   | 9.289    | 0.174 |
| 105                       | 1038     | 9.152   | 9.252    | 0.100 |
| 105                       | 203      | 9.177   | 9.330    | 0.153 |
| 105                       | 1029     | 9.185   | 9.328    | 0.143 |
| 105                       | 1027     | 9.138   | 9.335    | 0.197 |
| 105                       | Max      | 9.217   | 9.429    | 0.254 |
| 105                       | Average  | 9.145   | 9.322    | 0.177 |
| 105                       | Min      | 9.027   | 9.184    | 0.059 |
| 105                       | Std Dev  | 0.042   | 0.052    | 0.038 |



| 9.86_T_SYNC_FALL_1MHz_14V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 9.338  | 9.313  | 9.289  | 9.260  | 9.244  | 9.265  | 9.238  | 9.184  | 9.294  | 9.228  | 9.252  |
| Average                   | 9.354  | 9.344  | 9.355  | 9.314  | 9.335  | 9.321  | 9.341  | 9.291  | 9.334  | 9.261  | 9.307  |
| Max                       | 9.377  | 9.401  | 9.395  | 9.429  | 9.413  | 9.366  | 9.389  | 9.345  | 9.378  | 9.309  | 9.335  |
| UL                        | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

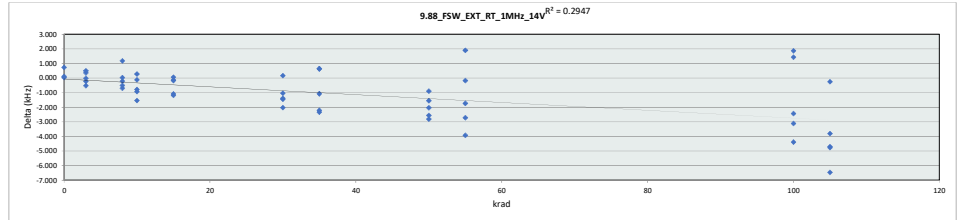


# HDR TID Report

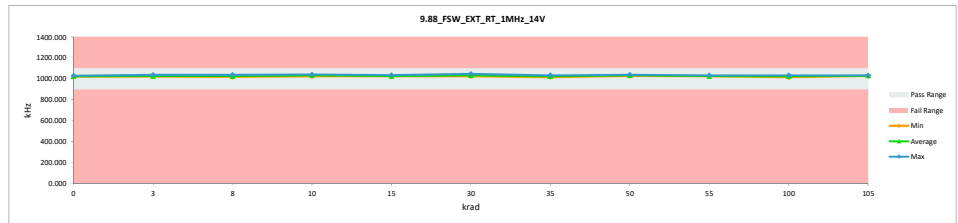
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.88_FSW_EXT_RT_1MHz_14V |          |          |          |        |
|--------------------------|----------|----------|----------|--------|
| Test Site                |          |          |          |        |
| Tester                   |          |          |          |        |
| Test Number              |          |          |          |        |
| Unit                     | kHz      | kHz      |          |        |
| Max Limit                | 1100     | 1100     |          |        |
| Min Limit                | 900      | 900      |          |        |
| krad                     | Serial # | PRE_HDR  | POST_HDR | Delta  |
| 0                        | 552      | 1018.900 | 1019.626 | 0.726  |
| 0                        | 726      | 1026.757 | 1026.786 | 0.029  |
| 0                        | 791      | 1029.824 | 1029.935 | 0.111  |
| 3                        | 689      | 1027.707 | 1027.686 | -0.021 |
| 3                        | 688      | 1030.281 | 1030.630 | 0.349  |
| 3                        | 700      | 1020.146 | 1020.640 | 0.494  |
| 3                        | 482      | 1037.746 | 1037.514 | -0.232 |
| 3                        | 1033     | 1028.928 | 1028.404 | -0.524 |
| 8                        | 442      | 1037.848 | 1037.873 | 0.025  |
| 8                        | 699      | 1027.598 | 1026.899 | -0.699 |
| 8                        | 344      | 1032.719 | 1032.212 | -0.507 |
| 8                        | 355      | 1025.583 | 1026.755 | 1.172  |
| 8                        | 750      | 1017.450 | 1017.238 | -0.212 |
| 10                       | 537      | 1023.372 | 1023.247 | -0.125 |
| 10                       | 396      | 1036.167 | 1035.232 | -0.935 |
| 10                       | 521      | 1042.433 | 1040.886 | -1.547 |
| 10                       | 535      | 1039.469 | 1038.690 | -0.779 |
| 10                       | 526      | 1030.218 | 1030.490 | 0.272  |
| 15                       | 540      | 1023.035 | 1022.861 | -0.174 |
| 15                       | 387      | 1036.270 | 1035.182 | -1.088 |
| 15                       | 787      | 1029.136 | 1028.995 | -0.141 |
| 15                       | 1042     | 1025.343 | 1024.152 | -1.191 |
| 15                       | 483      | 1029.780 | 1029.832 | 0.052  |
| 30                       | 597      | 1024.957 | 1023.912 | -1.045 |
| 30                       | 853      | 1047.193 | 1047.355 | 0.162  |
| 30                       | 416      | 1031.275 | 1029.884 | -1.391 |
| 30                       | 949      | 1031.607 | 1029.577 | -2.030 |
| 30                       | 221      | 1031.188 | 1029.732 | -1.456 |
| 35                       | 538      | 1036.808 | 1034.589 | -2.219 |
| 35                       | 164      | 1018.647 | 1019.276 | 0.629  |
| 35                       | 1018     | 1025.763 | 1026.392 | 0.629  |
| 35                       | 462      | 1017.972 | 1016.885 | -1.087 |
| 35                       | 1032     | 1029.277 | 1026.938 | -2.339 |
| 50                       | 566      | 1034.459 | 1032.905 | -1.554 |
| 50                       | 197      | 1038.997 | 1036.960 | -2.037 |
| 50                       | 793      | 1042.402 | 1039.837 | -2.565 |
| 50                       | 802      | 1035.886 | 1033.066 | -2.820 |
| 50                       | 61       | 1028.826 | 1027.921 | -0.905 |
| 55                       | 795      | 1027.164 | 1023.234 | -3.930 |
| 55                       | 921      | 1024.780 | 1023.039 | -1.741 |
| 55                       | 741      | 1031.696 | 1028.975 | -2.721 |
| 55                       | 809      | 1033.471 | 1033.292 | -0.179 |
| 55                       | 804      | 1022.427 | 1024.322 | 1.895  |
| 100                      | 449      | 1013.296 | 1014.722 | 1.426  |
| 100                      | 541      | 1028.696 | 1026.256 | -2.440 |
| 100                      | 476      | 1029.871 | 1025.481 | -4.390 |
| 100                      | 45       | 1036.908 | 1033.790 | -3.118 |
| 100                      | 642      | 1022.306 | 1024.170 | 1.864  |
| 105                      | 1036     | 1032.370 | 1032.115 | -0.255 |
| 105                      | 1038     | 1032.169 | 1027.468 | -4.701 |
| 105                      | 203      | 1036.428 | 1031.654 | -4.774 |
| 105                      | 1029     | 1033.611 | 1027.139 | -6.472 |
| 105                      | 1027     | 1034.119 | 1030.313 | -3.806 |
| 105                      | Max      | 1047.193 | 1047.355 | 1.895  |
| 105                      | Average  | 1030.024 | 1028.924 | -1.100 |
| 105                      | Min      | 1013.296 | 1014.722 | -6.472 |
| 105                      | Std Dev  | 6.959    | 6.433    | 1.758  |



| 9.88_FSW_EXT_RT_1MHz_14V |          |          |          |          |          |          |          |          |          |          |          |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site                |          |          |          |          |          |          |          |          |          |          |          |
| Tester                   |          |          |          |          |          |          |          |          |          |          |          |
| Test Number              |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit                | 1100     | kHz      |          |          |          |          |          |          |          |          |          |
| Min Limit                | 900      | kHz      |          |          |          |          |          |          |          |          |          |
| krad                     | 0        | 3        | 8        | 10       | 15       | 30       | 35       | 50       | 55       | 100      | 105      |
| LL                       | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  | 900.000  |
| Min                      | 1019.626 | 1020.640 | 1017.238 | 1023.247 | 1022.861 | 1023.912 | 1016.885 | 1027.921 | 1023.039 | 1014.722 | 1027.139 |
| Average                  | 1025.449 | 1028.975 | 1028.195 | 1033.709 | 1028.204 | 1032.092 | 1024.816 | 1034.138 | 1026.572 | 1024.884 | 1029.736 |
| Max                      | 1029.935 | 1037.514 | 1037.873 | 1040.886 | 1035.182 | 1047.355 | 1034.589 | 1039.837 | 1033.292 | 1033.790 | 1032.115 |
| UL                       | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 | 1100.000 |

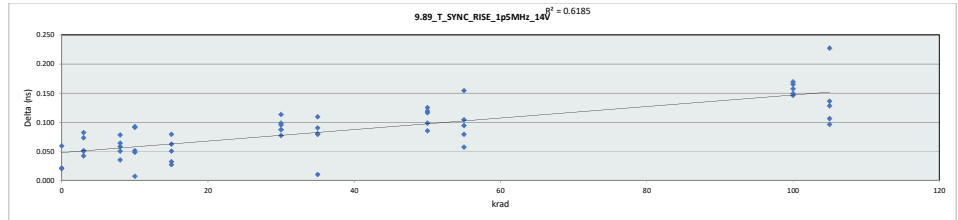


# HDR TID Report

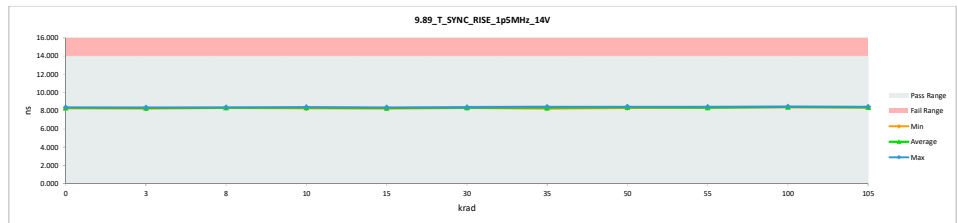
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.89_T_SYNC_RISE_1p5MHz_14V |          |         |          |       |
|-----------------------------|----------|---------|----------|-------|
| Test Site                   |          |         |          |       |
| Tester                      |          |         |          |       |
| Test Number                 |          |         |          |       |
| Unit                        |          |         |          |       |
| Max Limit                   |          |         |          |       |
| Min Limit                   |          |         |          |       |
| krad                        | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                           | 552      | 8.351   | 8.371    | 0.020 |
| 0                           | 726      | 8.253   | 8.274    | 0.021 |
| 0                           | 791      | 8.243   | 8.302    | 0.059 |
| 3                           | 689      | 8.280   | 8.353    | 0.073 |
| 3                           | 688      | 8.277   | 8.359    | 0.082 |
| 3                           | 700      | 8.171   | 8.222    | 0.051 |
| 3                           | 482      | 8.256   | 8.306    | 0.050 |
| 3                           | 1033     | 8.269   | 8.269    | 0.042 |
| 8                           | 442      | 8.273   | 8.337    | 0.064 |
| 8                           | 699      | 8.300   | 8.378    | 0.078 |
| 8                           | 344      | 8.269   | 8.319    | 0.050 |
| 8                           | 355      | 8.235   | 8.293    | 0.058 |
| 8                           | 790      | 8.301   | 8.336    | 0.035 |
| 10                          | 537      | 8.333   | 8.381    | 0.048 |
| 10                          | 396      | 8.318   | 8.369    | 0.051 |
| 10                          | 521      | 8.244   | 8.335    | 0.091 |
| 10                          | 535      | 8.318   | 8.410    | 0.092 |
| 10                          | 526      | 8.248   | 8.255    | 0.007 |
| 15                          | 540      | 8.233   | 8.295    | 0.062 |
| 15                          | 387      | 8.321   | 8.371    | 0.050 |
| 15                          | 787      | 8.197   | 8.224    | 0.027 |
| 15                          | 1042     | 8.327   | 8.359    | 0.032 |
| 15                          | 483      | 8.188   | 8.267    | 0.079 |
| 30                          | 597      | 8.277   | 8.390    | 0.113 |
| 30                          | 853      | 8.228   | 8.323    | 0.095 |
| 30                          | 416      | 8.253   | 8.340    | 0.087 |
| 30                          | 949      | 8.253   | 8.351    | 0.098 |
| 30                          | 221      | 8.237   | 8.314    | 0.077 |
| 35                          | 538      | 8.350   | 8.430    | 0.080 |
| 35                          | 164      | 8.221   | 8.231    | 0.010 |
| 35                          | 1018     | 8.215   | 8.324    | 0.109 |
| 35                          | 462      | 8.241   | 8.320    | 0.079 |
| 35                          | 1032     | 8.203   | 8.293    | 0.090 |
| 50                          | 566      | 8.308   | 8.406    | 0.098 |
| 50                          | 197      | 8.176   | 8.301    | 0.125 |
| 50                          | 793      | 8.226   | 8.345    | 0.119 |
| 50                          | 802      | 8.372   | 8.457    | 0.085 |
| 50                          | 61       | 8.297   | 8.413    | 0.116 |
| 55                          | 795      | 8.257   | 8.361    | 0.104 |
| 55                          | 921      | 8.229   | 8.323    | 0.094 |
| 55                          | 741      | 8.238   | 8.317    | 0.079 |
| 55                          | 809      | 8.279   | 8.336    | 0.057 |
| 55                          | 804      | 8.266   | 8.420    | 0.154 |
| 100                         | 449      | 8.302   | 8.459    | 0.157 |
| 100                         | 541      | 8.288   | 8.453    | 0.165 |
| 100                         | 476      | 8.234   | 8.403    | 0.169 |
| 100                         | 45       | 8.243   | 8.389    | 0.146 |
| 100                         | 642      | 8.232   | 8.381    | 0.149 |
| 105                         | 1036     | 8.289   | 8.417    | 0.128 |
| 105                         | 1038     | 8.208   | 8.435    | 0.227 |
| 105                         | 203      | 8.219   | 8.355    | 0.136 |
| 105                         | 1029     | 8.238   | 8.344    | 0.106 |
| 105                         | 1027     | 8.265   | 8.351    | 0.086 |
| 105                         | Max      | 8.372   | 8.459    | 0.227 |
|                             | Average  | 8.260   | 8.347    | 0.086 |
|                             | Min      | 8.171   | 8.222    | 0.007 |
|                             | Std Dev  | 0.045   | 0.058    | 0.045 |



| 9.89_T_SYNC_RISE_1p5MHz                                      |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site<br>Tester<br>Test Number<br>Max Limit<br>Min Limit |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              |        |        |        |        |        |        |        |        |        |        |        |
|                                                              | 14     | ns     |        |        |        |        |        |        |        |        |        |
|                                                              | 0      | ns     |        |        |        |        |        |        |        |        |        |
|                                                              | krad   | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL<br>Min<br>Average<br>Max<br>UL                            | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|                                                              | 8.274  | 8.222  | 8.293  | 8.255  | 8.224  | 8.314  | 8.231  | 8.301  | 8.317  | 8.381  | 8.344  |
|                                                              | 8.316  | 8.302  | 8.333  | 8.350  | 8.303  | 8.344  | 8.320  | 8.384  | 8.351  | 8.417  | 8.380  |
|                                                              | 8.371  | 8.359  | 8.378  | 8.410  | 8.371  | 8.390  | 8.430  | 8.457  | 8.420  | 8.459  | 8.435  |
|                                                              | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

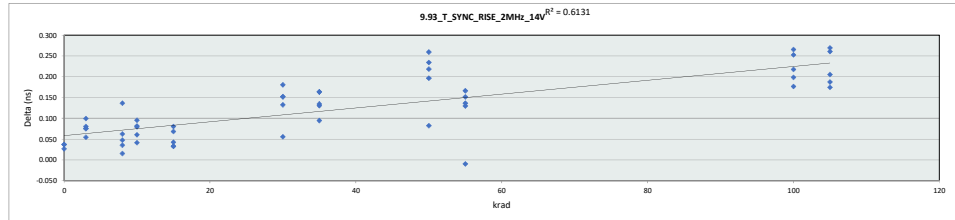


# HDR TID Report

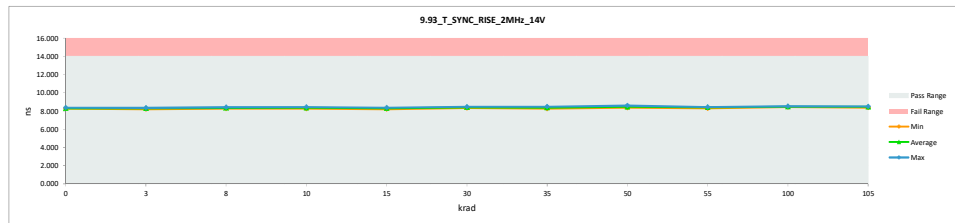
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.93_T_SYNC_RISE_2MHz_14V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      |          |         |          |        |
| Max Limit                 |          |         |          |        |
| Min Limit                 |          |         |          |        |
| krad                      | Serial # | PRE HDR | POST HDR | Delta  |
| 0                         | 552      | 8.328   | 8.354    | 0.026  |
| 0                         | 726      | 8.227   | 8.264    | 0.037  |
| 0                         | 791      | 8.246   | 8.282    | 0.036  |
| 3                         | 689      | 8.260   | 8.340    | 0.080  |
| 3                         | 688      | 8.218   | 8.293    | 0.075  |
| 3                         | 700      | 8.153   | 8.207    | 0.054  |
| 3                         | 482      | 8.254   | 8.329    | 0.075  |
| 3                         | 1033     | 8.269   | 8.299    | 0.029  |
| 8                         | 442      | 8.284   | 8.299    | 0.015  |
| 8                         | 699      | 8.290   | 8.352    | 0.062  |
| 8                         | 344      | 8.226   | 8.261    | 0.035  |
| 8                         | 355      | 8.220   | 8.267    | 0.047  |
| 8                         | 750      | 8.271   | 8.407    | 0.136  |
| 10                        | 537      | 8.354   | 8.435    | 0.081  |
| 10                        | 396      | 8.299   | 8.378    | 0.079  |
| 10                        | 521      | 8.248   | 8.289    | 0.041  |
| 10                        | 535      | 8.318   | 8.413    | 0.095  |
| 10                        | 526      | 8.182   | 8.242    | 0.060  |
| 15                        | 540      | 8.256   | 8.324    | 0.068  |
| 15                        | 387      | 8.322   | 8.354    | 0.032  |
| 15                        | 787      | 8.162   | 8.204    | 0.042  |
| 15                        | 1042     | 8.301   | 8.334    | 0.033  |
| 15                        | 483      | 8.200   | 8.280    | 0.080  |
| 30                        | 597      | 8.319   | 8.451    | 0.132  |
| 30                        | 853      | 8.270   | 8.325    | 0.055  |
| 30                        | 416      | 8.247   | 8.399    | 0.152  |
| 30                        | 949      | 8.251   | 8.402    | 0.151  |
| 30                        | 221      | 8.205   | 8.385    | 0.180  |
| 35                        | 538      | 8.315   | 8.478    | 0.163  |
| 35                        | 164      | 8.245   | 8.375    | 0.130  |
| 35                        | 1018     | 8.205   | 8.339    | 0.134  |
| 35                        | 462      | 8.239   | 8.402    | 0.163  |
| 35                        | 1032     | 8.155   | 8.249    | 0.094  |
| 50                        | 566      | 8.274   | 8.508    | 0.234  |
| 50                        | 197      | 8.135   | 8.353    | 0.218  |
| 50                        | 793      | 8.244   | 8.440    | 0.196  |
| 50                        | 802      | 8.351   | 8.590    | 0.259  |
| 50                        | 61       | 8.288   | 8.370    | 0.082  |
| 55                        | 795      | 8.256   | 8.422    | 0.166  |
| 55                        | 921      | 8.216   | 8.367    | 0.151  |
| 55                        | 741      | 8.272   | 8.408    | 0.136  |
| 55                        | 809      | 8.288   | 8.278    | -0.010 |
| 55                        | 804      | 8.292   | 8.421    | 0.129  |
| 100                       | 449      | 8.338   | 8.514    | 0.176  |
| 100                       | 541      | 8.292   | 8.490    | 0.198  |
| 100                       | 476      | 8.187   | 8.452    | 0.265  |
| 100                       | 45       | 8.225   | 8.442    | 0.217  |
| 100                       | 642      | 8.221   | 8.473    | 0.252  |
| 105                       | 1036     | 8.286   | 8.491    | 0.205  |
| 105                       | 1038     | 8.214   | 8.483    | 0.269  |
| 105                       | 203      | 8.232   | 8.419    | 0.187  |
| 105                       | 1029     | 8.204   | 8.378    | 0.174  |
| 105                       | 1027     | 8.208   | 8.468    | 0.260  |
| 105                       | Max      | 8.354   | 8.590    | 0.269  |
| 105                       | Average  | 8.250   | 8.373    | 0.123  |
| 105                       | Min      | 8.135   | 8.204    | -0.010 |
| 105                       | Std Dev  | 0.052   | 0.086    | 0.076  |



| 9.93_T_SYNC_RISE_2MHz_14V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |        |        |        |        |        |        |        |        |
| krad                      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 8.264  | 8.207  | 8.261  | 8.242  | 8.204  | 8.325  | 8.249  | 8.353  | 8.278  | 8.442  | 8.378  |
| Average                   | 8.300  | 8.288  | 8.317  | 8.351  | 8.299  | 8.392  | 8.369  | 8.452  | 8.379  | 8.474  | 8.448  |
| Max                       | 8.354  | 8.340  | 8.407  | 8.435  | 8.354  | 8.451  | 8.478  | 8.590  | 8.422  | 8.514  | 8.491  |
| UL                        | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

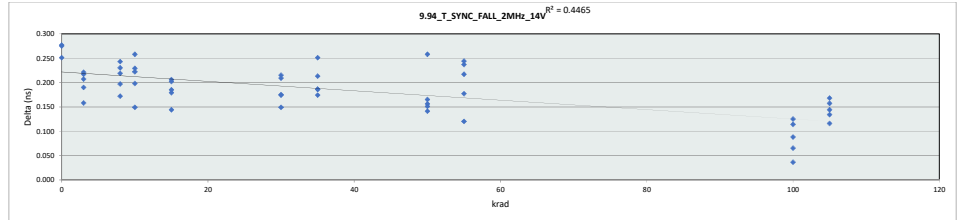


# HDR TID Report

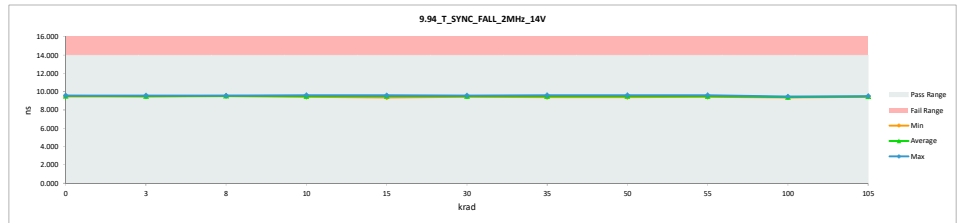
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.94_T_SYNC_FALL_2MHz_14V |          |         |          |       |
|---------------------------|----------|---------|----------|-------|
| Test Site                 |          |         |          |       |
| Tester                    |          |         |          |       |
| Test Number               |          |         |          |       |
| Unit                      |          |         |          |       |
| Max Limit                 |          |         |          |       |
| Min Limit                 |          |         |          |       |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                         | 552      | 9.210   | 9.487    | 0.277 |
| 0                         | 726      | 9.304   | 9.579    | 0.275 |
| 0                         | 791      | 9.286   | 9.537    | 0.251 |
| 3                         | 689      | 9.259   | 9.476    | 0.217 |
| 3                         | 688      | 9.324   | 9.545    | 0.221 |
| 3                         | 700      | 9.377   | 9.584    | 0.207 |
| 3                         | 482      | 9.332   | 9.490    | 0.158 |
| 3                         | 1033     | 9.310   | 9.500    | 0.190 |
| 8                         | 442      | 9.392   | 9.564    | 0.172 |
| 8                         | 699      | 9.292   | 9.522    | 0.230 |
| 8                         | 344      | 9.315   | 9.558    | 0.243 |
| 8                         | 355      | 9.355   | 9.574    | 0.219 |
| 8                         | 790      | 9.319   | 9.516    | 0.197 |
| 10                        | 537      | 9.229   | 9.427    | 0.198 |
| 10                        | 396      | 9.267   | 9.525    | 0.258 |
| 10                        | 521      | 9.351   | 9.500    | 0.149 |
| 10                        | 535      | 9.308   | 9.530    | 0.222 |
| 10                        | 526      | 9.387   | 9.616    | 0.229 |
| 15                        | 540      | 9.320   | 9.499    | 0.179 |
| 15                        | 387      | 9.317   | 9.523    | 0.206 |
| 15                        | 787      | 9.396   | 9.598    | 0.202 |
| 15                        | 1042     | 9.217   | 9.361    | 0.144 |
| 15                        | 483      | 9.375   | 9.560    | 0.185 |
| 30                        | 597      | 9.299   | 9.448    | 0.149 |
| 30                        | 853      | 9.350   | 9.524    | 0.174 |
| 30                        | 416      | 9.363   | 9.578    | 0.215 |
| 30                        | 949      | 9.342   | 9.551    | 0.209 |
| 30                        | 221      | 9.338   | 9.513    | 0.175 |
| 35                        | 538      | 9.231   | 9.417    | 0.186 |
| 35                        | 164      | 9.306   | 9.519    | 0.213 |
| 35                        | 1018     | 9.310   | 9.496    | 0.186 |
| 35                        | 462      | 9.361   | 9.612    | 0.251 |
| 35                        | 1032     | 9.348   | 9.522    | 0.174 |
| 50                        | 566      | 9.292   | 9.457    | 0.165 |
| 50                        | 197      | 9.349   | 9.607    | 0.258 |
| 50                        | 793      | 9.390   | 9.546    | 0.156 |
| 50                        | 802      | 9.277   | 9.418    | 0.141 |
| 50                        | 61       | 9.320   | 9.471    | 0.151 |
| 55                        | 795      | 9.340   | 9.517    | 0.177 |
| 55                        | 921      | 9.329   | 9.546    | 0.217 |
| 55                        | 741      | 9.363   | 9.607    | 0.244 |
| 55                        | 809      | 9.305   | 9.425    | 0.120 |
| 55                        | 804      | 9.285   | 9.522    | 0.237 |
| 100                       | 449      | 9.249   | 9.374    | 0.125 |
| 100                       | 541      | 9.326   | 9.414    | 0.088 |
| 100                       | 476      | 9.349   | 9.463    | 0.114 |
| 100                       | 45       | 9.328   | 9.393    | 0.065 |
| 100                       | 642      | 9.383   | 9.419    | 0.036 |
| 105                       | 1036     | 9.309   | 9.453    | 0.144 |
| 105                       | 1038     | 9.301   | 9.458    | 0.157 |
| 105                       | 203      | 9.407   | 9.523    | 0.116 |
| 105                       | 1029     | 9.339   | 9.473    | 0.134 |
| 105                       | 1027     | 9.349   | 9.517    | 0.168 |
| 105                       | Max      | 9.407   | 9.616    | 0.277 |
| 105                       | Average  | 9.322   | 9.507    | 0.184 |
| 105                       | Min      | 9.210   | 9.361    | 0.036 |
| 105                       | Std Dev  | 0.046   | 0.063    | 0.052 |



| 9.94_T_SYNC_FALL_2MHz_14V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 14     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 0      | ns     |        |        |        |        |        |        |        |        |        |
|                           | krad   |        | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Min                       | 9.487  | 9.476  | 9.516  | 9.427  | 9.361  | 9.448  | 9.417  | 9.418  | 9.425  | 9.374  | 9.453  |
| Average                   | 9.534  | 9.519  | 9.547  | 9.520  | 9.508  | 9.523  | 9.513  | 9.500  | 9.523  | 9.413  | 9.485  |
| Max                       | 9.579  | 9.584  | 9.574  | 9.616  | 9.598  | 9.578  | 9.612  | 9.607  | 9.607  | 9.463  | 9.523  |
| UL                        | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

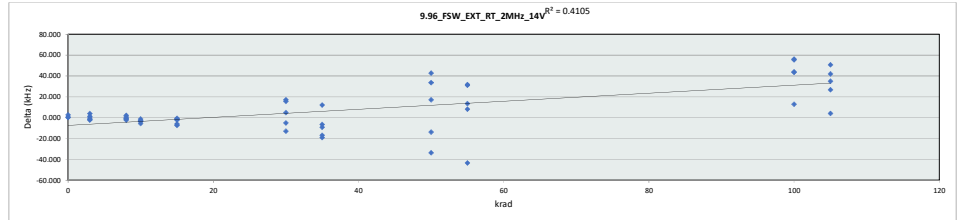


# HDR TID Report

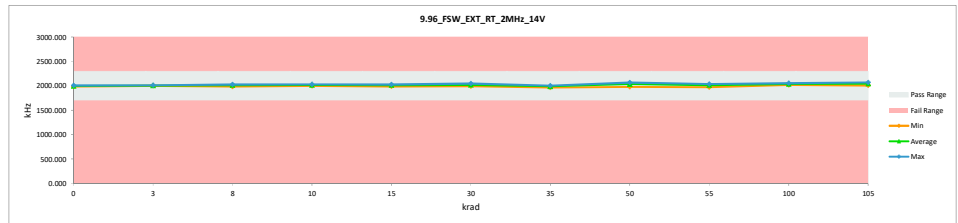
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.96_FSW_EXT_RT_2MHz_14V |          |          |          |         |
|--------------------------|----------|----------|----------|---------|
| Test Site                |          |          |          |         |
| Tester                   |          |          |          |         |
| Test Number              |          |          |          |         |
| Unit                     |          |          |          |         |
| Max Limit                |          |          |          |         |
| Min Limit                |          |          |          |         |
| krad                     | Serial # | PRE HDR  | POST HDR | Delta   |
| 0                        | 552      | 1982.790 | 1985.365 | 2.575   |
| 0                        | 726      | 2008.240 | 2008.759 | 0.519   |
| 0                        | 791      | 1996.428 | 1996.419 | -0.009  |
| 3                        | 689      | 2001.311 | 2000.894 | -0.417  |
| 3                        | 688      | 2012.042 | 2013.232 | 1.190   |
| 3                        | 700      | 1999.070 | 2002.872 | 3.802   |
| 3                        | 482      | 2014.818 | 2012.524 | -2.294  |
| 3                        | 1033     | 2003.433 | 2001.529 | -1.904  |
| 8                        | 442      | 2029.248 | 2028.527 | -0.721  |
| 8                        | 699      | 2012.129 | 2009.715 | -2.414  |
| 8                        | 344      | 2020.024 | 2018.505 | -1.519  |
| 8                        | 355      | 2007.899 | 2009.993 | 2.094   |
| 8                        | 750      | 1982.836 | 1983.352 | 0.516   |
| 10                       | 537      | 1995.549 | 1998.163 | -1.386  |
| 10                       | 396      | 2025.224 | 2021.585 | -3.639  |
| 10                       | 521      | 2034.319 | 2028.645 | -5.674  |
| 10                       | 535      | 2026.912 | 2023.748 | -3.164  |
| 10                       | 526      | 2011.212 | 2008.352 | -2.860  |
| 15                       | 540      | 1991.593 | 1989.283 | -2.310  |
| 15                       | 387      | 2032.652 | 2026.453 | -6.199  |
| 15                       | 787      | 2020.455 | 2018.953 | -1.502  |
| 15                       | 1042     | 2008.990 | 2001.514 | -7.476  |
| 15                       | 483      | 2012.122 | 2011.374 | -0.748  |
| 30                       | 597      | 1988.242 | 1992.950 | 4.708   |
| 30                       | 853      | 2051.081 | 2045.964 | -5.117  |
| 30                       | 416      | 2004.502 | 2021.664 | 17.162  |
| 30                       | 949      | 2007.718 | 2023.320 | 15.602  |
| 30                       | 221      | 2013.202 | 2000.167 | -13.035 |
| 35                       | 538      | 2013.261 | 1994.036 | -19.225 |
| 35                       | 164      | 1971.128 | 1964.579 | -6.549  |
| 35                       | 1018     | 2003.811 | 1994.473 | -9.338  |
| 35                       | 462      | 1991.911 | 2003.893 | 11.982  |
| 35                       | 1032     | 2004.015 | 1987.086 | -16.929 |
| 50                       | 566      | 2026.011 | 2012.194 | -13.817 |
| 50                       | 197      | 2034.802 | 2051.864 | 17.062  |
| 50                       | 793      | 2032.822 | 2066.369 | 33.547  |
| 50                       | 802      | 2018.711 | 2061.452 | 42.741  |
| 50                       | 61       | 2013.433 | 1979.703 | -33.730 |
| 55                       | 795      | 2007.404 | 2020.772 | 13.368  |
| 55                       | 921      | 1991.995 | 2000.037 | 8.042   |
| 55                       | 741      | 2002.821 | 2034.475 | 31.654  |
| 55                       | 809      | 2014.591 | 1971.102 | -43.489 |
| 55                       | 804      | 1992.768 | 2023.802 | 31.034  |
| 100                      | 449      | 1963.195 | 2018.590 | 55.395  |
| 100                      | 541      | 1999.088 | 2042.609 | 43.521  |
| 100                      | 476      | 2009.148 | 2052.850 | 43.702  |
| 100                      | 45       | 2015.501 | 2028.338 | 12.837  |
| 100                      | 642      | 1995.851 | 2052.997 | 56.146  |
| 105                      | 1036     | 2005.205 | 2055.885 | 50.680  |
| 105                      | 1038     | 2008.763 | 2043.657 | 34.894  |
| 105                      | 203      | 2028.075 | 2054.744 | 26.669  |
| 105                      | 1029     | 2004.907 | 2008.905 | 3.998   |
| 105                      | 1027     | 2026.436 | 2068.389 | 41.953  |
| 105                      | Max      | 2051.081 | 2068.389 | 56.146  |
| 105                      | Average  | 2008.956 | 2016.540 | 7.584   |
| 105                      | Min      | 1963.195 | 1964.579 | -43.489 |
| 105                      | Std Dev  | 16.415   | 24.606   | 21.477  |



| 9.96_FSW_EXT_RT_2MHz_14V |          |          |          |          |          |          |          |          |          |          |          |          |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Test Site                |          |          |          |          |          |          |          |          |          |          |          |          |
| Tester                   |          |          |          |          |          |          |          |          |          |          |          |          |
| Test Number              |          |          |          |          |          |          |          |          |          |          |          |          |
| Max Limit                |          |          |          |          |          |          |          |          |          |          |          |          |
| Min Limit                |          |          |          |          |          |          |          |          |          |          |          |          |
| krad                     | 0        | 3        | 8        | 10       | 15       | 30       | 35       | 50       | 55       | 100      | 105      |          |
| LL                       | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 | 1700.000 |
| Min                      | 1985.365 | 2000.894 | 1983.352 | 1998.163 | 1989.283 | 1992.950 | 1964.579 | 1979.703 | 1971.102 | 2018.590 | 2008.905 |          |
| Average                  | 1996.848 | 2006.210 | 2010.018 | 2016.099 | 2009.515 | 2016.813 | 1988.813 | 2034.316 | 2010.038 | 2039.077 | 2046.316 |          |
| Max                      | 2008.759 | 2013.232 | 2028.527 | 2028.645 | 2026.453 | 2045.964 | 2003.893 | 2066.369 | 2034.475 | 2052.997 | 2068.389 |          |
| UL                       | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 | 2300.000 |          |

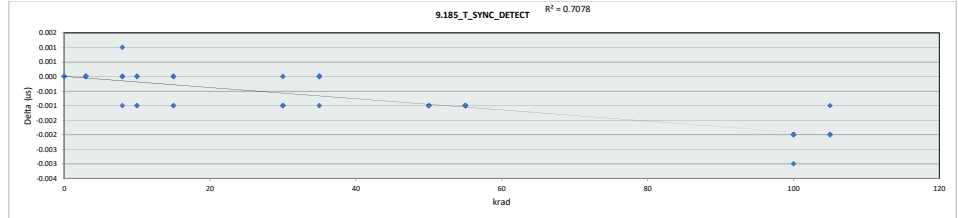


# HDR TID Report

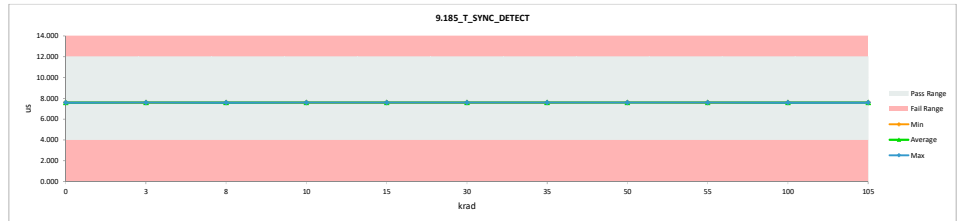
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.185_T_SYNC_DETECT |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                |          |         |          |        |
| Max Limit           |          |         |          |        |
| Min Limit           |          |         |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 7.586   | 7.586    | 0.000  |
| 0                   | 726      | 7.585   | 7.585    | 0.000  |
| 0                   | 791      | 7.584   | 7.584    | 0.000  |
| 3                   | 689      | 7.585   | 7.585    | 0.000  |
| 3                   | 688      | 7.585   | 7.585    | 0.000  |
| 3                   | 700      | 7.584   | 7.584    | 0.000  |
| 3                   | 482      | 7.585   | 7.585    | 0.000  |
| 3                   | 1033     | 7.585   | 7.585    | 0.000  |
| 8                   | 442      | 7.586   | 7.585    | -0.001 |
| 8                   | 699      | 7.584   | 7.584    | 0.000  |
| 8                   | 344      | 7.585   | 7.585    | 0.000  |
| 8                   | 355      | 7.585   | 7.586    | 0.001  |
| 8                   | 790      | 7.585   | 7.585    | 0.000  |
| 10                  | 537      | 7.585   | 7.585    | 0.000  |
| 10                  | 396      | 7.585   | 7.585    | 0.000  |
| 10                  | 521      | 7.585   | 7.584    | -0.001 |
| 10                  | 535      | 7.586   | 7.585    | -0.001 |
| 10                  | 526      | 7.585   | 7.585    | 0.000  |
| 15                  | 540      | 7.585   | 7.585    | 0.000  |
| 15                  | 387      | 7.584   | 7.584    | 0.000  |
| 15                  | 787      | 7.585   | 7.584    | -0.001 |
| 15                  | 1042     | 7.585   | 7.585    | 0.000  |
| 15                  | 483      | 7.585   | 7.584    | -0.001 |
| 30                  | 597      | 7.585   | 7.584    | -0.001 |
| 30                  | 853      | 7.584   | 7.584    | 0.000  |
| 30                  | 416      | 7.585   | 7.584    | -0.001 |
| 30                  | 949      | 7.585   | 7.584    | -0.001 |
| 30                  | 221      | 7.585   | 7.584    | -0.001 |
| 35                  | 538      | 7.585   | 7.585    | 0.000  |
| 35                  | 164      | 7.584   | 7.584    | 0.000  |
| 35                  | 1018     | 7.584   | 7.584    | 0.000  |
| 35                  | 462      | 7.586   | 7.585    | -0.001 |
| 35                  | 1032     | 7.584   | 7.584    | 0.000  |
| 50                  | 566      | 7.585   | 7.584    | -0.001 |
| 50                  | 197      | 7.584   | 7.583    | -0.001 |
| 50                  | 793      | 7.585   | 7.584    | -0.001 |
| 50                  | 802      | 7.585   | 7.584    | -0.001 |
| 50                  | 61       | 7.585   | 7.584    | -0.001 |
| 55                  | 795      | 7.585   | 7.584    | -0.001 |
| 55                  | 921      | 7.585   | 7.584    | -0.001 |
| 55                  | 741      | 7.585   | 7.584    | -0.001 |
| 55                  | 809      | 7.585   | 7.584    | -0.001 |
| 55                  | 804      | 7.586   | 7.585    | -0.001 |
| 100                 | 449      | 7.585   | 7.583    | -0.002 |
| 100                 | 541      | 7.585   | 7.583    | -0.002 |
| 100                 | 476      | 7.585   | 7.582    | -0.003 |
| 100                 | 45       | 7.585   | 7.583    | -0.002 |
| 100                 | 642      | 7.584   | 7.582    | -0.002 |
| 105                 | 1036     | 7.585   | 7.583    | -0.002 |
| 105                 | 1038     | 7.585   | 7.583    | -0.002 |
| 105                 | 203      | 7.584   | 7.583    | -0.001 |
| 105                 | 1029     | 7.585   | 7.583    | -0.002 |
| 105                 | 1027     | 7.585   | 7.583    | -0.002 |
| 105                 | Max      | 7.586   | 7.586    | 0.001  |
| Average             |          | 7.585   | 7.584    | -0.001 |
| Min                 |          | 7.584   | 7.582    | -0.003 |
| Std Dev             |          | 0.001   | 0.001    | 0.001  |



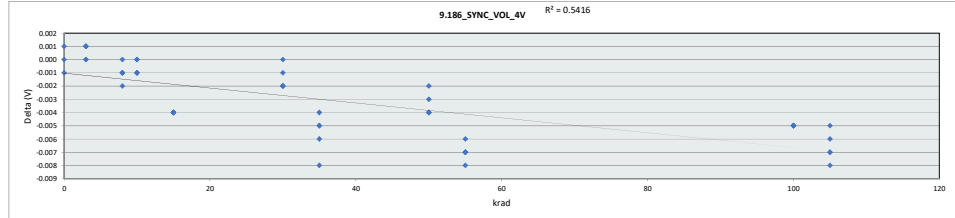
| 9.185_T_SYNC_DETECT |        |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site           |        |        |        |        |        |        |        |        |        |        |        |
| Tester              |        |        |        |        |        |        |        |        |        |        |        |
| Test Number         |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit           | 12     | us     |        |        |        |        |        |        |        |        |        |
| Min Limit           | 4      | us     |        |        |        |        |        |        |        |        |        |
| krad                | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                 | 7.584  | 7.584  | 7.584  | 7.584  | 7.584  | 7.584  | 7.584  | 7.583  | 7.584  | 7.582  | 7.583  |
| Average             | 7.585  | 7.585  | 7.585  | 7.585  | 7.584  | 7.584  | 7.584  | 7.584  | 7.584  | 7.583  | 7.583  |
| Max                 | 7.586  | 7.585  | 7.586  | 7.585  | 7.585  | 7.584  | 7.585  | 7.584  | 7.585  | 7.583  | 7.583  |
| UL                  | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 |



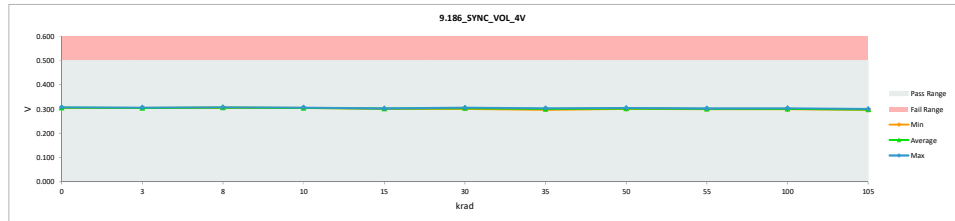
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.186_SYNC_VOL_4V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              |          |         |          |        |
| Max Limit         |          |         |          |        |
| Min Limit         |          |         |          |        |
| krad              | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                 | 552      | 0.308   | 0.307    | -0.001 |
| 0                 | 726      | 0.304   | 0.304    | 0.000  |
| 0                 | 791      | 0.304   | 0.305    | 0.001  |
| 3                 | 689      | 0.305   | 0.306    | 0.001  |
| 3                 | 688      | 0.305   | 0.305    | 0.000  |
| 3                 | 700      | 0.304   | 0.305    | 0.001  |
| 3                 | 482      | 0.304   | 0.304    | 0.000  |
| 3                 | 1033     | 0.304   | 0.304    | 0.001  |
| 8                 | 442      | 0.309   | 0.307    | -0.002 |
| 8                 | 699      | 0.306   | 0.305    | -0.001 |
| 8                 | 344      | 0.307   | 0.306    | -0.001 |
| 8                 | 355      | 0.308   | 0.307    | -0.001 |
| 8                 | 790      | 0.305   | 0.305    | 0.000  |
| 10                | 537      | 0.305   | 0.305    | 0.000  |
| 10                | 396      | 0.305   | 0.304    | -0.001 |
| 10                | 521      | 0.306   | 0.306    | 0.000  |
| 10                | 535      | 0.305   | 0.304    | -0.001 |
| 10                | 526      | 0.305   | 0.304    | -0.001 |
| 15                | 540      | 0.306   | 0.302    | -0.004 |
| 15                | 387      | 0.305   | 0.301    | -0.004 |
| 15                | 787      | 0.305   | 0.301    | -0.004 |
| 15                | 1042     | 0.305   | 0.301    | -0.004 |
| 15                | 483      | 0.305   | 0.301    | -0.004 |
| 30                | 597      | 0.307   | 0.305    | -0.002 |
| 30                | 853      | 0.303   | 0.301    | -0.002 |
| 30                | 416      | 0.305   | 0.305    | 0.000  |
| 30                | 949      | 0.306   | 0.305    | -0.001 |
| 30                | 221      | 0.305   | 0.303    | -0.002 |
| 35                | 538      | 0.304   | 0.299    | -0.005 |
| 35                | 164      | 0.306   | 0.300    | -0.006 |
| 35                | 1018     | 0.304   | 0.299    | -0.005 |
| 35                | 462      | 0.307   | 0.303    | -0.004 |
| 35                | 1032     | 0.305   | 0.297    | -0.008 |
| 50                | 566      | 0.308   | 0.304    | -0.004 |
| 50                | 197      | 0.303   | 0.300    | -0.003 |
| 50                | 793      | 0.306   | 0.304    | -0.002 |
| 50                | 802      | 0.307   | 0.303    | -0.004 |
| 50                | 61       | 0.305   | 0.301    | -0.004 |
| 55                | 795      | 0.306   | 0.299    | -0.007 |
| 55                | 921      | 0.308   | 0.302    | -0.006 |
| 55                | 741      | 0.306   | 0.299    | -0.007 |
| 55                | 809      | 0.309   | 0.302    | -0.007 |
| 55                | 804      | 0.308   | 0.300    | -0.008 |
| 100               | 449      | 0.308   | 0.303    | -0.005 |
| 100               | 541      | 0.307   | 0.302    | -0.005 |
| 100               | 476      | 0.305   | 0.300    | -0.005 |
| 100               | 45       | 0.304   | 0.299    | -0.005 |
| 100               | 642      | 0.305   | 0.300    | -0.005 |
| 105               | 1036     | 0.304   | 0.297    | -0.007 |
| 105               | 1038     | 0.305   | 0.300    | -0.005 |
| 105               | 203      | 0.304   | 0.296    | -0.008 |
| 105               | 1029     | 0.305   | 0.298    | -0.007 |
| 105               | 1027     | 0.304   | 0.298    | -0.006 |
| 105               | Max      | 0.309   | 0.307    | 0.001  |
| 105               | Average  | 0.306   | 0.302    | -0.003 |
| 105               | Min      | 0.303   | 0.296    | -0.008 |
| 105               | Std Dev  | 0.002   | 0.003    | 0.003  |



| 9.186_SYNC_VOL_4V |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site         |       |       |       |       |       |       |       |       |       |       |       |
| Tester            |       |       |       |       |       |       |       |       |       |       |       |
| Test Number       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit         | 0.5   | V     |       |       |       |       |       |       |       |       |       |
| Min Limit         | 0     | V     |       |       |       |       |       |       |       |       |       |
| krad              |       |       |       |       |       |       |       |       |       |       |       |
| LL                | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Min               | 0.304 | 0.304 | 0.305 | 0.304 | 0.301 | 0.301 | 0.297 | 0.300 | 0.299 | 0.299 | 0.296 |
| Average           | 0.305 | 0.305 | 0.306 | 0.305 | 0.301 | 0.304 | 0.300 | 0.302 | 0.300 | 0.301 | 0.298 |
| Max               | 0.307 | 0.306 | 0.307 | 0.306 | 0.302 | 0.305 | 0.303 | 0.304 | 0.302 | 0.303 | 0.300 |
| UL                | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 |

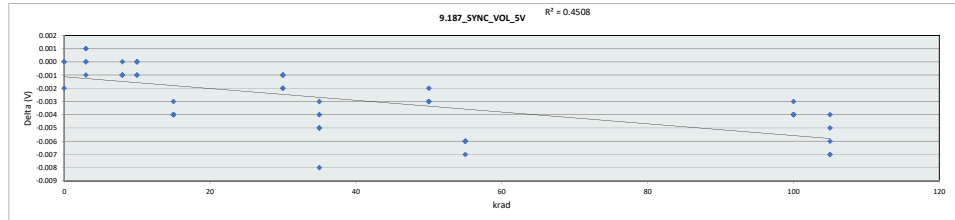


# HDR TID Report

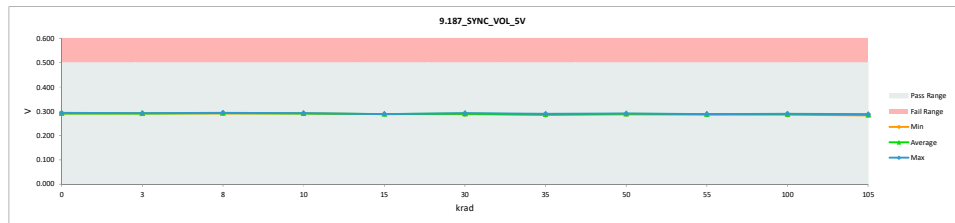
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.187_SYNC_VOL_5V |          |         |          |        |
|-------------------|----------|---------|----------|--------|
| Test Site         |          |         |          |        |
| Tester            |          |         |          |        |
| Test Number       |          |         |          |        |
| Unit              |          |         |          |        |
| Max Limit         |          |         |          |        |
| Min Limit         |          |         |          |        |
| krad              | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                 | 552      | 0.295   | 0.293    | -0.002 |
| 0                 | 726      | 0.291   | 0.291    | 0.000  |
| 0                 | 791      | 0.291   | 0.291    | 0.000  |
| 3                 | 689      | 0.292   | 0.292    | 0.000  |
| 3                 | 688      | 0.292   | 0.291    | -0.001 |
| 3                 | 700      | 0.291   | 0.292    | 0.001  |
| 3                 | 482      | 0.291   | 0.291    | 0.000  |
| 3                 | 1033     | 0.290   | 0.291    | 0.001  |
| 8                 | 442      | 0.294   | 0.294    | 0.000  |
| 8                 | 699      | 0.293   | 0.292    | -0.001 |
| 8                 | 344      | 0.293   | 0.292    | -0.001 |
| 8                 | 355      | 0.294   | 0.293    | -0.001 |
| 8                 | 790      | 0.292   | 0.291    | -0.001 |
| 10                | 537      | 0.292   | 0.292    | 0.000  |
| 10                | 396      | 0.292   | 0.291    | -0.001 |
| 10                | 521      | 0.293   | 0.292    | -0.001 |
| 10                | 535      | 0.291   | 0.291    | 0.000  |
| 10                | 526      | 0.291   | 0.291    | 0.000  |
| 15                | 540      | 0.293   | 0.289    | -0.004 |
| 15                | 387      | 0.291   | 0.288    | -0.003 |
| 15                | 787      | 0.292   | 0.288    | -0.004 |
| 15                | 1042     | 0.292   | 0.288    | -0.004 |
| 15                | 483      | 0.292   | 0.288    | -0.004 |
| 30                | 597      | 0.294   | 0.292    | -0.002 |
| 30                | 853      | 0.290   | 0.288    | -0.002 |
| 30                | 416      | 0.292   | 0.291    | -0.001 |
| 30                | 949      | 0.292   | 0.291    | -0.001 |
| 30                | 221      | 0.291   | 0.290    | -0.001 |
| 35                | 538      | 0.291   | 0.286    | -0.005 |
| 35                | 164      | 0.292   | 0.287    | -0.005 |
| 35                | 1018     | 0.291   | 0.287    | -0.004 |
| 35                | 462      | 0.293   | 0.290    | -0.003 |
| 35                | 1032     | 0.292   | 0.284    | -0.008 |
| 50                | 566      | 0.294   | 0.291    | -0.003 |
| 50                | 197      | 0.290   | 0.287    | -0.003 |
| 50                | 793      | 0.293   | 0.291    | -0.002 |
| 50                | 802      | 0.293   | 0.290    | -0.003 |
| 50                | 61       | 0.292   | 0.289    | -0.003 |
| 55                | 795      | 0.293   | 0.287    | -0.006 |
| 55                | 921      | 0.295   | 0.289    | -0.006 |
| 55                | 741      | 0.293   | 0.286    | -0.007 |
| 55                | 809      | 0.295   | 0.289    | -0.006 |
| 55                | 804      | 0.294   | 0.288    | -0.006 |
| 100               | 449      | 0.294   | 0.290    | -0.004 |
| 100               | 541      | 0.293   | 0.289    | -0.004 |
| 100               | 476      | 0.291   | 0.288    | -0.003 |
| 100               | 45       | 0.290   | 0.286    | -0.004 |
| 100               | 642      | 0.291   | 0.287    | -0.004 |
| 105               | 1036     | 0.291   | 0.284    | -0.007 |
| 105               | 1038     | 0.292   | 0.288    | -0.004 |
| 105               | 203      | 0.290   | 0.283    | -0.007 |
| 105               | 1029     | 0.291   | 0.286    | -0.005 |
| 105               | 1027     | 0.291   | 0.285    | -0.006 |
| 105               | Max      | 0.295   | 0.294    | 0.001  |
| 105               | Average  | 0.292   | 0.289    | -0.003 |
| 105               | Min      | 0.290   | 0.283    | -0.008 |
| 105               | Std Dev  | 0.001   | 0.003    | 0.002  |



| 9.187_SYNC_VOL_5V |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site         |       |       |       |       |       |       |       |       |       |       |       |
| Tester            |       |       |       |       |       |       |       |       |       |       |       |
| Test Number       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit         | 0.5   | V     |       |       |       |       |       |       |       |       |       |
| Min Limit         | 0     | V     |       |       |       |       |       |       |       |       |       |
| krad              | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Min               | 0.291 | 0.291 | 0.291 | 0.291 | 0.288 | 0.288 | 0.284 | 0.287 | 0.286 | 0.286 | 0.283 |
| Average           | 0.292 | 0.291 | 0.292 | 0.291 | 0.288 | 0.290 | 0.287 | 0.290 | 0.288 | 0.288 | 0.285 |
| Max               | 0.293 | 0.292 | 0.294 | 0.292 | 0.289 | 0.292 | 0.290 | 0.291 | 0.289 | 0.290 | 0.288 |
| UL                | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 |

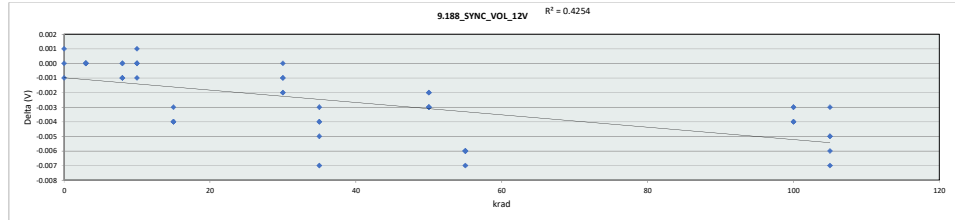


# HDR TID Report

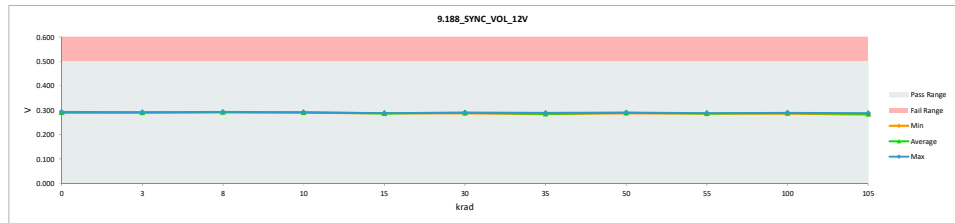
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.188_SYNC_VOL_12V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               |          |         |          |        |
| Max Limit          |          |         |          |        |
| Min Limit          |          |         |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 0.294   | 0.293    | -0.001 |
| 0                  | 726      | 0.290   | 0.290    | 0.000  |
| 0                  | 791      | 0.290   | 0.291    | 0.001  |
| 3                  | 689      | 0.292   | 0.292    | 0.000  |
| 3                  | 688      | 0.291   | 0.291    | 0.000  |
| 3                  | 700      | 0.290   | 0.290    | 0.000  |
| 3                  | 482      | 0.290   | 0.290    | 0.000  |
| 3                  | 1033     | 0.290   | 0.290    | 0.000  |
| 8                  | 442      | 0.294   | 0.293    | -0.001 |
| 8                  | 699      | 0.292   | 0.292    | 0.000  |
| 8                  | 344      | 0.292   | 0.291    | -0.001 |
| 8                  | 355      | 0.293   | 0.292    | -0.001 |
| 8                  | 790      | 0.291   | 0.291    | 0.000  |
| 10                 | 537      | 0.291   | 0.292    | 0.001  |
| 10                 | 396      | 0.291   | 0.291    | 0.000  |
| 10                 | 521      | 0.292   | 0.292    | 0.000  |
| 10                 | 535      | 0.291   | 0.290    | -0.001 |
| 10                 | 526      | 0.290   | 0.290    | 0.000  |
| 15                 | 540      | 0.292   | 0.288    | -0.004 |
| 15                 | 387      | 0.291   | 0.288    | -0.003 |
| 15                 | 787      | 0.291   | 0.287    | -0.004 |
| 15                 | 1042     | 0.292   | 0.288    | -0.004 |
| 15                 | 483      | 0.291   | 0.287    | -0.004 |
| 30                 | 597      | 0.293   | 0.291    | -0.002 |
| 30                 | 853      | 0.289   | 0.287    | -0.002 |
| 30                 | 416      | 0.291   | 0.291    | 0.000  |
| 30                 | 949      | 0.292   | 0.291    | -0.001 |
| 30                 | 221      | 0.290   | 0.289    | -0.001 |
| 35                 | 538      | 0.290   | 0.286    | -0.004 |
| 35                 | 164      | 0.291   | 0.286    | -0.005 |
| 35                 | 1018     | 0.290   | 0.286    | -0.004 |
| 35                 | 462      | 0.292   | 0.289    | -0.003 |
| 35                 | 1032     | 0.291   | 0.284    | -0.007 |
| 50                 | 566      | 0.294   | 0.291    | -0.003 |
| 50                 | 197      | 0.289   | 0.287    | -0.002 |
| 50                 | 793      | 0.292   | 0.290    | -0.002 |
| 50                 | 802      | 0.293   | 0.290    | -0.003 |
| 50                 | 61       | 0.291   | 0.288    | -0.003 |
| 55                 | 795      | 0.292   | 0.286    | -0.006 |
| 55                 | 921      | 0.294   | 0.288    | -0.006 |
| 55                 | 741      | 0.292   | 0.285    | -0.007 |
| 55                 | 809      | 0.294   | 0.288    | -0.006 |
| 55                 | 804      | 0.293   | 0.287    | -0.006 |
| 100                | 449      | 0.293   | 0.290    | -0.003 |
| 100                | 541      | 0.293   | 0.289    | -0.004 |
| 100                | 476      | 0.291   | 0.287    | -0.004 |
| 100                | 45       | 0.290   | 0.286    | -0.004 |
| 100                | 642      | 0.290   | 0.287    | -0.003 |
| 105                | 1036     | 0.290   | 0.284    | -0.006 |
| 105                | 1038     | 0.291   | 0.288    | -0.003 |
| 105                | 203      | 0.289   | 0.282    | -0.007 |
| 105                | 1029     | 0.291   | 0.286    | -0.005 |
| 105                | 1027     | 0.290   | 0.285    | -0.005 |
| 105                | Max      | 0.294   | 0.293    | 0.001  |
| 105                | Average  | 0.291   | 0.289    | -0.003 |
| 105                | Min      | 0.289   | 0.282    | -0.007 |
| 105                | Std Dev  | 0.001   | 0.003    | 0.002  |



| 9.188_SYNC_VOL_12V |       |       |       |       |       |       |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site          |       |       |       |       |       |       |       |       |       |       |       |
| Tester             |       |       |       |       |       |       |       |       |       |       |       |
| Test Number        |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit          | 0.5   | V     |       |       |       |       |       |       |       |       |       |
| Min Limit          | 0     | kV    |       |       |       |       |       |       |       |       |       |
| krad               | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Min                | 0.290 | 0.290 | 0.291 | 0.290 | 0.287 | 0.287 | 0.284 | 0.287 | 0.285 | 0.286 | 0.282 |
| Average            | 0.291 | 0.291 | 0.292 | 0.291 | 0.288 | 0.290 | 0.286 | 0.289 | 0.287 | 0.288 | 0.285 |
| Max                | 0.293 | 0.292 | 0.293 | 0.292 | 0.288 | 0.291 | 0.289 | 0.291 | 0.288 | 0.290 | 0.288 |
| UL                 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 |

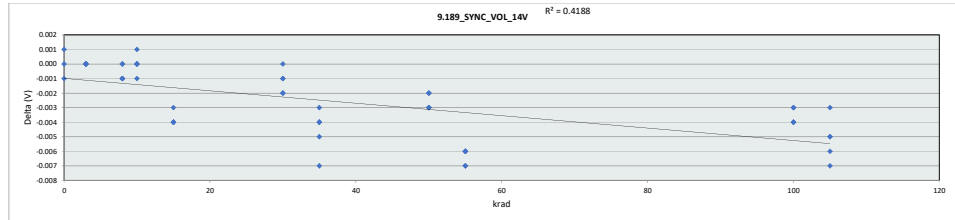


# HDR TID Report

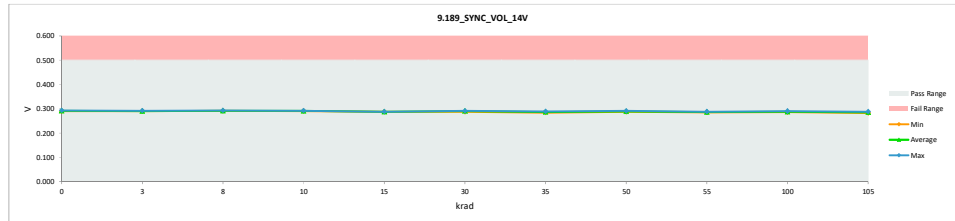
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 9.189_SYNC_VOL_14V |          |         |          |        |
|--------------------|----------|---------|----------|--------|
| Test Site          |          |         |          |        |
| Tester             |          |         |          |        |
| Test Number        |          |         |          |        |
| Unit               |          |         |          |        |
| Max Limit          |          |         |          |        |
| Min Limit          |          |         |          |        |
| krad               | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                  | 552      | 0.294   | 0.293    | -0.001 |
| 0                  | 726      | 0.290   | 0.290    | 0.000  |
| 0                  | 791      | 0.290   | 0.291    | 0.001  |
| 3                  | 689      | 0.292   | 0.292    | 0.000  |
| 3                  | 688      | 0.291   | 0.291    | 0.000  |
| 3                  | 700      | 0.290   | 0.290    | 0.000  |
| 3                  | 482      | 0.290   | 0.290    | 0.000  |
| 3                  | 1033     | 0.290   | 0.290    | 0.000  |
| 8                  | 442      | 0.294   | 0.293    | -0.001 |
| 8                  | 699      | 0.292   | 0.292    | 0.000  |
| 8                  | 344      | 0.292   | 0.291    | -0.001 |
| 8                  | 355      | 0.293   | 0.292    | -0.001 |
| 8                  | 790      | 0.291   | 0.291    | 0.000  |
| 10                 | 537      | 0.291   | 0.292    | 0.001  |
| 10                 | 396      | 0.291   | 0.291    | 0.000  |
| 10                 | 521      | 0.292   | 0.292    | 0.000  |
| 10                 | 535      | 0.291   | 0.290    | -0.001 |
| 10                 | 526      | 0.290   | 0.290    | 0.000  |
| 15                 | 540      | 0.292   | 0.288    | -0.004 |
| 15                 | 387      | 0.291   | 0.288    | -0.003 |
| 15                 | 787      | 0.291   | 0.287    | -0.004 |
| 15                 | 1042     | 0.292   | 0.288    | -0.004 |
| 15                 | 483      | 0.291   | 0.287    | -0.004 |
| 30                 | 597      | 0.293   | 0.291    | -0.002 |
| 30                 | 853      | 0.289   | 0.287    | -0.002 |
| 30                 | 416      | 0.291   | 0.291    | 0.000  |
| 30                 | 949      | 0.292   | 0.291    | -0.001 |
| 30                 | 221      | 0.290   | 0.289    | -0.001 |
| 35                 | 538      | 0.290   | 0.286    | -0.004 |
| 35                 | 164      | 0.291   | 0.286    | -0.005 |
| 35                 | 1018     | 0.290   | 0.286    | -0.004 |
| 35                 | 462      | 0.292   | 0.289    | -0.003 |
| 35                 | 1032     | 0.291   | 0.284    | -0.007 |
| 50                 | 566      | 0.294   | 0.291    | -0.003 |
| 50                 | 197      | 0.289   | 0.287    | -0.002 |
| 50                 | 793      | 0.292   | 0.290    | -0.002 |
| 50                 | 802      | 0.293   | 0.290    | -0.003 |
| 50                 | 61       | 0.291   | 0.288    | -0.003 |
| 55                 | 795      | 0.292   | 0.286    | -0.006 |
| 55                 | 921      | 0.294   | 0.288    | -0.006 |
| 55                 | 741      | 0.292   | 0.285    | -0.007 |
| 55                 | 809      | 0.294   | 0.288    | -0.006 |
| 55                 | 804      | 0.294   | 0.287    | -0.007 |
| 100                | 449      | 0.293   | 0.290    | -0.003 |
| 100                | 541      | 0.293   | 0.289    | -0.004 |
| 100                | 476      | 0.291   | 0.287    | -0.004 |
| 100                | 45       | 0.290   | 0.286    | -0.004 |
| 100                | 642      | 0.290   | 0.287    | -0.003 |
| 105                | 1036     | 0.290   | 0.284    | -0.006 |
| 105                | 1038     | 0.291   | 0.288    | -0.003 |
| 105                | 203      | 0.289   | 0.282    | -0.007 |
| 105                | 1029     | 0.291   | 0.286    | -0.005 |
| 105                | 1027     | 0.290   | 0.285    | -0.005 |
| 105                | Max      | 0.294   | 0.293    | 0.001  |
| 105                | Average  | 0.291   | 0.289    | -0.003 |
| 105                | Min      | 0.289   | 0.282    | -0.007 |
| 105                | Std Dev  | 0.001   | 0.003    | 0.002  |



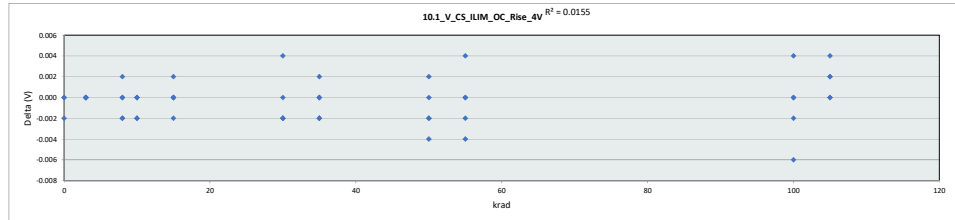
| 9.189_SYNC_VOL_14V |       |       |       |       |       |       |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site          |       |       |       |       |       |       |       |       |       |       |       |
| Tester             |       |       |       |       |       |       |       |       |       |       |       |
| Test Number        |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit          | 0.5   | V     |       |       |       |       |       |       |       |       |       |
| Min Limit          | 0     | V     |       |       |       |       |       |       |       |       |       |
| krad               | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Min                | 0.290 | 0.290 | 0.291 | 0.290 | 0.287 | 0.287 | 0.284 | 0.287 | 0.285 | 0.286 | 0.282 |
| Average            | 0.291 | 0.291 | 0.292 | 0.291 | 0.288 | 0.290 | 0.286 | 0.289 | 0.287 | 0.288 | 0.285 |
| Max                | 0.293 | 0.292 | 0.293 | 0.292 | 0.288 | 0.291 | 0.289 | 0.291 | 0.288 | 0.290 | 0.288 |
| UL                 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 |



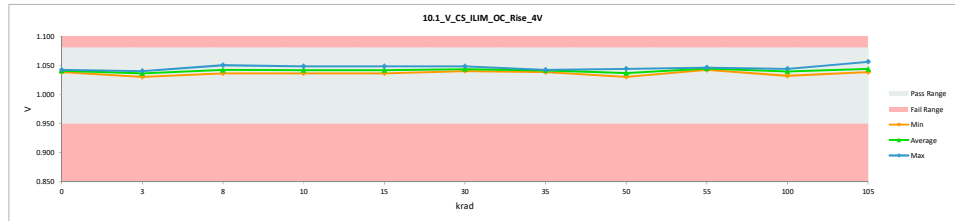
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 10.1_V_CS_ILIM_OC_Rise_4V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      |          |         |          |        |
| Max Limit                 |          |         |          |        |
| Min Limit                 |          |         |          |        |
| krad                      | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                         | 552      | 1.042   | 1.042    | 0.000  |
| 0                         | 726      | 1.042   | 1.042    | 0.000  |
| 0                         | 791      | 1.040   | 1.038    | -0.002 |
| 3                         | 689      | 1.030   | 1.030    | 0.000  |
| 3                         | 688      | 1.036   | 1.036    | 0.000  |
| 3                         | 700      | 1.040   | 1.040    | 0.000  |
| 3                         | 482      | 1.038   | 1.038    | 0.000  |
| 3                         | 1033     | 1.036   | 1.036    | 0.000  |
| 8                         | 442      | 1.038   | 1.036    | -0.002 |
| 8                         | 699      | 1.038   | 1.038    | 0.000  |
| 8                         | 344      | 1.042   | 1.042    | 0.000  |
| 8                         | 355      | 1.046   | 1.044    | -0.002 |
| 8                         | 750      | 1.048   | 1.050    | 0.002  |
| 10                        | 537      | 1.044   | 1.044    | 0.000  |
| 10                        | 396      | 1.048   | 1.048    | 0.000  |
| 10                        | 521      | 1.038   | 1.038    | 0.000  |
| 10                        | 535      | 1.038   | 1.036    | -0.002 |
| 10                        | 526      | 1.044   | 1.042    | -0.002 |
| 15                        | 540      | 1.038   | 1.038    | 0.000  |
| 15                        | 387      | 1.046   | 1.048    | 0.002  |
| 15                        | 787      | 1.040   | 1.040    | 0.000  |
| 15                        | 1042     | 1.036   | 1.036    | 0.000  |
| 15                        | 483      | 1.048   | 1.046    | -0.002 |
| 30                        | 597      | 1.038   | 1.042    | 0.004  |
| 30                        | 853      | 1.042   | 1.040    | -0.002 |
| 30                        | 416      | 1.042   | 1.042    | 0.000  |
| 30                        | 949      | 1.050   | 1.048    | -0.002 |
| 30                        | 221      | 1.046   | 1.044    | -0.002 |
| 35                        | 538      | 1.042   | 1.042    | 0.000  |
| 35                        | 164      | 1.040   | 1.042    | 0.002  |
| 35                        | 1018     | 1.042   | 1.042    | 0.000  |
| 35                        | 462      | 1.044   | 1.042    | -0.002 |
| 35                        | 1032     | 1.040   | 1.038    | -0.002 |
| 50                        | 566      | 1.032   | 1.032    | 0.000  |
| 50                        | 197      | 1.046   | 1.044    | -0.002 |
| 50                        | 793      | 1.036   | 1.038    | 0.002  |
| 50                        | 802      | 1.034   | 1.030    | -0.004 |
| 50                        | 61       | 1.042   | 1.040    | -0.002 |
| 55                        | 795      | 1.038   | 1.042    | 0.004  |
| 55                        | 921      | 1.050   | 1.046    | -0.004 |
| 55                        | 741      | 1.044   | 1.042    | -0.002 |
| 55                        | 809      | 1.046   | 1.046    | 0.000  |
| 55                        | 804      | 1.046   | 1.046    | 0.000  |
| 100                       | 449      | 1.038   | 1.038    | 0.000  |
| 100                       | 541      | 1.040   | 1.040    | 0.000  |
| 100                       | 476      | 1.040   | 1.044    | 0.004  |
| 100                       | 45       | 1.038   | 1.032    | -0.006 |
| 100                       | 642      | 1.044   | 1.042    | -0.002 |
| 105                       | 1036     | 1.036   | 1.038    | 0.002  |
| 105                       | 1038     | 1.054   | 1.056    | 0.002  |
| 105                       | 203      | 1.038   | 1.038    | 0.000  |
| 105                       | 1029     | 1.038   | 1.042    | 0.004  |
| 105                       | 1027     | 1.048   | 1.044    | -0.004 |
| 105                       | Max      | 1.054   | 1.056    | 0.004  |
| 105                       | Average  | 1.041   | 1.041    | 0.000  |
| 105                       | Min      | 1.030   | 1.030    | -0.006 |
| 105                       | Std Dev  | 0.005   | 0.005    | 0.002  |



| 10.1_V_CS_ILIM_OC_Rise_4V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                 |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit                 |       |       |       |       |       |       |       |       |       |       |       |
| krad                      | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                        | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 |
| Min                       | 1.038 | 1.030 | 1.036 | 1.036 | 1.036 | 1.040 | 1.038 | 1.030 | 1.042 | 1.032 | 1.038 |
| Average                   | 1.041 | 1.036 | 1.042 | 1.042 | 1.042 | 1.043 | 1.041 | 1.037 | 1.044 | 1.039 | 1.044 |
| Max                       | 1.042 | 1.040 | 1.050 | 1.048 | 1.048 | 1.048 | 1.042 | 1.044 | 1.046 | 1.044 | 1.056 |
| UL                        | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 |

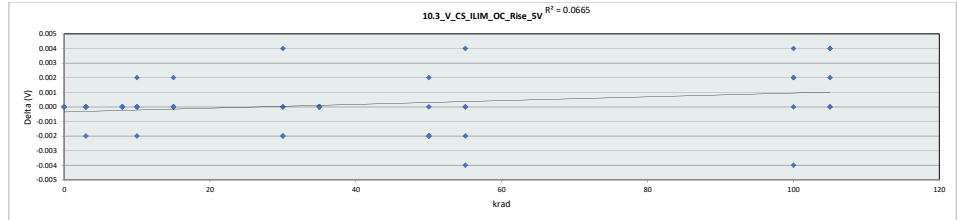


# HDR TID Report

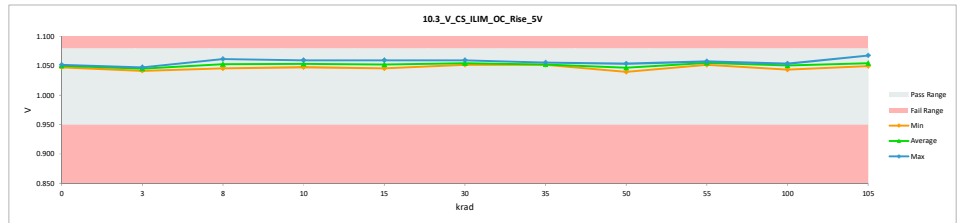
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 10.3_V_CS_ILIM_OC_Rise_5V |          |         |          |        |
|---------------------------|----------|---------|----------|--------|
| Test Site                 |          |         |          |        |
| Tester                    |          |         |          |        |
| Test Number               |          |         |          |        |
| Unit                      |          |         |          |        |
| Max Limit                 |          |         |          |        |
| Min Limit                 |          |         |          |        |
| krad                      | Serial # | PRE HDR | POST HDR | Delta  |
| 0                         | 552      | 1.052   | 1.052    | 0.000  |
| 0                         | 726      | 1.052   | 1.052    | 0.000  |
| 0                         | 791      | 1.048   | 1.048    | 0.000  |
| 3                         | 689      | 1.042   | 1.042    | 0.000  |
| 3                         | 688      | 1.046   | 1.046    | 0.000  |
| 3                         | 700      | 1.048   | 1.048    | 0.000  |
| 3                         | 482      | 1.050   | 1.048    | -0.002 |
| 3                         | 1033     | 1.044   | 1.044    | 0.000  |
| 8                         | 442      | 1.046   | 1.046    | 0.000  |
| 8                         | 699      | 1.050   | 1.050    | 0.000  |
| 8                         | 344      | 1.052   | 1.052    | 0.000  |
| 8                         | 355      | 1.056   | 1.056    | 0.000  |
| 8                         | 790      | 1.062   | 1.062    | 0.000  |
| 10                        | 537      | 1.056   | 1.056    | 0.000  |
| 10                        | 396      | 1.058   | 1.060    | 0.002  |
| 10                        | 521      | 1.050   | 1.050    | 0.000  |
| 10                        | 535      | 1.048   | 1.048    | 0.000  |
| 10                        | 526      | 1.056   | 1.054    | -0.002 |
| 15                        | 540      | 1.048   | 1.048    | 0.000  |
| 15                        | 387      | 1.058   | 1.060    | 0.002  |
| 15                        | 787      | 1.050   | 1.050    | 0.000  |
| 15                        | 1042     | 1.046   | 1.046    | 0.000  |
| 15                        | 483      | 1.058   | 1.058    | 0.000  |
| 30                        | 597      | 1.050   | 1.054    | 0.004  |
| 30                        | 853      | 1.054   | 1.052    | -0.002 |
| 30                        | 416      | 1.056   | 1.056    | 0.000  |
| 30                        | 949      | 1.060   | 1.060    | 0.000  |
| 30                        | 221      | 1.056   | 1.054    | -0.002 |
| 35                        | 538      | 1.052   | 1.052    | 0.000  |
| 35                        | 164      | 1.052   | 1.052    | 0.000  |
| 35                        | 1018     | 1.056   | 1.056    | 0.000  |
| 35                        | 462      | 1.052   | 1.052    | 0.000  |
| 35                        | 1032     | 1.052   | 1.052    | 0.000  |
| 50                        | 566      | 1.042   | 1.042    | 0.000  |
| 50                        | 197      | 1.056   | 1.054    | -0.002 |
| 50                        | 793      | 1.046   | 1.048    | 0.002  |
| 50                        | 802      | 1.042   | 1.040    | -0.002 |
| 50                        | 61       | 1.054   | 1.052    | -0.002 |
| 55                        | 795      | 1.048   | 1.052    | 0.004  |
| 55                        | 921      | 1.060   | 1.056    | -0.004 |
| 55                        | 741      | 1.056   | 1.056    | 0.000  |
| 55                        | 809      | 1.058   | 1.058    | 0.000  |
| 55                        | 804      | 1.058   | 1.056    | -0.002 |
| 100                       | 449      | 1.048   | 1.050    | 0.002  |
| 100                       | 541      | 1.050   | 1.052    | 0.002  |
| 100                       | 476      | 1.050   | 1.054    | 0.004  |
| 100                       | 45       | 1.048   | 1.044    | -0.004 |
| 100                       | 642      | 1.054   | 1.054    | 0.000  |
| 105                       | 1036     | 1.046   | 1.050    | 0.004  |
| 105                       | 1038     | 1.068   | 1.068    | 0.000  |
| 105                       | 203      | 1.048   | 1.050    | 0.002  |
| 105                       | 1029     | 1.048   | 1.052    | 0.004  |
| 105                       | 1027     | 1.056   | 1.056    | 0.000  |
| 105                       | Max      | 1.068   | 1.068    | 0.004  |
| Average                   |          | 1.052   | 1.052    | 0.000  |
| Min                       |          | 1.042   | 1.040    | -0.004 |
| Std Dev                   |          | 0.005   | 0.005    | 0.002  |



| 10.3_V_CS_ILIM_OC_Rise_5V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                 | 1.08  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit                 | 0.95  | V     |       |       |       |       |       |       |       |       |       |
| krad                      | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                        | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 |
| Min                       | 1.048 | 1.042 | 1.046 | 1.048 | 1.046 | 1.052 | 1.052 | 1.040 | 1.052 | 1.044 | 1.050 |
| Average                   | 1.051 | 1.046 | 1.053 | 1.054 | 1.052 | 1.055 | 1.053 | 1.047 | 1.056 | 1.051 | 1.055 |
| Max                       | 1.052 | 1.048 | 1.062 | 1.060 | 1.060 | 1.060 | 1.056 | 1.054 | 1.058 | 1.054 | 1.068 |
| UL                        | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 |

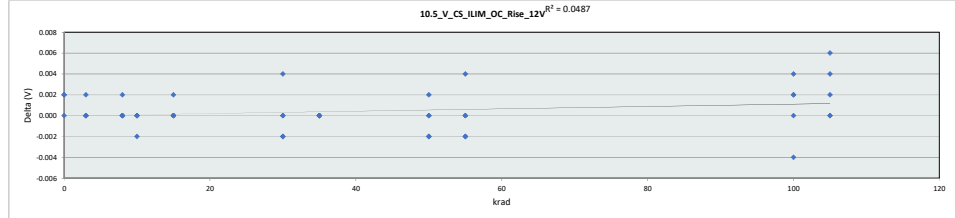


# HDR TID Report

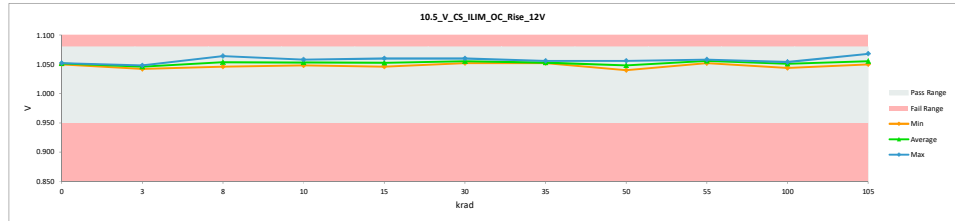
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 10.5_V_CS_ILIM_OC_Rise_12V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE HDR | POST HDR | Delta  |
| 0                          | 552      | 1.050   | 1.052    | 0.002  |
| 0                          | 726      | 1.052   | 1.052    | 0.000  |
| 0                          | 791      | 1.048   | 1.050    | 0.002  |
| 3                          | 689      | 1.042   | 1.042    | 0.000  |
| 3                          | 688      | 1.046   | 1.046    | 0.000  |
| 3                          | 700      | 1.048   | 1.048    | 0.000  |
| 3                          | 482      | 1.048   | 1.048    | 0.000  |
| 3                          | 1033     | 1.046   | 1.046    | 0.002  |
| 8                          | 442      | 1.046   | 1.046    | 0.000  |
| 8                          | 699      | 1.050   | 1.050    | 0.000  |
| 8                          | 344      | 1.052   | 1.052    | 0.000  |
| 8                          | 355      | 1.056   | 1.056    | 0.000  |
| 8                          | 750      | 1.062   | 1.064    | 0.002  |
| 10                         | 537      | 1.056   | 1.056    | 0.000  |
| 10                         | 396      | 1.058   | 1.058    | 0.000  |
| 10                         | 521      | 1.050   | 1.050    | 0.000  |
| 10                         | 535      | 1.048   | 1.048    | 0.000  |
| 10                         | 526      | 1.056   | 1.054    | -0.002 |
| 15                         | 540      | 1.048   | 1.048    | 0.000  |
| 15                         | 387      | 1.058   | 1.060    | 0.002  |
| 15                         | 787      | 1.050   | 1.050    | 0.000  |
| 15                         | 1042     | 1.046   | 1.046    | 0.000  |
| 15                         | 483      | 1.058   | 1.058    | 0.000  |
| 30                         | 597      | 1.050   | 1.054    | 0.004  |
| 30                         | 853      | 1.054   | 1.052    | -0.002 |
| 30                         | 416      | 1.056   | 1.056    | 0.000  |
| 30                         | 949      | 1.060   | 1.060    | 0.000  |
| 30                         | 221      | 1.056   | 1.054    | -0.002 |
| 35                         | 538      | 1.052   | 1.052    | 0.000  |
| 35                         | 164      | 1.052   | 1.052    | 0.000  |
| 35                         | 1018     | 1.056   | 1.056    | 0.000  |
| 35                         | 462      | 1.052   | 1.052    | 0.000  |
| 35                         | 1032     | 1.052   | 1.052    | 0.000  |
| 50                         | 566      | 1.042   | 1.042    | 0.000  |
| 50                         | 197      | 1.058   | 1.056    | -0.002 |
| 50                         | 793      | 1.046   | 1.048    | 0.002  |
| 50                         | 802      | 1.042   | 1.040    | -0.002 |
| 50                         | 61       | 1.054   | 1.054    | 0.000  |
| 55                         | 795      | 1.048   | 1.052    | 0.004  |
| 55                         | 921      | 1.060   | 1.058    | -0.002 |
| 55                         | 741      | 1.056   | 1.056    | 0.000  |
| 55                         | 809      | 1.058   | 1.058    | 0.000  |
| 55                         | 804      | 1.058   | 1.056    | -0.002 |
| 100                        | 449      | 1.048   | 1.050    | 0.002  |
| 100                        | 541      | 1.050   | 1.052    | 0.002  |
| 100                        | 476      | 1.050   | 1.054    | 0.004  |
| 100                        | 45       | 1.048   | 1.044    | -0.004 |
| 100                        | 642      | 1.054   | 1.054    | 0.000  |
| 105                        | 1036     | 1.046   | 1.050    | 0.004  |
| 105                        | 1038     | 1.068   | 1.068    | 0.000  |
| 105                        | 203      | 1.048   | 1.050    | 0.002  |
| 105                        | 1029     | 1.048   | 1.054    | 0.006  |
| 105                        | 1027     | 1.056   | 1.056    | 0.000  |
| 105                        | Max      | 1.068   | 1.068    | 0.006  |
| 105                        | Average  | 1.052   | 1.052    | 0.000  |
| 105                        | Min      | 1.042   | 1.040    | -0.004 |
| 105                        | Std Dev  | 0.005   | 0.005    | 0.002  |



| 10.5_V_CS_ILIM_OC_Rise_12V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  |       |       |       |       |       |       |       |       |       |       |       |
| Min Limit                  |       |       |       |       |       |       |       |       |       |       |       |
| krad                       | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                         | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 |
| Min                        | 1.050 | 1.042 | 1.046 | 1.048 | 1.046 | 1.052 | 1.052 | 1.040 | 1.052 | 1.044 | 1.050 |
| Average                    | 1.051 | 1.046 | 1.054 | 1.053 | 1.052 | 1.055 | 1.053 | 1.048 | 1.056 | 1.051 | 1.056 |
| Max                        | 1.052 | 1.048 | 1.064 | 1.058 | 1.060 | 1.060 | 1.056 | 1.056 | 1.058 | 1.054 | 1.068 |
| UL                         | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 |

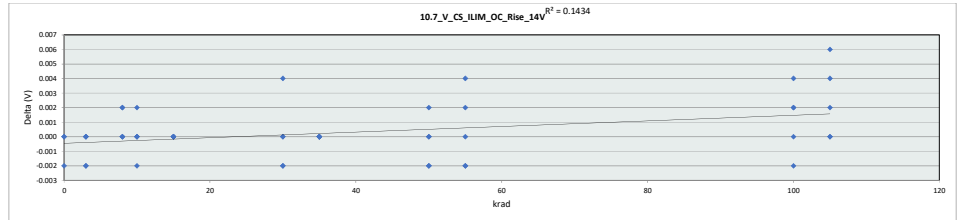


# HDR TID Report

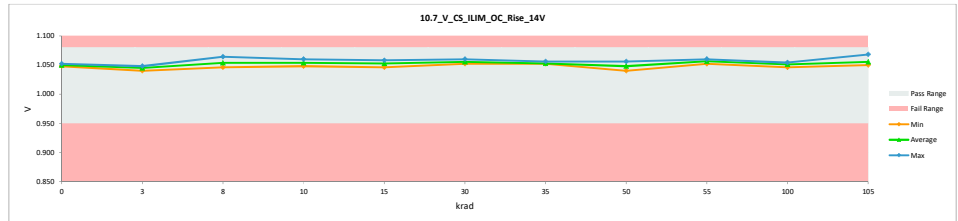
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 10.7_V_CS_ILIM_OC_Rise_14V |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       | V        | V       |          |        |
| Max Limit                  | 1.08     | 1.08    |          |        |
| Min Limit                  | 0.95     | 0.95    |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 1.052   | 1.050    | -0.002 |
| 0                          | 726      | 1.052   | 1.052    | 0.000  |
| 0                          | 791      | 1.048   | 1.048    | 0.000  |
| 3                          | 689      | 1.042   | 1.040    | -0.002 |
| 3                          | 688      | 1.046   | 1.046    | 0.000  |
| 3                          | 700      | 1.048   | 1.048    | 0.000  |
| 3                          | 482      | 1.050   | 1.048    | -0.002 |
| 3                          | 1033     | 1.056   | 1.044    | 0.000  |
| 8                          | 442      | 1.046   | 1.046    | 0.000  |
| 8                          | 699      | 1.048   | 1.050    | 0.002  |
| 8                          | 344      | 1.052   | 1.052    | 0.000  |
| 8                          | 355      | 1.056   | 1.056    | 0.000  |
| 8                          | 750      | 1.062   | 1.064    | 0.002  |
| 10                         | 537      | 1.056   | 1.056    | 0.000  |
| 10                         | 396      | 1.058   | 1.060    | 0.002  |
| 10                         | 521      | 1.050   | 1.050    | 0.000  |
| 10                         | 535      | 1.048   | 1.048    | 0.000  |
| 10                         | 526      | 1.056   | 1.054    | -0.002 |
| 15                         | 540      | 1.048   | 1.048    | 0.000  |
| 15                         | 387      | 1.058   | 1.058    | 0.000  |
| 15                         | 787      | 1.052   | 1.052    | 0.000  |
| 15                         | 1042     | 1.046   | 1.046    | 0.000  |
| 15                         | 483      | 1.058   | 1.058    | 0.000  |
| 30                         | 597      | 1.050   | 1.054    | 0.004  |
| 30                         | 853      | 1.054   | 1.052    | -0.002 |
| 30                         | 416      | 1.056   | 1.056    | 0.000  |
| 30                         | 949      | 1.060   | 1.060    | 0.000  |
| 30                         | 221      | 1.056   | 1.054    | -0.002 |
| 35                         | 538      | 1.052   | 1.052    | 0.000  |
| 35                         | 164      | 1.052   | 1.052    | 0.000  |
| 35                         | 1018     | 1.056   | 1.056    | 0.000  |
| 35                         | 462      | 1.052   | 1.052    | 0.000  |
| 35                         | 1032     | 1.052   | 1.052    | 0.000  |
| 50                         | 566      | 1.042   | 1.042    | 0.000  |
| 50                         | 197      | 1.058   | 1.056    | -0.002 |
| 50                         | 793      | 1.046   | 1.048    | 0.002  |
| 50                         | 802      | 1.042   | 1.040    | -0.002 |
| 50                         | 61       | 1.054   | 1.054    | 0.000  |
| 55                         | 795      | 1.048   | 1.052    | 0.004  |
| 55                         | 921      | 1.060   | 1.058    | -0.002 |
| 55                         | 741      | 1.056   | 1.056    | 0.000  |
| 55                         | 809      | 1.058   | 1.060    | 0.002  |
| 55                         | 804      | 1.058   | 1.056    | -0.002 |
| 100                        | 449      | 1.048   | 1.050    | 0.002  |
| 100                        | 541      | 1.050   | 1.052    | 0.002  |
| 100                        | 476      | 1.050   | 1.054    | 0.004  |
| 100                        | 45       | 1.048   | 1.046    | -0.002 |
| 100                        | 642      | 1.054   | 1.054    | 0.000  |
| 105                        | 1036     | 1.046   | 1.050    | 0.004  |
| 105                        | 1038     | 1.068   | 1.068    | 0.000  |
| 105                        | 203      | 1.048   | 1.050    | 0.002  |
| 105                        | 1029     | 1.048   | 1.054    | 0.006  |
| 105                        | 1027     | 1.056   | 1.056    | 0.000  |
| 105                        | Max      | 1.068   | 1.068    | 0.006  |
| 105                        | Average  | 1.052   | 1.052    | 0.000  |
| 105                        | Min      | 1.042   | 1.040    | -0.002 |
| 105                        | Std Dev  | 0.005   | 0.005    | 0.002  |



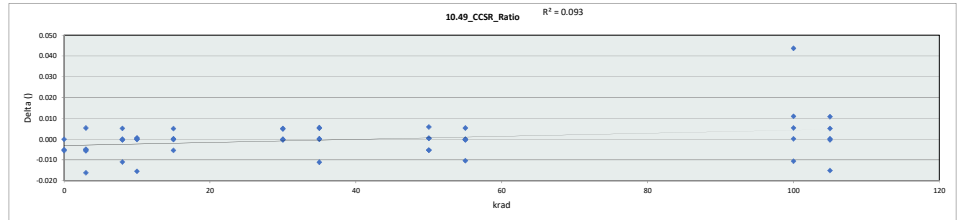
| 10.7_V_CS_ILIM_OC_Rise_14V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  | 1.08  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit                  | 0.95  | V     |       |       |       |       |       |       |       |       |       |
| krad                       | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                         | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 | 0.950 |
| Min                        | 1.048 | 1.040 | 1.046 | 1.048 | 1.046 | 1.052 | 1.052 | 1.040 | 1.052 | 1.046 | 1.050 |
| Average                    | 1.050 | 1.045 | 1.054 | 1.054 | 1.052 | 1.055 | 1.053 | 1.048 | 1.056 | 1.051 | 1.056 |
| Max                        | 1.052 | 1.048 | 1.064 | 1.060 | 1.058 | 1.060 | 1.056 | 1.056 | 1.060 | 1.054 | 1.068 |
| UL                         | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 |



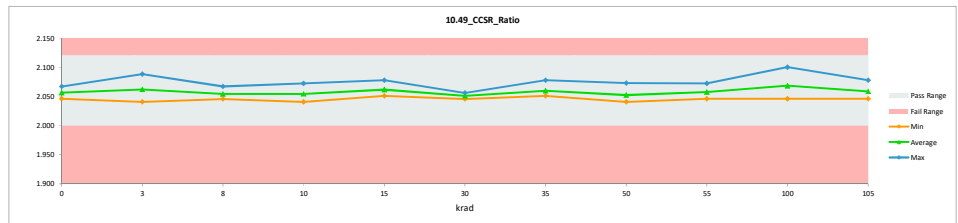
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 10.49_CCSR_Ratio |          |         |          |        |
|------------------|----------|---------|----------|--------|
| Test Site        |          |         |          |        |
| Tester           |          |         |          |        |
| Test Number      |          |         |          |        |
| Unit             |          |         |          |        |
| Max Limit        | 2.12     | 2.12    |          |        |
| Min Limit        | 2        | 2       |          |        |
| krad             | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                | 552      | 2.062   | 2.056    | -0.006 |
| 0                | 726      | 2.067   | 2.067    | 0.000  |
| 0                | 791      | 2.051   | 2.046    | -0.005 |
| 3                | 689      | 2.067   | 2.062    | -0.006 |
| 3                | 688      | 2.051   | 2.046    | -0.005 |
| 3                | 700      | 2.088   | 2.072    | -0.016 |
| 3                | 482      | 2.083   | 2.088    | 0.005  |
| 3                | 1033     | 2.046   | 2.041    | -0.005 |
| 8                | 442      | 2.046   | 2.046    | 0.000  |
| 8                | 699      | 2.062   | 2.051    | -0.011 |
| 8                | 344      | 2.067   | 2.067    | 0.000  |
| 8                | 355      | 2.051   | 2.056    | 0.005  |
| 8                | 790      | 2.051   | 2.051    | 0.000  |
| 10               | 537      | 2.072   | 2.072    | 0.000  |
| 10               | 396      | 2.056   | 2.041    | -0.015 |
| 10               | 521      | 2.051   | 2.051    | 0.000  |
| 10               | 535      | 2.051   | 2.051    | 0.000  |
| 10               | 526      | 2.056   | 2.056    | 0.000  |
| 15               | 540      | 2.061   | 2.062    | 0.000  |
| 15               | 387      | 2.046   | 2.051    | 0.005  |
| 15               | 787      | 2.062   | 2.062    | 0.000  |
| 15               | 1042     | 2.062   | 2.056    | -0.005 |
| 15               | 483      | 2.078   | 2.078    | 0.000  |
| 30               | 597      | 2.052   | 2.051    | 0.000  |
| 30               | 853      | 2.056   | 2.056    | 0.000  |
| 30               | 416      | 2.046   | 2.051    | 0.005  |
| 30               | 949      | 2.041   | 2.046    | 0.005  |
| 30               | 221      | 2.051   | 2.051    | 0.000  |
| 35               | 538      | 2.051   | 2.051    | 0.000  |
| 35               | 164      | 2.089   | 2.078    | -0.011 |
| 35               | 1018     | 2.051   | 2.057    | 0.005  |
| 35               | 462      | 2.051   | 2.056    | 0.005  |
| 35               | 1032     | 2.057   | 2.057    | 0.000  |
| 50               | 566      | 2.051   | 2.046    | -0.005 |
| 50               | 197      | 2.046   | 2.041    | -0.005 |
| 50               | 793      | 2.051   | 2.051    | 0.000  |
| 50               | 802      | 2.051   | 2.051    | 0.000  |
| 50               | 61       | 2.067   | 2.073    | 0.006  |
| 55               | 795      | 2.046   | 2.046    | 0.000  |
| 55               | 921      | 2.061   | 2.061    | 0.000  |
| 55               | 741      | 2.056   | 2.046    | -0.010 |
| 55               | 809      | 2.062   | 2.061    | 0.000  |
| 55               | 804      | 2.067   | 2.072    | 0.005  |
| 100              | 449      | 2.046   | 2.046    | 0.000  |
| 100              | 541      | 2.051   | 2.056    | 0.005  |
| 100              | 476      | 2.073   | 2.062    | -0.011 |
| 100              | 45       | 2.067   | 2.078    | 0.011  |
| 100              | 642      | 2.056   | 2.100    | 0.044  |
| 105              | 1036     | 2.046   | 2.046    | 0.000  |
| 105              | 1038     | 2.051   | 2.062    | 0.011  |
| 105              | 203      | 2.051   | 2.051    | 0.000  |
| 105              | 1029     | 2.072   | 2.057    | -0.015 |
| 105              | 1027     | 2.073   | 2.078    | 0.005  |
| 105              | Max      | 2.089   | 2.100    | 0.044  |
|                  | Average  | 2.058   | 2.058    | 0.000  |
|                  | Min      | 2.041   | 2.041    | -0.016 |
|                  | Std Dev  | 0.011   | 0.013    | 0.009  |



| 10.49_CCSR_Ratio |       |       |       |       |       |       |       |       |       |       |       |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site        |       |       |       |       |       |       |       |       |       |       |       |
| Tester           |       |       |       |       |       |       |       |       |       |       |       |
| Test Number      |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit        | 2.12  |       |       |       |       |       |       |       |       |       |       |
| Min Limit        | 2     |       |       |       |       |       |       |       |       |       |       |
| krad             | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL               | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 | 2.000 |
| Min              | 2.046 | 2.041 | 2.046 | 2.041 | 2.051 | 2.046 | 2.051 | 2.041 | 2.046 | 2.046 | 2.046 |
| Average          | 2.056 | 2.062 | 2.054 | 2.054 | 2.062 | 2.051 | 2.060 | 2.052 | 2.057 | 2.068 | 2.059 |
| Max              | 2.067 | 2.088 | 2.067 | 2.072 | 2.078 | 2.056 | 2.078 | 2.073 | 2.072 | 2.100 | 2.078 |
| UL               | 2.120 | 2.120 | 2.120 | 2.120 | 2.120 | 2.120 | 2.120 | 2.120 | 2.120 | 2.120 | 2.120 |

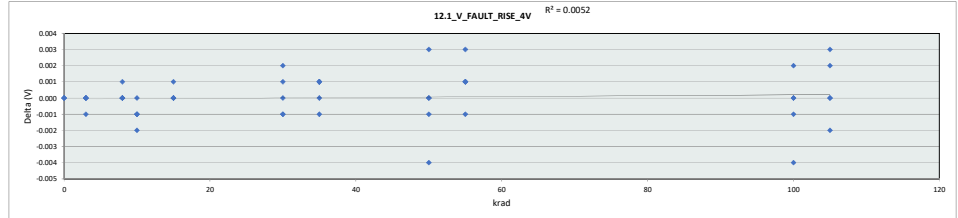


# HDR TID Report

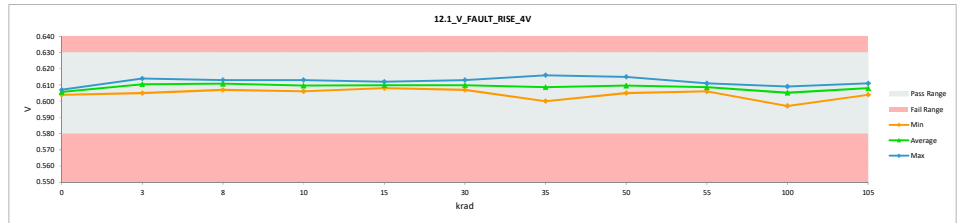
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.1_V_FAULT_RISE_4V |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 | V        | V       |          |        |
| Max Limit            | 0.63     | 0.63    |          |        |
| Min Limit            | 0.58     | 0.58    |          |        |
| krad                 | Serial # | PRE HDR | POST HDR | Delta  |
| 0                    | 552      | 0.606   | 0.606    | 0.000  |
| 0                    | 726      | 0.607   | 0.607    | 0.000  |
| 0                    | 791      | 0.604   | 0.604    | 0.000  |
| 3                    | 689      | 0.614   | 0.613    | -0.001 |
| 3                    | 688      | 0.608   | 0.608    | 0.000  |
| 3                    | 700      | 0.605   | 0.605    | 0.000  |
| 3                    | 482      | 0.612   | 0.612    | 0.000  |
| 3                    | 1033     | 0.614   | 0.614    | 0.000  |
| 8                    | 442      | 0.611   | 0.611    | 0.000  |
| 8                    | 699      | 0.607   | 0.607    | 0.000  |
| 8                    | 344      | 0.612   | 0.613    | 0.001  |
| 8                    | 355      | 0.610   | 0.610    | 0.000  |
| 8                    | 790      | 0.613   | 0.613    | 0.000  |
| 10                   | 537      | 0.614   | 0.613    | -0.001 |
| 10                   | 396      | 0.611   | 0.611    | 0.000  |
| 10                   | 521      | 0.607   | 0.606    | -0.001 |
| 10                   | 535      | 0.612   | 0.611    | -0.001 |
| 10                   | 526      | 0.609   | 0.607    | -0.002 |
| 15                   | 540      | 0.610   | 0.610    | 0.000  |
| 15                   | 387      | 0.608   | 0.608    | 0.000  |
| 15                   | 787      | 0.610   | 0.610    | 0.000  |
| 15                   | 1042     | 0.609   | 0.609    | 0.000  |
| 15                   | 483      | 0.611   | 0.612    | 0.001  |
| 30                   | 597      | 0.608   | 0.607    | -0.001 |
| 30                   | 853      | 0.614   | 0.613    | -0.001 |
| 30                   | 416      | 0.611   | 0.611    | 0.000  |
| 30                   | 949      | 0.606   | 0.608    | 0.002  |
| 30                   | 221      | 0.609   | 0.610    | 0.001  |
| 35                   | 538      | 0.607   | 0.607    | 0.000  |
| 35                   | 164      | 0.609   | 0.610    | 0.001  |
| 35                   | 1018     | 0.611   | 0.610    | -0.001 |
| 35                   | 462      | 0.599   | 0.600    | 0.001  |
| 35                   | 1032     | 0.615   | 0.616    | 0.001  |
| 50                   | 566      | 0.612   | 0.615    | 0.003  |
| 50                   | 197      | 0.615   | 0.614    | -0.001 |
| 50                   | 793      | 0.609   | 0.605    | -0.004 |
| 50                   | 802      | 0.607   | 0.607    | 0.000  |
| 50                   | 61       | 0.607   | 0.607    | 0.000  |
| 55                   | 795      | 0.610   | 0.611    | 0.001  |
| 55                   | 921      | 0.609   | 0.610    | 0.001  |
| 55                   | 741      | 0.607   | 0.606    | -0.001 |
| 55                   | 809      | 0.606   | 0.607    | 0.001  |
| 55                   | 804      | 0.606   | 0.609    | 0.003  |
| 100                  | 449      | 0.607   | 0.609    | 0.002  |
| 100                  | 541      | 0.601   | 0.597    | -0.004 |
| 100                  | 476      | 0.609   | 0.609    | 0.000  |
| 100                  | 45       | 0.608   | 0.608    | 0.000  |
| 100                  | 642      | 0.604   | 0.603    | -0.001 |
| 105                  | 1036     | 0.608   | 0.611    | 0.003  |
| 105                  | 1038     | 0.611   | 0.611    | 0.000  |
| 105                  | 203      | 0.602   | 0.604    | 0.002  |
| 105                  | 1029     | 0.610   | 0.608    | -0.002 |
| 105                  | 1027     | 0.606   | 0.606    | 0.000  |
| 105                  |          | 0.615   | 0.615    | 0.003  |
|                      | Max      | 0.609   | 0.609    | 0.000  |
|                      | Average  | 0.599   | 0.597    | -0.004 |
|                      | Min      | 0.599   | 0.597    | -0.004 |
|                      | Std Dev  | 0.003   | 0.004    | 0.001  |



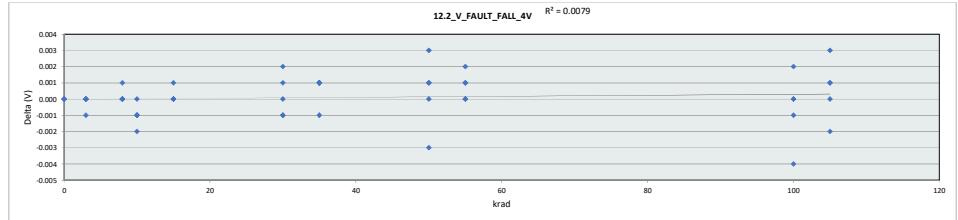
| 12.1_V_FAULT_RISE_4V |       |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            | 0.63  | V     |       |       |       |       |       |       |       |       |       |       |
| Min Limit            | 0.58  | V     |       |       |       |       |       |       |       |       |       |       |
| krad                 |       | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                   | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 |
| Min                  | 0.604 | 0.605 | 0.607 | 0.606 | 0.608 | 0.607 | 0.600 | 0.605 | 0.606 | 0.597 | 0.604 |       |
| Average              | 0.606 | 0.610 | 0.611 | 0.610 | 0.610 | 0.610 | 0.609 | 0.610 | 0.609 | 0.605 | 0.608 |       |
| Max                  | 0.607 | 0.614 | 0.613 | 0.613 | 0.612 | 0.613 | 0.616 | 0.615 | 0.611 | 0.609 | 0.611 |       |
| UL                   | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 |



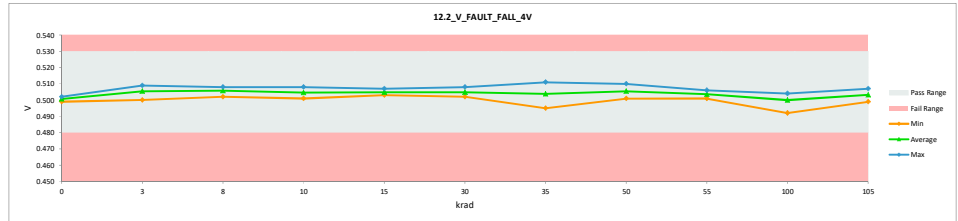
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.2_V_FAULT_FALL_4V |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 | V        | V       |          |        |
| Max Limit            | 0.53     | 0.53    |          |        |
| Min Limit            | 0.48     | 0.48    |          |        |
| krad                 | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                    | 552      | 0.501   | 0.501    | 0.000  |
| 0                    | 726      | 0.502   | 0.502    | 0.000  |
| 0                    | 791      | 0.499   | 0.499    | 0.000  |
| 3                    | 689      | 0.509   | 0.508    | -0.001 |
| 3                    | 688      | 0.503   | 0.503    | 0.000  |
| 3                    | 700      | 0.500   | 0.500    | 0.000  |
| 3                    | 482      | 0.507   | 0.507    | 0.000  |
| 3                    | 1033     | 0.509   | 0.509    | 0.000  |
| 8                    | 442      | 0.506   | 0.506    | 0.000  |
| 8                    | 699      | 0.502   | 0.502    | 0.000  |
| 8                    | 344      | 0.507   | 0.508    | 0.001  |
| 8                    | 355      | 0.505   | 0.505    | 0.000  |
| 8                    | 730      | 0.508   | 0.508    | 0.000  |
| 10                   | 537      | 0.509   | 0.508    | -0.001 |
| 10                   | 396      | 0.506   | 0.506    | 0.000  |
| 10                   | 521      | 0.502   | 0.501    | -0.001 |
| 10                   | 535      | 0.507   | 0.506    | -0.001 |
| 10                   | 526      | 0.504   | 0.502    | -0.002 |
| 15                   | 540      | 0.505   | 0.505    | 0.000  |
| 15                   | 387      | 0.503   | 0.503    | 0.000  |
| 15                   | 787      | 0.505   | 0.505    | 0.000  |
| 15                   | 1042     | 0.504   | 0.504    | 0.000  |
| 15                   | 483      | 0.506   | 0.507    | 0.001  |
| 30                   | 597      | 0.503   | 0.502    | -0.001 |
| 30                   | 853      | 0.509   | 0.508    | -0.001 |
| 30                   | 416      | 0.506   | 0.506    | 0.000  |
| 30                   | 949      | 0.501   | 0.503    | 0.002  |
| 30                   | 221      | 0.504   | 0.505    | 0.001  |
| 35                   | 538      | 0.502   | 0.503    | 0.001  |
| 35                   | 164      | 0.504   | 0.505    | 0.001  |
| 35                   | 1018     | 0.506   | 0.505    | -0.001 |
| 35                   | 462      | 0.494   | 0.495    | 0.001  |
| 35                   | 1032     | 0.510   | 0.511    | 0.001  |
| 50                   | 566      | 0.507   | 0.510    | 0.003  |
| 50                   | 197      | 0.510   | 0.510    | 0.000  |
| 50                   | 793      | 0.504   | 0.501    | -0.003 |
| 50                   | 802      | 0.502   | 0.503    | 0.001  |
| 50                   | 61       | 0.502   | 0.503    | 0.001  |
| 55                   | 795      | 0.505   | 0.506    | 0.001  |
| 55                   | 921      | 0.504   | 0.505    | 0.001  |
| 55                   | 741      | 0.501   | 0.501    | 0.000  |
| 55                   | 809      | 0.502   | 0.502    | 0.000  |
| 55                   | 804      | 0.502   | 0.504    | 0.002  |
| 100                  | 449      | 0.502   | 0.504    | 0.002  |
| 100                  | 541      | 0.496   | 0.492    | -0.004 |
| 100                  | 476      | 0.504   | 0.504    | 0.000  |
| 100                  | 45       | 0.503   | 0.503    | 0.000  |
| 100                  | 642      | 0.498   | 0.497    | -0.001 |
| 105                  | 1036     | 0.503   | 0.506    | 0.003  |
| 105                  | 1038     | 0.506   | 0.507    | 0.001  |
| 105                  | 203      | 0.498   | 0.499    | 0.001  |
| 105                  | 1029     | 0.505   | 0.503    | -0.002 |
| 105                  | 1027     | 0.501   | 0.501    | 0.000  |
| 105                  | Max      | 0.510   | 0.511    | 0.003  |
| 105                  | Average  | 0.504   | 0.504    | 0.000  |
| 105                  | Min      | 0.494   | 0.492    | -0.004 |
| 105                  | Std Dev  | 0.003   | 0.004    | 0.001  |



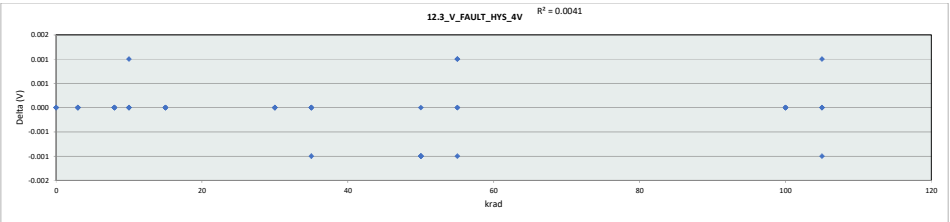
| 12.2_V_FAULT_FALL_4V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            | 0.53  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit            | 0.48  | V     |       |       |       |       |       |       |       |       |       |
| krad                 | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                   | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 |
| Min                  | 0.499 | 0.500 | 0.502 | 0.501 | 0.503 | 0.502 | 0.495 | 0.501 | 0.501 | 0.492 | 0.499 |
| Average              | 0.501 | 0.505 | 0.506 | 0.505 | 0.505 | 0.505 | 0.504 | 0.505 | 0.504 | 0.500 | 0.503 |
| Max                  | 0.502 | 0.509 | 0.508 | 0.508 | 0.507 | 0.508 | 0.511 | 0.510 | 0.506 | 0.504 | 0.507 |
| UL                   | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 |



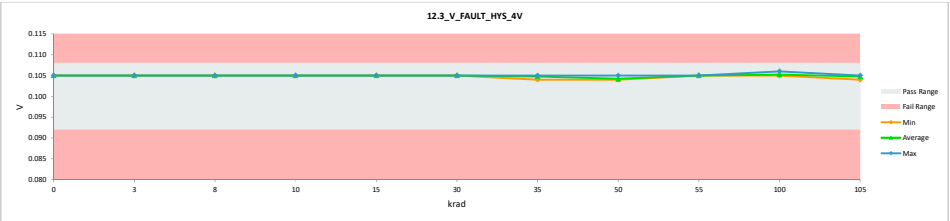
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.3_V_FAULT_HYS_4V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | V        | V       |          |        |
| Max Limit           | 0.108    | 0.108   |          |        |
| Min Limit           | 0.092    | 0.092   |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 0.105   | 0.105    | 0.000  |
| 0                   | 726      | 0.105   | 0.105    | 0.000  |
| 0                   | 791      | 0.105   | 0.105    | 0.000  |
| 3                   | 689      | 0.105   | 0.105    | 0.000  |
| 3                   | 688      | 0.105   | 0.105    | 0.000  |
| 3                   | 700      | 0.105   | 0.105    | 0.000  |
| 3                   | 482      | 0.105   | 0.105    | 0.000  |
| 3                   | 1033     | 0.105   | 0.105    | 0.000  |
| 8                   | 442      | 0.105   | 0.105    | 0.000  |
| 8                   | 699      | 0.105   | 0.105    | 0.000  |
| 8                   | 344      | 0.105   | 0.105    | 0.000  |
| 8                   | 355      | 0.105   | 0.105    | 0.000  |
| 8                   | 790      | 0.105   | 0.105    | 0.000  |
| 10                  | 537      | 0.105   | 0.105    | 0.000  |
| 10                  | 396      | 0.105   | 0.105    | 0.000  |
| 10                  | 521      | 0.105   | 0.105    | 0.000  |
| 10                  | 535      | 0.105   | 0.105    | 0.000  |
| 10                  | 526      | 0.104   | 0.105    | 0.001  |
| 15                  | 540      | 0.105   | 0.105    | 0.000  |
| 15                  | 387      | 0.105   | 0.105    | 0.000  |
| 15                  | 787      | 0.105   | 0.105    | 0.000  |
| 15                  | 1042     | 0.105   | 0.105    | 0.000  |
| 15                  | 483      | 0.105   | 0.105    | 0.000  |
| 30                  | 597      | 0.105   | 0.105    | 0.000  |
| 30                  | 853      | 0.105   | 0.105    | 0.000  |
| 30                  | 416      | 0.105   | 0.105    | 0.000  |
| 30                  | 949      | 0.105   | 0.105    | 0.000  |
| 30                  | 221      | 0.105   | 0.105    | 0.000  |
| 35                  | 538      | 0.105   | 0.104    | -0.001 |
| 35                  | 164      | 0.105   | 0.105    | 0.000  |
| 35                  | 1018     | 0.105   | 0.105    | 0.000  |
| 35                  | 462      | 0.105   | 0.105    | 0.000  |
| 35                  | 1032     | 0.105   | 0.105    | 0.000  |
| 50                  | 566      | 0.105   | 0.105    | 0.000  |
| 50                  | 197      | 0.105   | 0.104    | -0.001 |
| 50                  | 793      | 0.105   | 0.104    | -0.001 |
| 50                  | 802      | 0.105   | 0.104    | -0.001 |
| 50                  | 61       | 0.105   | 0.104    | -0.001 |
| 55                  | 795      | 0.105   | 0.105    | 0.000  |
| 55                  | 921      | 0.105   | 0.105    | 0.000  |
| 55                  | 741      | 0.106   | 0.105    | -0.001 |
| 55                  | 809      | 0.104   | 0.105    | 0.001  |
| 55                  | 804      | 0.104   | 0.105    | 0.001  |
| 100                 | 449      | 0.105   | 0.105    | 0.000  |
| 100                 | 541      | 0.105   | 0.105    | 0.000  |
| 100                 | 476      | 0.105   | 0.105    | 0.000  |
| 100                 | 45       | 0.105   | 0.105    | 0.000  |
| 100                 | 642      | 0.106   | 0.106    | 0.000  |
| 105                 | 1036     | 0.105   | 0.105    | 0.000  |
| 105                 | 1038     | 0.105   | 0.104    | -0.001 |
| 105                 | 203      | 0.104   | 0.105    | 0.001  |
| 105                 | 1029     | 0.105   | 0.105    | 0.000  |
| 105                 | 1027     | 0.105   | 0.105    | 0.000  |
| 105                 | Max      | 0.106   | 0.106    | 0.001  |
| 105                 | Average  | 0.105   | 0.105    | 0.000  |
| 105                 | Min      | 0.104   | 0.104    | -0.001 |
| 105                 | Std Dev  | 0.000   | 0.000    | 0.000  |



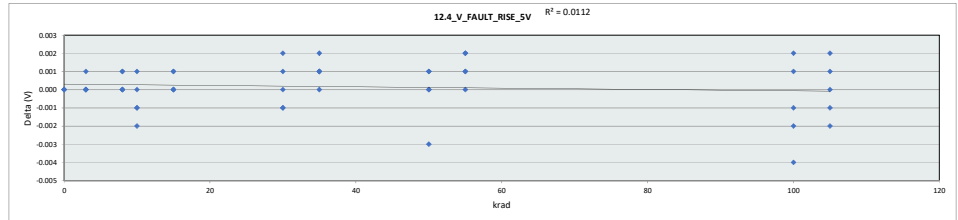
| 12.3_V_FAULT_HYS_4V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site           |       |       |       |       |       |       |       |       |       |       |       |
| Tester              |       |       |       |       |       |       |       |       |       |       |       |
| Test Number         |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit           | 0.108 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit           | 0.092 | V     |       |       |       |       |       |       |       |       |       |
| krad                | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                  | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 |
| Min                 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.104 | 0.104 | 0.105 | 0.105 | 0.104 |
| Average             | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.104 | 0.105 | 0.105 | 0.105 |
| Max                 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.106 | 0.105 |
| UL                  | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 |



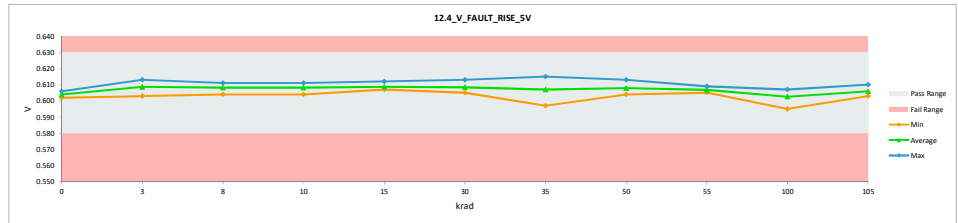
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.4_V_FAULT_RISE_SV |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 |          |         |          |        |
| Max Limit            |          |         |          |        |
| Min Limit            |          |         |          |        |
| krad                 | Serial # | PRE HDR | POST HDR | Delta  |
| 0                    | 552      | 0.604   | 0.604    | 0.000  |
| 0                    | 726      | 0.606   | 0.606    | 0.000  |
| 0                    | 791      | 0.602   | 0.602    | 0.000  |
| 3                    | 689      | 0.611   | 0.611    | 0.000  |
| 3                    | 688      | 0.606   | 0.606    | 0.000  |
| 3                    | 700      | 0.603   | 0.603    | 0.000  |
| 3                    | 482      | 0.610   | 0.610    | 0.000  |
| 3                    | 1033     | 0.612   | 0.613    | 0.001  |
| 8                    | 442      | 0.609   | 0.609    | 0.000  |
| 8                    | 699      | 0.603   | 0.604    | 0.001  |
| 8                    | 344      | 0.609   | 0.610    | 0.001  |
| 8                    | 355      | 0.607   | 0.607    | 0.000  |
| 8                    | 790      | 0.611   | 0.611    | 0.000  |
| 10                   | 537      | 0.612   | 0.611    | -0.001 |
| 10                   | 396      | 0.610   | 0.611    | 0.001  |
| 10                   | 521      | 0.604   | 0.604    | 0.000  |
| 10                   | 535      | 0.610   | 0.609    | -0.001 |
| 10                   | 526      | 0.608   | 0.606    | -0.002 |
| 15                   | 540      | 0.609   | 0.609    | 0.000  |
| 15                   | 387      | 0.607   | 0.607    | 0.000  |
| 15                   | 787      | 0.607   | 0.607    | 0.000  |
| 15                   | 1042     | 0.607   | 0.608    | 0.001  |
| 15                   | 483      | 0.611   | 0.612    | 0.001  |
| 30                   | 597      | 0.607   | 0.606    | -0.001 |
| 30                   | 853      | 0.614   | 0.613    | -0.001 |
| 30                   | 416      | 0.609   | 0.609    | 0.000  |
| 30                   | 949      | 0.603   | 0.605    | 0.002  |
| 30                   | 221      | 0.608   | 0.609    | 0.001  |
| 35                   | 538      | 0.605   | 0.606    | 0.001  |
| 35                   | 164      | 0.607   | 0.608    | 0.001  |
| 35                   | 1018     | 0.609   | 0.609    | 0.000  |
| 35                   | 462      | 0.596   | 0.597    | 0.001  |
| 35                   | 1032     | 0.613   | 0.615    | 0.002  |
| 50                   | 566      | 0.611   | 0.612    | 0.001  |
| 50                   | 197      | 0.613   | 0.613    | 0.000  |
| 50                   | 793      | 0.607   | 0.604    | -0.003 |
| 50                   | 802      | 0.605   | 0.605    | 0.000  |
| 50                   | 61       | 0.604   | 0.605    | 0.001  |
| 55                   | 795      | 0.608   | 0.609    | 0.001  |
| 55                   | 921      | 0.607   | 0.609    | 0.002  |
| 55                   | 741      | 0.604   | 0.605    | 0.001  |
| 55                   | 809      | 0.605   | 0.605    | 0.000  |
| 55                   | 804      | 0.604   | 0.606    | 0.002  |
| 100                  | 449      | 0.605   | 0.607    | 0.002  |
| 100                  | 541      | 0.599   | 0.595    | -0.004 |
| 100                  | 476      | 0.607   | 0.606    | -0.001 |
| 100                  | 45       | 0.605   | 0.606    | 0.001  |
| 100                  | 642      | 0.601   | 0.599    | -0.002 |
| 105                  | 1036     | 0.607   | 0.608    | 0.001  |
| 105                  | 1038     | 0.610   | 0.610    | 0.000  |
| 105                  | 203      | 0.601   | 0.603    | 0.002  |
| 105                  | 1029     | 0.608   | 0.606    | -0.002 |
| 105                  | 1027     | 0.604   | 0.603    | -0.001 |
| 105                  | Max      | 0.614   | 0.615    | 0.002  |
| 105                  | Average  | 0.607   | 0.607    | 0.000  |
| 105                  | Min      | 0.596   | 0.595    | -0.004 |
| 105                  | Std Dev  | 0.004   | 0.004    | 0.001  |



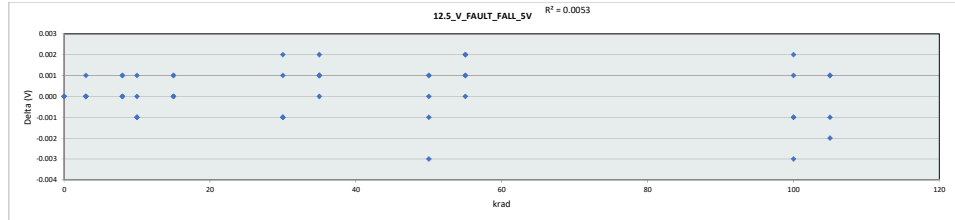
| 12.4_V_FAULT_RISE_SV |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            | 0.63  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit            | 0.58  | V     |       |       |       |       |       |       |       |       |       |
| krad                 |       |       | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                   | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 |
| Min                  | 0.602 | 0.603 | 0.604 | 0.604 | 0.607 | 0.605 | 0.597 | 0.604 | 0.605 | 0.595 | 0.603 |
| Average              | 0.604 | 0.609 | 0.608 | 0.608 | 0.609 | 0.608 | 0.607 | 0.608 | 0.607 | 0.603 | 0.606 |
| Max                  | 0.606 | 0.613 | 0.611 | 0.611 | 0.612 | 0.613 | 0.615 | 0.613 | 0.609 | 0.607 | 0.610 |
| UL                   | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 |



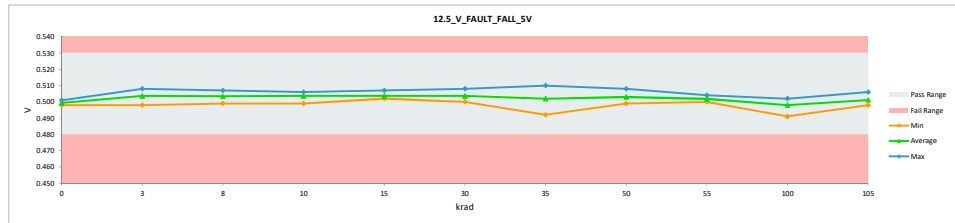
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.5_V_FAULT_FALL_SV |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 | V        | V       |          |        |
| Max Limit            | 0.53     | 0.53    |          |        |
| Min Limit            | 0.48     | 0.48    |          |        |
| krad                 | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                    | 552      | 0.499   | 0.499    | 0.000  |
| 0                    | 726      | 0.501   | 0.501    | 0.000  |
| 0                    | 791      | 0.498   | 0.498    | 0.000  |
| 3                    | 689      | 0.506   | 0.506    | 0.000  |
| 3                    | 688      | 0.501   | 0.501    | 0.000  |
| 3                    | 700      | 0.498   | 0.498    | 0.000  |
| 3                    | 482      | 0.505   | 0.505    | 0.000  |
| 3                    | 1033     | 0.507   | 0.508    | 0.001  |
| 8                    | 442      | 0.504   | 0.504    | 0.000  |
| 8                    | 699      | 0.499   | 0.499    | 0.000  |
| 8                    | 344      | 0.504   | 0.505    | 0.001  |
| 8                    | 355      | 0.502   | 0.502    | 0.000  |
| 8                    | 790      | 0.506   | 0.507    | 0.001  |
| 10                   | 537      | 0.506   | 0.506    | -0.001 |
| 10                   | 396      | 0.505   | 0.506    | 0.001  |
| 10                   | 521      | 0.500   | 0.499    | -0.001 |
| 10                   | 535      | 0.505   | 0.505    | 0.000  |
| 10                   | 526      | 0.503   | 0.502    | -0.001 |
| 15                   | 540      | 0.504   | 0.504    | 0.000  |
| 15                   | 387      | 0.502   | 0.502    | 0.000  |
| 15                   | 787      | 0.502   | 0.502    | 0.000  |
| 15                   | 1042     | 0.502   | 0.503    | 0.001  |
| 15                   | 483      | 0.506   | 0.507    | 0.001  |
| 30                   | 597      | 0.502   | 0.501    | -0.001 |
| 30                   | 853      | 0.509   | 0.508    | -0.001 |
| 30                   | 416      | 0.505   | 0.504    | -0.001 |
| 30                   | 949      | 0.499   | 0.500    | 0.001  |
| 30                   | 221      | 0.503   | 0.505    | 0.002  |
| 35                   | 538      | 0.500   | 0.501    | 0.001  |
| 35                   | 164      | 0.502   | 0.503    | 0.001  |
| 35                   | 1018     | 0.504   | 0.504    | 0.000  |
| 35                   | 462      | 0.491   | 0.492    | 0.001  |
| 35                   | 1032     | 0.508   | 0.510    | 0.002  |
| 50                   | 566      | 0.506   | 0.507    | 0.001  |
| 50                   | 197      | 0.509   | 0.508    | -0.001 |
| 50                   | 793      | 0.502   | 0.499    | -0.003 |
| 50                   | 802      | 0.500   | 0.501    | 0.001  |
| 50                   | 61       | 0.500   | 0.500    | 0.000  |
| 55                   | 795      | 0.503   | 0.504    | 0.001  |
| 55                   | 921      | 0.502   | 0.504    | 0.002  |
| 55                   | 741      | 0.499   | 0.500    | 0.001  |
| 55                   | 809      | 0.500   | 0.500    | 0.000  |
| 55                   | 804      | 0.499   | 0.501    | 0.002  |
| 100                  | 449      | 0.500   | 0.502    | 0.002  |
| 100                  | 541      | 0.494   | 0.491    | -0.003 |
| 100                  | 476      | 0.502   | 0.501    | -0.001 |
| 100                  | 45       | 0.500   | 0.501    | 0.001  |
| 100                  | 642      | 0.496   | 0.495    | -0.001 |
| 105                  | 1036     | 0.502   | 0.503    | 0.001  |
| 105                  | 1038     | 0.505   | 0.506    | 0.001  |
| 105                  | 203      | 0.497   | 0.498    | 0.001  |
| 105                  | 1029     | 0.503   | 0.501    | -0.002 |
| 105                  | 1027     | 0.499   | 0.498    | -0.001 |
| 105                  | Max      | 0.509   | 0.510    | 0.002  |
|                      | Average  | 0.502   | 0.502    | 0.000  |
|                      | Min      | 0.491   | 0.491    | -0.003 |
|                      | Std Dev  | 0.004   | 0.004    | 0.001  |



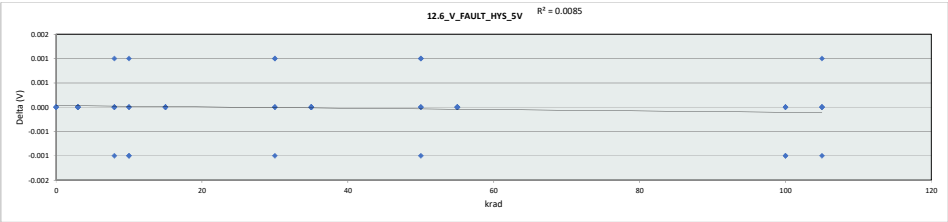
| 12.5_V_FAULT_FALL_SV |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            | 0.53  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit            | 0.48  | V     |       |       |       |       |       |       |       |       |       |
| krad                 | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                   | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 |
| Min                  | 0.498 | 0.498 | 0.499 | 0.499 | 0.502 | 0.500 | 0.492 | 0.499 | 0.500 | 0.491 | 0.498 |
| Average              | 0.499 | 0.504 | 0.503 | 0.504 | 0.504 | 0.504 | 0.502 | 0.503 | 0.502 | 0.498 | 0.501 |
| Max                  | 0.501 | 0.508 | 0.507 | 0.506 | 0.507 | 0.508 | 0.510 | 0.508 | 0.504 | 0.502 | 0.506 |
| UL                   | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 |



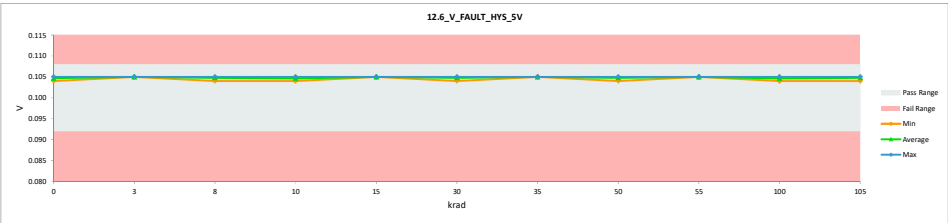
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.6_V_FAULT_HYS_5V |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | V        | V       |          |        |
| Max Limit           | 0.108    | 0.108   |          |        |
| Min Limit           | 0.092    | 0.092   |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 0.105   | 0.105    | 0.000  |
| 0                   | 726      | 0.105   | 0.105    | 0.000  |
| 0                   | 791      | 0.104   | 0.104    | 0.000  |
| 3                   | 689      | 0.105   | 0.105    | 0.000  |
| 3                   | 688      | 0.105   | 0.105    | 0.000  |
| 3                   | 700      | 0.105   | 0.105    | 0.000  |
| 3                   | 482      | 0.105   | 0.105    | 0.000  |
| 3                   | 1033     | 0.105   | 0.105    | 0.000  |
| 8                   | 442      | 0.105   | 0.105    | 0.000  |
| 8                   | 699      | 0.104   | 0.105    | 0.001  |
| 8                   | 344      | 0.105   | 0.105    | 0.000  |
| 8                   | 355      | 0.105   | 0.105    | 0.000  |
| 8                   | 790      | 0.105   | 0.104    | -0.001 |
| 10                  | 537      | 0.105   | 0.105    | 0.000  |
| 10                  | 396      | 0.105   | 0.105    | 0.000  |
| 10                  | 521      | 0.104   | 0.105    | 0.001  |
| 10                  | 535      | 0.105   | 0.104    | -0.001 |
| 10                  | 526      | 0.105   | 0.104    | -0.001 |
| 15                  | 540      | 0.105   | 0.105    | 0.000  |
| 15                  | 387      | 0.105   | 0.105    | 0.000  |
| 15                  | 787      | 0.105   | 0.105    | 0.000  |
| 15                  | 1042     | 0.105   | 0.105    | 0.000  |
| 15                  | 483      | 0.105   | 0.105    | 0.000  |
| 30                  | 597      | 0.105   | 0.105    | 0.000  |
| 30                  | 853      | 0.105   | 0.105    | 0.000  |
| 30                  | 416      | 0.104   | 0.105    | 0.001  |
| 30                  | 949      | 0.104   | 0.105    | 0.001  |
| 30                  | 221      | 0.105   | 0.104    | -0.001 |
| 35                  | 538      | 0.105   | 0.105    | 0.000  |
| 35                  | 164      | 0.105   | 0.105    | 0.000  |
| 35                  | 1018     | 0.105   | 0.105    | 0.000  |
| 35                  | 462      | 0.105   | 0.105    | 0.000  |
| 35                  | 1032     | 0.105   | 0.105    | 0.000  |
| 50                  | 566      | 0.105   | 0.105    | 0.000  |
| 50                  | 197      | 0.104   | 0.105    | 0.001  |
| 50                  | 793      | 0.105   | 0.105    | 0.000  |
| 50                  | 802      | 0.105   | 0.104    | -0.001 |
| 50                  | 61       | 0.104   | 0.105    | 0.001  |
| 55                  | 795      | 0.105   | 0.105    | 0.000  |
| 55                  | 921      | 0.105   | 0.105    | 0.000  |
| 55                  | 741      | 0.105   | 0.105    | 0.000  |
| 55                  | 809      | 0.105   | 0.105    | 0.000  |
| 55                  | 804      | 0.105   | 0.105    | 0.000  |
| 100                 | 449      | 0.105   | 0.105    | 0.000  |
| 100                 | 541      | 0.105   | 0.104    | -0.001 |
| 100                 | 476      | 0.105   | 0.105    | 0.000  |
| 100                 | 45       | 0.105   | 0.105    | 0.000  |
| 100                 | 642      | 0.105   | 0.104    | -0.001 |
| 105                 | 1036     | 0.105   | 0.105    | 0.000  |
| 105                 | 1038     | 0.105   | 0.104    | -0.001 |
| 105                 | 203      | 0.104   | 0.105    | 0.001  |
| 105                 | 1029     | 0.105   | 0.105    | 0.000  |
| 105                 | 1027     | 0.105   | 0.105    | 0.000  |
| 105                 | Max      | 0.105   | 0.105    | 0.001  |
|                     | Average  | 0.105   | 0.105    | 0.000  |
|                     | Min      | 0.104   | 0.104    | -0.001 |
|                     | Std Dev  | 0.000   | 0.000    | 0.001  |



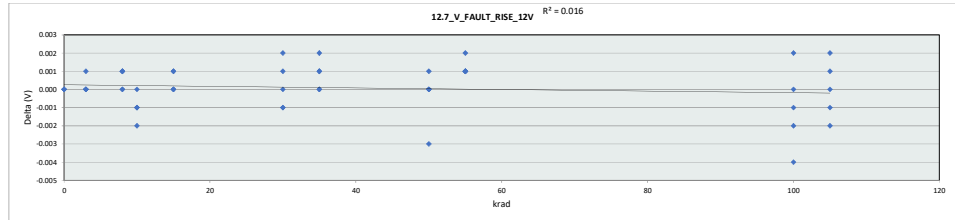
| 12.6_V_FAULT_HYS_5V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site           |       |       |       |       |       |       |       |       |       |       |       |
| Tester              |       |       |       |       |       |       |       |       |       |       |       |
| Test Number         |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit           | 0.108 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit           | 0.092 | V     |       |       |       |       |       |       |       |       |       |
| krad                | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                  | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 |
| Min                 | 0.104 | 0.105 | 0.104 | 0.104 | 0.105 | 0.104 | 0.105 | 0.104 | 0.105 | 0.104 | 0.104 |
| Average             | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 |
| Max                 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 |
| UL                  | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 |



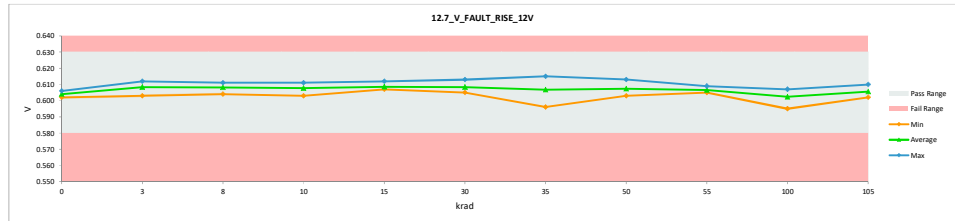
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.7_V_FAULT_RISE_12V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 0.604   | 0.604    | 0.000  |
| 0                     | 726      | 0.606   | 0.606    | 0.000  |
| 0                     | 791      | 0.602   | 0.602    | 0.000  |
| 3                     | 689      | 0.611   | 0.611    | 0.000  |
| 3                     | 688      | 0.605   | 0.606    | 0.001  |
| 3                     | 700      | 0.603   | 0.603    | 0.000  |
| 3                     | 482      | 0.610   | 0.610    | 0.000  |
| 3                     | 1033     | 0.612   | 0.612    | 0.000  |
| 8                     | 442      | 0.609   | 0.609    | 0.000  |
| 8                     | 699      | 0.603   | 0.604    | 0.001  |
| 8                     | 344      | 0.609   | 0.610    | 0.001  |
| 8                     | 355      | 0.606   | 0.607    | 0.001  |
| 8                     | 790      | 0.611   | 0.611    | 0.000  |
| 10                    | 537      | 0.612   | 0.611    | -0.001 |
| 10                    | 396      | 0.610   | 0.610    | 0.000  |
| 10                    | 521      | 0.604   | 0.603    | -0.001 |
| 10                    | 535      | 0.610   | 0.609    | -0.001 |
| 10                    | 526      | 0.608   | 0.606    | -0.002 |
| 15                    | 540      | 0.609   | 0.609    | 0.000  |
| 15                    | 387      | 0.607   | 0.607    | 0.000  |
| 15                    | 787      | 0.607   | 0.607    | 0.000  |
| 15                    | 1042     | 0.607   | 0.608    | 0.001  |
| 15                    | 483      | 0.611   | 0.612    | 0.001  |
| 30                    | 597      | 0.607   | 0.606    | -0.001 |
| 30                    | 853      | 0.614   | 0.613    | -0.001 |
| 30                    | 416      | 0.609   | 0.609    | 0.000  |
| 30                    | 949      | 0.603   | 0.605    | 0.002  |
| 30                    | 221      | 0.608   | 0.609    | 0.001  |
| 35                    | 538      | 0.605   | 0.606    | 0.001  |
| 35                    | 164      | 0.607   | 0.608    | 0.001  |
| 35                    | 1018     | 0.609   | 0.609    | 0.000  |
| 35                    | 462      | 0.596   | 0.596    | 0.000  |
| 35                    | 1032     | 0.613   | 0.615    | 0.002  |
| 50                    | 566      | 0.611   | 0.611    | 0.000  |
| 50                    | 197      | 0.613   | 0.613    | 0.000  |
| 50                    | 793      | 0.606   | 0.603    | -0.003 |
| 50                    | 802      | 0.605   | 0.605    | 0.000  |
| 50                    | 61       | 0.604   | 0.605    | 0.001  |
| 55                    | 795      | 0.608   | 0.609    | 0.001  |
| 55                    | 921      | 0.607   | 0.608    | 0.001  |
| 55                    | 741      | 0.604   | 0.605    | 0.001  |
| 55                    | 809      | 0.604   | 0.605    | 0.001  |
| 55                    | 804      | 0.604   | 0.606    | 0.002  |
| 100                   | 449      | 0.605   | 0.607    | 0.002  |
| 100                   | 541      | 0.599   | 0.595    | -0.004 |
| 100                   | 476      | 0.607   | 0.606    | -0.001 |
| 100                   | 45       | 0.605   | 0.605    | 0.000  |
| 100                   | 642      | 0.601   | 0.599    | -0.002 |
| 105                   | 1036     | 0.606   | 0.608    | 0.002  |
| 105                   | 1038     | 0.610   | 0.610    | 0.000  |
| 105                   | 203      | 0.601   | 0.602    | 0.001  |
| 105                   | 1029     | 0.607   | 0.605    | -0.002 |
| 105                   | 1027     | 0.604   | 0.603    | -0.001 |
| 105                   | Max      | 0.614   | 0.615    | 0.002  |
| 105                   | Average  | 0.607   | 0.607    | 0.000  |
| 105                   | Min      | 0.596   | 0.595    | -0.004 |
| 105                   | Std Dev  | 0.004   | 0.004    | 0.001  |



| 12.7_V_FAULT_RISE_12V |       |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             | 0.63  | V     |       |       |       |       |       |       |       |       |       |       |
| Min Limit             | 0.58  | V     |       |       |       |       |       |       |       |       |       |       |
| krad                  |       |       |       |       |       |       |       |       |       |       |       |       |
| LL                    | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 |       |
| Min                   | 0.602 | 0.603 | 0.603 | 0.604 | 0.603 | 0.607 | 0.605 | 0.596 | 0.603 | 0.605 | 0.595 | 0.602 |
| Average               | 0.604 | 0.608 | 0.608 | 0.608 | 0.608 | 0.609 | 0.608 | 0.607 | 0.607 | 0.607 | 0.602 | 0.606 |
| Max                   | 0.606 | 0.612 | 0.611 | 0.611 | 0.611 | 0.612 | 0.613 | 0.615 | 0.613 | 0.609 | 0.607 | 0.610 |
| UL                    | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 |

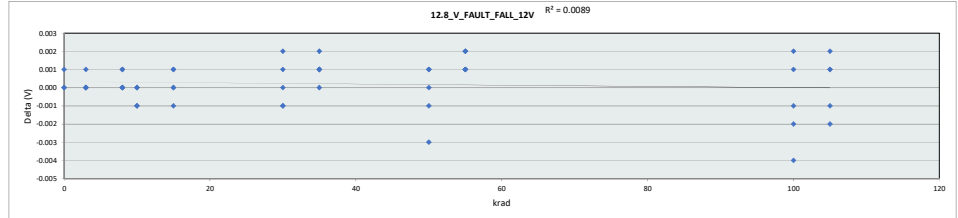


# HDR TID Report

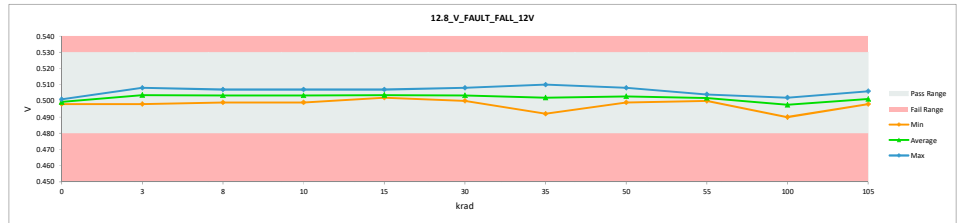
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.8_V_FAULT_FALL_12V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  |          |         |          |        |
| Max Limit             |          |         |          |        |
| Min Limit             |          |         |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 0.499   | 0.499    | 0.000  |
| 0                     | 726      | 0.501   | 0.501    | 0.000  |
| 0                     | 791      | 0.497   | 0.498    | 0.001  |
| 3                     | 689      | 0.506   | 0.506    | 0.000  |
| 3                     | 688      | 0.501   | 0.501    | 0.000  |
| 3                     | 700      | 0.498   | 0.498    | 0.000  |
| 3                     | 482      | 0.505   | 0.505    | 0.000  |
| 3                     | 1033     | 0.507   | 0.508    | 0.001  |
| 8                     | 442      | 0.504   | 0.504    | 0.000  |
| 8                     | 699      | 0.499   | 0.499    | 0.000  |
| 8                     | 344      | 0.504   | 0.505    | 0.001  |
| 8                     | 355      | 0.502   | 0.502    | 0.000  |
| 8                     | 790      | 0.506   | 0.507    | 0.001  |
| 10                    | 537      | 0.507   | 0.507    | 0.000  |
| 10                    | 396      | 0.505   | 0.505    | 0.000  |
| 10                    | 521      | 0.499   | 0.499    | 0.000  |
| 10                    | 535      | 0.505   | 0.504    | -0.001 |
| 10                    | 526      | 0.503   | 0.502    | -0.001 |
| 15                    | 540      | 0.505   | 0.504    | -0.001 |
| 15                    | 387      | 0.502   | 0.502    | 0.000  |
| 15                    | 787      | 0.502   | 0.502    | 0.000  |
| 15                    | 1042     | 0.502   | 0.503    | 0.001  |
| 15                    | 483      | 0.506   | 0.507    | 0.001  |
| 30                    | 597      | 0.502   | 0.501    | -0.001 |
| 30                    | 853      | 0.509   | 0.508    | -0.001 |
| 30                    | 416      | 0.504   | 0.504    | 0.000  |
| 30                    | 949      | 0.498   | 0.500    | 0.002  |
| 30                    | 221      | 0.503   | 0.504    | 0.001  |
| 35                    | 538      | 0.500   | 0.501    | 0.001  |
| 35                    | 164      | 0.502   | 0.503    | 0.001  |
| 35                    | 1018     | 0.504   | 0.504    | 0.000  |
| 35                    | 462      | 0.491   | 0.492    | 0.001  |
| 35                    | 1032     | 0.508   | 0.510    | 0.002  |
| 50                    | 566      | 0.506   | 0.507    | 0.001  |
| 50                    | 197      | 0.509   | 0.508    | -0.001 |
| 50                    | 793      | 0.502   | 0.499    | -0.003 |
| 50                    | 802      | 0.500   | 0.500    | 0.000  |
| 50                    | 61       | 0.499   | 0.500    | 0.001  |
| 55                    | 795      | 0.503   | 0.504    | 0.001  |
| 55                    | 921      | 0.502   | 0.504    | 0.002  |
| 55                    | 741      | 0.499   | 0.500    | 0.001  |
| 55                    | 809      | 0.499   | 0.500    | 0.001  |
| 55                    | 804      | 0.499   | 0.501    | 0.002  |
| 100                   | 449      | 0.500   | 0.502    | 0.002  |
| 100                   | 541      | 0.494   | 0.490    | -0.004 |
| 100                   | 476      | 0.502   | 0.501    | -0.001 |
| 100                   | 45       | 0.500   | 0.501    | 0.001  |
| 100                   | 642      | 0.496   | 0.494    | -0.002 |
| 105                   | 1036     | 0.502   | 0.503    | 0.001  |
| 105                   | 1038     | 0.505   | 0.506    | 0.001  |
| 105                   | 203      | 0.496   | 0.498    | 0.002  |
| 105                   | 1029     | 0.503   | 0.501    | -0.002 |
| 105                   | 1027     | 0.499   | 0.498    | -0.001 |
| 105                   | Max      | 0.509   | 0.510    | 0.002  |
| 105                   | Average  | 0.502   | 0.502    | 0.000  |
| 105                   | Min      | 0.491   | 0.490    | -0.004 |
| 105                   | Std Dev  | 0.004   | 0.004    | 0.001  |



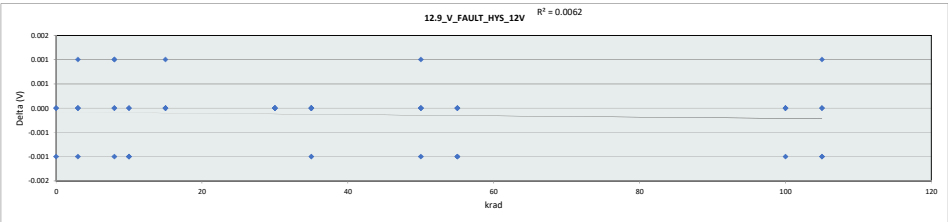
| 12.8_V_FAULT_FALL_12V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             | 0.53  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit             | 0.48  | V     |       |       |       |       |       |       |       |       |       |
| krad                  |       |       | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 |
| Min                   | 0.498 | 0.498 | 0.499 | 0.499 | 0.502 | 0.500 | 0.492 | 0.499 | 0.500 | 0.490 | 0.498 |
| Average               | 0.499 | 0.504 | 0.503 | 0.503 | 0.504 | 0.503 | 0.502 | 0.503 | 0.502 | 0.498 | 0.501 |
| Max                   | 0.501 | 0.508 | 0.507 | 0.507 | 0.507 | 0.508 | 0.510 | 0.508 | 0.504 | 0.502 | 0.506 |
| UL                    | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 |



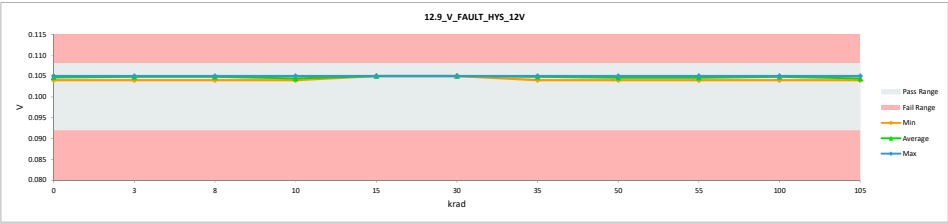
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.9_V_FAULT_HYS_12V |          |         |          |        |
|----------------------|----------|---------|----------|--------|
| Test Site            |          |         |          |        |
| Tester               |          |         |          |        |
| Test Number          |          |         |          |        |
| Unit                 | V        | V       |          |        |
| Max Limit            | 0.108    | 0.108   |          |        |
| Min Limit            | 0.092    | 0.092   |          |        |
| krad                 | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                    | 552      | 0.105   | 0.105    | 0.000  |
| 0                    | 726      | 0.105   | 0.105    | 0.000  |
| 0                    | 791      | 0.105   | 0.104    | -0.001 |
| 3                    | 689      | 0.105   | 0.105    | 0.000  |
| 3                    | 688      | 0.104   | 0.105    | 0.001  |
| 3                    | 700      | 0.105   | 0.105    | 0.000  |
| 3                    | 482      | 0.105   | 0.105    | 0.000  |
| 3                    | 1033     | 0.105   | 0.104    | -0.001 |
| 8                    | 442      | 0.105   | 0.105    | 0.000  |
| 8                    | 699      | 0.104   | 0.105    | 0.001  |
| 8                    | 344      | 0.105   | 0.105    | 0.000  |
| 8                    | 355      | 0.104   | 0.105    | 0.001  |
| 8                    | 790      | 0.105   | 0.104    | -0.001 |
| 10                   | 537      | 0.105   | 0.104    | -0.001 |
| 10                   | 396      | 0.105   | 0.105    | 0.000  |
| 10                   | 521      | 0.105   | 0.104    | -0.001 |
| 10                   | 535      | 0.105   | 0.105    | 0.000  |
| 10                   | 526      | 0.105   | 0.104    | -0.001 |
| 15                   | 540      | 0.104   | 0.105    | 0.001  |
| 15                   | 387      | 0.105   | 0.105    | 0.000  |
| 15                   | 787      | 0.105   | 0.105    | 0.000  |
| 15                   | 1042     | 0.105   | 0.105    | 0.000  |
| 15                   | 483      | 0.105   | 0.105    | 0.000  |
| 30                   | 597      | 0.105   | 0.105    | 0.000  |
| 30                   | 853      | 0.105   | 0.105    | 0.000  |
| 30                   | 416      | 0.105   | 0.105    | 0.000  |
| 30                   | 949      | 0.105   | 0.105    | 0.000  |
| 30                   | 221      | 0.105   | 0.105    | 0.000  |
| 35                   | 538      | 0.105   | 0.105    | 0.000  |
| 35                   | 164      | 0.105   | 0.105    | 0.000  |
| 35                   | 1018     | 0.105   | 0.105    | 0.000  |
| 35                   | 462      | 0.105   | 0.104    | -0.001 |
| 35                   | 1032     | 0.105   | 0.105    | 0.000  |
| 50                   | 566      | 0.105   | 0.104    | -0.001 |
| 50                   | 197      | 0.104   | 0.105    | 0.001  |
| 50                   | 793      | 0.104   | 0.104    | 0.000  |
| 50                   | 802      | 0.105   | 0.105    | 0.000  |
| 50                   | 61       | 0.105   | 0.105    | 0.000  |
| 55                   | 795      | 0.105   | 0.104    | -0.001 |
| 55                   | 921      | 0.105   | 0.104    | -0.001 |
| 55                   | 741      | 0.105   | 0.105    | 0.000  |
| 55                   | 809      | 0.105   | 0.105    | 0.000  |
| 55                   | 804      | 0.105   | 0.105    | 0.000  |
| 100                  | 449      | 0.105   | 0.105    | 0.000  |
| 100                  | 541      | 0.105   | 0.105    | 0.000  |
| 100                  | 476      | 0.105   | 0.105    | 0.000  |
| 100                  | 45       | 0.105   | 0.104    | -0.001 |
| 100                  | 642      | 0.105   | 0.105    | 0.000  |
| 105                  | 1036     | 0.104   | 0.105    | 0.001  |
| 105                  | 1038     | 0.105   | 0.104    | -0.001 |
| 105                  | 203      | 0.105   | 0.104    | -0.001 |
| 105                  | 1029     | 0.104   | 0.104    | 0.000  |
| 105                  | 1027     | 0.105   | 0.105    | 0.000  |
| 105                  | Max      | 0.105   | 0.105    | 0.001  |
|                      | Average  | 0.105   | 0.105    | 0.000  |
|                      | Min      | 0.104   | 0.104    | -0.001 |
|                      | Std Dev  | 0.000   | 0.000    | 0.001  |



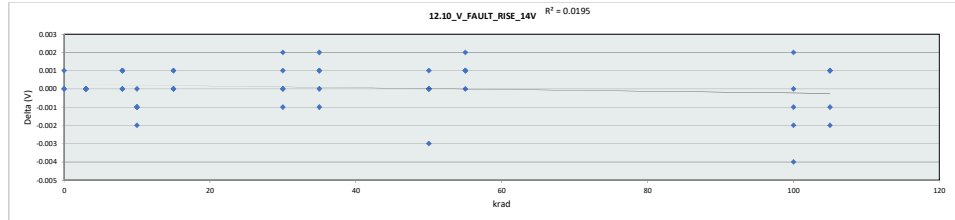
| 12.9_V_FAULT_HYS_12V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site            |       |       |       |       |       |       |       |       |       |       |       |
| Tester               |       |       |       |       |       |       |       |       |       |       |       |
| Test Number          |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit            | 0.108 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit            | 0.092 | V     |       |       |       |       |       |       |       |       |       |
| krad                 | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                   | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 |
| Min                  | 0.104 | 0.104 | 0.104 | 0.104 | 0.105 | 0.105 | 0.104 | 0.104 | 0.104 | 0.104 | 0.104 |
| Average              | 0.105 | 0.105 | 0.105 | 0.104 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.104 |
| Max                  | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 |
| UL                   | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 |



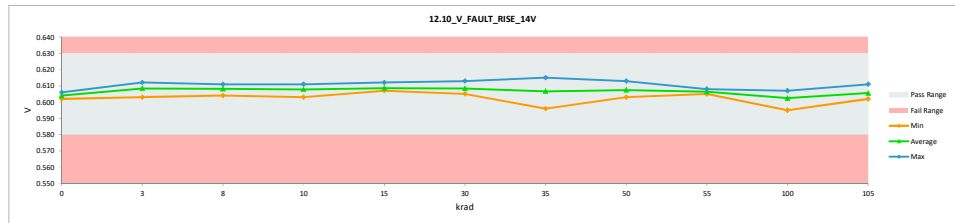
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.10_V_FAULT_RISE_14V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE HDR | POST HDR | Delta  |
| 0                      | 552      | 0.604   | 0.604    | 0.000  |
| 0                      | 726      | 0.605   | 0.606    | 0.001  |
| 0                      | 791      | 0.602   | 0.602    | 0.000  |
| 3                      | 689      | 0.611   | 0.611    | 0.000  |
| 3                      | 688      | 0.606   | 0.606    | 0.000  |
| 3                      | 700      | 0.603   | 0.603    | 0.000  |
| 3                      | 482      | 0.610   | 0.610    | 0.000  |
| 3                      | 1033     | 0.612   | 0.612    | 0.000  |
| 8                      | 442      | 0.609   | 0.609    | 0.000  |
| 8                      | 699      | 0.603   | 0.604    | 0.001  |
| 8                      | 344      | 0.609   | 0.610    | 0.001  |
| 8                      | 355      | 0.606   | 0.607    | 0.001  |
| 8                      | 790      | 0.611   | 0.611    | 0.000  |
| 10                     | 537      | 0.611   | 0.611    | -0.001 |
| 10                     | 396      | 0.610   | 0.610    | 0.000  |
| 10                     | 521      | 0.604   | 0.603    | -0.001 |
| 10                     | 535      | 0.610   | 0.609    | -0.001 |
| 10                     | 526      | 0.608   | 0.606    | -0.002 |
| 15                     | 540      | 0.609   | 0.609    | 0.000  |
| 15                     | 387      | 0.607   | 0.607    | 0.000  |
| 15                     | 787      | 0.607   | 0.607    | 0.000  |
| 15                     | 1042     | 0.607   | 0.608    | 0.001  |
| 15                     | 483      | 0.611   | 0.612    | 0.001  |
| 30                     | 597      | 0.606   | 0.606    | 0.000  |
| 30                     | 853      | 0.614   | 0.613    | -0.001 |
| 30                     | 416      | 0.609   | 0.609    | 0.000  |
| 30                     | 949      | 0.603   | 0.605    | 0.002  |
| 30                     | 221      | 0.608   | 0.609    | 0.001  |
| 35                     | 538      | 0.605   | 0.606    | 0.001  |
| 35                     | 164      | 0.607   | 0.608    | 0.001  |
| 35                     | 1018     | 0.609   | 0.608    | -0.001 |
| 35                     | 462      | 0.596   | 0.596    | 0.000  |
| 35                     | 1032     | 0.613   | 0.615    | 0.002  |
| 50                     | 566      | 0.611   | 0.611    | 0.000  |
| 50                     | 197      | 0.613   | 0.613    | 0.000  |
| 50                     | 793      | 0.606   | 0.603    | -0.003 |
| 50                     | 802      | 0.605   | 0.605    | 0.000  |
| 50                     | 61       | 0.604   | 0.605    | 0.001  |
| 55                     | 795      | 0.608   | 0.608    | 0.000  |
| 55                     | 921      | 0.607   | 0.608    | 0.001  |
| 55                     | 741      | 0.604   | 0.605    | 0.001  |
| 55                     | 809      | 0.604   | 0.605    | 0.001  |
| 55                     | 804      | 0.604   | 0.606    | 0.002  |
| 100                    | 449      | 0.605   | 0.607    | 0.002  |
| 100                    | 541      | 0.599   | 0.595    | -0.004 |
| 100                    | 476      | 0.607   | 0.606    | -0.001 |
| 100                    | 45       | 0.605   | 0.605    | 0.000  |
| 100                    | 642      | 0.601   | 0.599    | -0.002 |
| 105                    | 1036     | 0.606   | 0.607    | 0.001  |
| 105                    | 1038     | 0.610   | 0.611    | 0.001  |
| 105                    | 203      | 0.601   | 0.602    | 0.001  |
| 105                    | 1029     | 0.607   | 0.605    | -0.002 |
| 105                    | 1027     | 0.604   | 0.603    | -0.001 |
| 105                    | Max      | 0.614   | 0.615    | 0.002  |
| 105                    | Average  | 0.607   | 0.607    | 0.000  |
| 105                    | Min      | 0.596   | 0.595    | -0.004 |
| 105                    | Std Dev  | 0.004   | 0.004    | 0.001  |



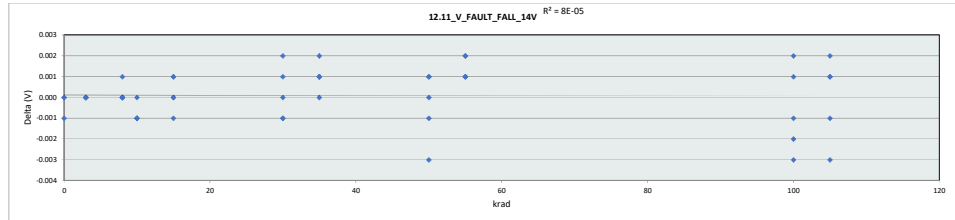
| 12.10_V_FAULT_RISE_14V |       |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site              |       |       |       |       |       |       |       |       |       |       |       |
| Tester                 |       |       |       |       |       |       |       |       |       |       |       |
| Test Number            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit              | 0.63  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit              | 0.58  | V     |       |       |       |       |       |       |       |       |       |
| krad                   |       |       |       |       |       |       |       |       |       |       |       |
| LL                     | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 |
| Min                    | 0.602 | 0.603 | 0.604 | 0.603 | 0.607 | 0.605 | 0.596 | 0.603 | 0.605 | 0.595 | 0.602 |
| Average                | 0.604 | 0.608 | 0.608 | 0.608 | 0.609 | 0.608 | 0.607 | 0.607 | 0.606 | 0.602 | 0.606 |
| Max                    | 0.606 | 0.612 | 0.611 | 0.611 | 0.612 | 0.613 | 0.615 | 0.613 | 0.608 | 0.607 | 0.611 |
| UL                     | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 | 0.630 |



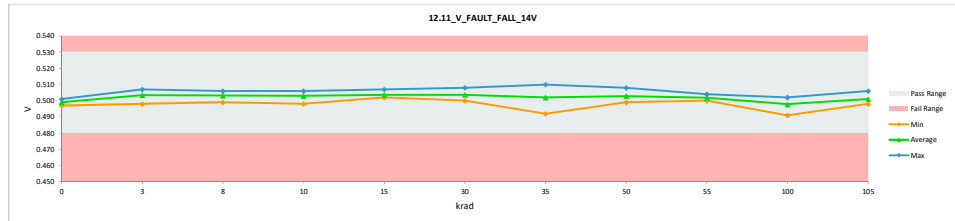
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.11_V_FAULT_FALL_14V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   | V        | V       |          |        |
| Max Limit              | 0.53     | 0.53    |          |        |
| Min Limit              | 0.48     | 0.48    |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 0.499   | 0.499    | 0.000  |
| 0                      | 726      | 0.501   | 0.501    | 0.000  |
| 0                      | 791      | 0.498   | 0.497    | -0.001 |
| 3                      | 689      | 0.506   | 0.506    | 0.000  |
| 3                      | 688      | 0.501   | 0.501    | 0.000  |
| 3                      | 700      | 0.498   | 0.498    | 0.000  |
| 3                      | 482      | 0.505   | 0.505    | 0.000  |
| 3                      | 1033     | 0.507   | 0.507    | 0.000  |
| 8                      | 442      | 0.504   | 0.504    | 0.000  |
| 8                      | 699      | 0.499   | 0.499    | 0.000  |
| 8                      | 344      | 0.504   | 0.505    | 0.001  |
| 8                      | 355      | 0.502   | 0.502    | 0.000  |
| 8                      | 790      | 0.506   | 0.506    | 0.000  |
| 10                     | 537      | 0.506   | -0.001   |        |
| 10                     | 396      | 0.505   | 0.505    | 0.000  |
| 10                     | 521      | 0.499   | 0.498    | -0.001 |
| 10                     | 535      | 0.505   | 0.504    | -0.001 |
| 10                     | 526      | 0.503   | 0.502    | -0.001 |
| 15                     | 540      | 0.505   | 0.504    | -0.001 |
| 15                     | 387      | 0.502   | 0.502    | 0.000  |
| 15                     | 787      | 0.502   | 0.502    | 0.000  |
| 15                     | 1042     | 0.502   | 0.503    | 0.001  |
| 15                     | 483      | 0.506   | 0.507    | 0.001  |
| 30                     | 597      | 0.502   | 0.501    | -0.001 |
| 30                     | 853      | 0.509   | 0.508    | -0.001 |
| 30                     | 416      | 0.505   | 0.505    | 0.000  |
| 30                     | 949      | 0.498   | 0.500    | 0.002  |
| 30                     | 221      | 0.503   | 0.504    | 0.001  |
| 35                     | 538      | 0.500   | 0.501    | 0.001  |
| 35                     | 164      | 0.502   | 0.503    | 0.001  |
| 35                     | 1018     | 0.504   | 0.504    | 0.000  |
| 35                     | 462      | 0.491   | 0.492    | 0.001  |
| 35                     | 1032     | 0.508   | 0.510    | 0.002  |
| 50                     | 566      | 0.506   | 0.507    | 0.001  |
| 50                     | 197      | 0.509   | 0.508    | -0.001 |
| 50                     | 793      | 0.502   | 0.499    | -0.003 |
| 50                     | 802      | 0.500   | 0.500    | 0.000  |
| 50                     | 61       | 0.499   | 0.500    | 0.001  |
| 55                     | 795      | 0.503   | 0.504    | 0.001  |
| 55                     | 921      | 0.502   | 0.504    | 0.002  |
| 55                     | 741      | 0.499   | 0.500    | 0.001  |
| 55                     | 809      | 0.499   | 0.500    | 0.001  |
| 55                     | 804      | 0.499   | 0.501    | 0.002  |
| 100                    | 449      | 0.500   | 0.502    | 0.002  |
| 100                    | 541      | 0.494   | 0.491    | -0.003 |
| 100                    | 476      | 0.502   | 0.501    | -0.001 |
| 100                    | 45       | 0.500   | 0.501    | 0.001  |
| 100                    | 642      | 0.496   | 0.494    | -0.002 |
| 105                    | 1036     | 0.502   | 0.503    | 0.001  |
| 105                    | 1038     | 0.505   | 0.506    | 0.001  |
| 105                    | 203      | 0.496   | 0.498    | 0.002  |
| 105                    | 1029     | 0.503   | 0.500    | -0.003 |
| 105                    | 1027     | 0.499   | 0.498    | -0.001 |
| 105                    | Max      | 0.509   | 0.510    | 0.002  |
| 105                    | Average  | 0.502   | 0.502    | 0.000  |
| 105                    | Min      | 0.491   | 0.491    | -0.003 |
| 105                    | Std Dev  | 0.004   | 0.004    | 0.001  |



| 12.11_V_FAULT_FALL_14V |       |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site              |       |       |       |       |       |       |       |       |       |       |       |
| Tester                 |       |       |       |       |       |       |       |       |       |       |       |
| Test Number            |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit              | 0.53  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit              | 0.48  | V     |       |       |       |       |       |       |       |       |       |
| krad                   | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                     | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 | 0.480 |
| Min                    | 0.497 | 0.498 | 0.499 | 0.498 | 0.502 | 0.500 | 0.492 | 0.499 | 0.500 | 0.491 | 0.498 |
| Average                | 0.499 | 0.503 | 0.503 | 0.503 | 0.504 | 0.504 | 0.502 | 0.503 | 0.502 | 0.498 | 0.501 |
| Max                    | 0.501 | 0.507 | 0.506 | 0.506 | 0.507 | 0.508 | 0.510 | 0.508 | 0.504 | 0.502 | 0.506 |
| UL                     | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 | 0.530 |

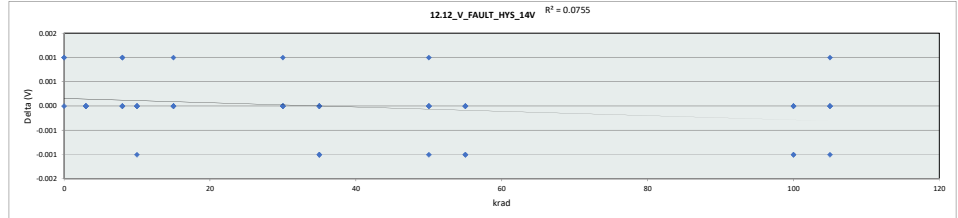


# HDR TID Report

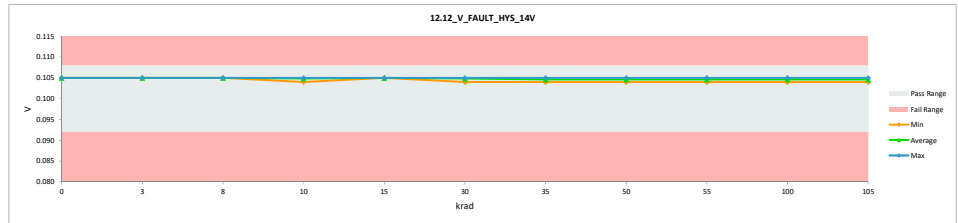
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.12_V_FAULT_HYS_14V |          |         |          |        |
|-----------------------|----------|---------|----------|--------|
| Test Site             |          |         |          |        |
| Tester                |          |         |          |        |
| Test Number           |          |         |          |        |
| Unit                  | V        | V       |          |        |
| Max Limit             | 0.108    | 0.108   |          |        |
| Min Limit             | 0.092    | 0.092   |          |        |
| krad                  | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                     | 552      | 0.105   | 0.105    | 0.000  |
| 0                     | 726      | 0.104   | 0.105    | 0.001  |
| 0                     | 791      | 0.104   | 0.105    | 0.001  |
| 3                     | 689      | 0.105   | 0.105    | 0.000  |
| 3                     | 688      | 0.105   | 0.105    | 0.000  |
| 3                     | 700      | 0.105   | 0.105    | 0.000  |
| 3                     | 482      | 0.105   | 0.105    | 0.000  |
| 3                     | 1033     | 0.105   | 0.105    | 0.000  |
| 8                     | 442      | 0.105   | 0.105    | 0.000  |
| 8                     | 699      | 0.104   | 0.105    | 0.001  |
| 8                     | 344      | 0.105   | 0.105    | 0.000  |
| 8                     | 355      | 0.104   | 0.105    | 0.001  |
| 8                     | 790      | 0.105   | 0.105    | 0.000  |
| 10                    | 537      | 0.105   | 0.105    | 0.000  |
| 10                    | 396      | 0.105   | 0.105    | 0.000  |
| 10                    | 521      | 0.105   | 0.105    | 0.000  |
| 10                    | 535      | 0.105   | 0.105    | 0.000  |
| 10                    | 526      | 0.105   | 0.104    | -0.001 |
| 15                    | 540      | 0.104   | 0.105    | 0.001  |
| 15                    | 387      | 0.105   | 0.105    | 0.000  |
| 15                    | 787      | 0.105   | 0.105    | 0.000  |
| 15                    | 1042     | 0.105   | 0.105    | 0.000  |
| 15                    | 483      | 0.105   | 0.105    | 0.000  |
| 30                    | 597      | 0.104   | 0.105    | 0.001  |
| 30                    | 853      | 0.105   | 0.105    | 0.000  |
| 30                    | 416      | 0.104   | 0.104    | 0.000  |
| 30                    | 949      | 0.105   | 0.105    | 0.000  |
| 30                    | 221      | 0.105   | 0.105    | 0.000  |
| 35                    | 538      | 0.105   | 0.105    | 0.000  |
| 35                    | 164      | 0.105   | 0.105    | 0.000  |
| 35                    | 1018     | 0.105   | 0.104    | -0.001 |
| 35                    | 462      | 0.105   | 0.104    | -0.001 |
| 35                    | 1032     | 0.105   | 0.105    | 0.000  |
| 50                    | 566      | 0.105   | 0.104    | -0.001 |
| 50                    | 197      | 0.104   | 0.105    | 0.001  |
| 50                    | 793      | 0.104   | 0.104    | 0.000  |
| 50                    | 802      | 0.105   | 0.105    | 0.000  |
| 50                    | 61       | 0.105   | 0.105    | 0.000  |
| 55                    | 795      | 0.105   | 0.104    | -0.001 |
| 55                    | 921      | 0.105   | 0.104    | -0.001 |
| 55                    | 741      | 0.105   | 0.105    | 0.000  |
| 55                    | 809      | 0.105   | 0.105    | 0.000  |
| 55                    | 804      | 0.105   | 0.105    | 0.000  |
| 100                   | 449      | 0.105   | 0.105    | 0.000  |
| 100                   | 541      | 0.105   | 0.104    | -0.001 |
| 100                   | 476      | 0.105   | 0.105    | 0.000  |
| 100                   | 45       | 0.105   | 0.104    | -0.001 |
| 100                   | 642      | 0.105   | 0.105    | 0.000  |
| 105                   | 1036     | 0.104   | 0.104    | 0.000  |
| 105                   | 1038     | 0.105   | 0.105    | 0.000  |
| 105                   | 203      | 0.105   | 0.104    | -0.001 |
| 105                   | 1029     | 0.104   | 0.105    | 0.001  |
| 105                   | 1027     | 0.105   | 0.105    | 0.000  |
| 105                   | Max      | 0.105   | 0.105    | 0.001  |
| 105                   | Average  | 0.105   | 0.105    | 0.000  |
| 105                   | Min      | 0.104   | 0.104    | -0.001 |
| 105                   | Std Dev  | 0.000   | 0.000    | 0.001  |



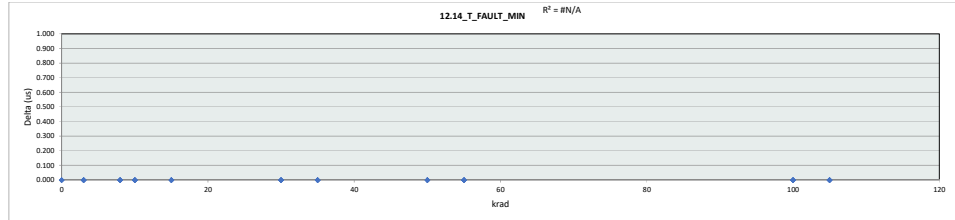
| 12.12_V_FAULT_HYS_14V |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site             |       |       |       |       |       |       |       |       |       |       |       |
| Tester                |       |       |       |       |       |       |       |       |       |       |       |
| Test Number           |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit             | 0.108 | V     |       |       |       |       |       |       |       |       |       |
| Min Limit             | 0.092 | V     |       |       |       |       |       |       |       |       |       |
| krad                  | 0     | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                    | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 |
| Min                   | 0.105 | 0.105 | 0.105 | 0.104 | 0.105 | 0.104 | 0.104 | 0.104 | 0.104 | 0.104 | 0.104 |
| Average               | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 |
| Max                   | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 | 0.105 |
| UL                    | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 |



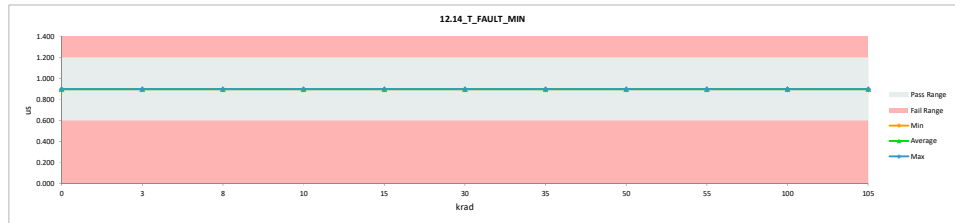
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.14_T_FAULT_MIN |          |         |          |       |
|-------------------|----------|---------|----------|-------|
| Test Site         |          |         |          |       |
| Tester            |          |         |          |       |
| Test Number       |          |         |          |       |
| Unit              | us       | us      |          |       |
| Max Limit         | 1.2      | 1.2     |          |       |
| Min Limit         | 0.6      | 0.6     |          |       |
| krad              | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                 | 552      | 0.900   | 0.900    | 0.000 |
| 0                 | 726      | 0.900   | 0.900    | 0.000 |
| 0                 | 791      | 0.900   | 0.900    | 0.000 |
| 3                 | 689      | 0.900   | 0.900    | 0.000 |
| 3                 | 688      | 0.900   | 0.900    | 0.000 |
| 3                 | 700      | 0.900   | 0.900    | 0.000 |
| 3                 | 482      | 0.900   | 0.900    | 0.000 |
| 3                 | 1033     | 0.900   | 0.900    | 0.000 |
| 8                 | 442      | 0.900   | 0.900    | 0.000 |
| 8                 | 699      | 0.900   | 0.900    | 0.000 |
| 8                 | 344      | 0.900   | 0.900    | 0.000 |
| 8                 | 355      | 0.900   | 0.900    | 0.000 |
| 8                 | 750      | 0.900   | 0.900    | 0.000 |
| 10                | 537      | 0.900   | 0.900    | 0.000 |
| 10                | 396      | 0.900   | 0.900    | 0.000 |
| 10                | 521      | 0.900   | 0.900    | 0.000 |
| 10                | 535      | 0.900   | 0.900    | 0.000 |
| 10                | 526      | 0.900   | 0.900    | 0.000 |
| 15                | 540      | 0.900   | 0.900    | 0.000 |
| 15                | 387      | 0.900   | 0.900    | 0.000 |
| 15                | 787      | 0.900   | 0.900    | 0.000 |
| 15                | 1042     | 0.900   | 0.900    | 0.000 |
| 15                | 483      | 0.900   | 0.900    | 0.000 |
| 30                | 597      | 0.900   | 0.900    | 0.000 |
| 30                | 853      | 0.900   | 0.900    | 0.000 |
| 30                | 416      | 0.900   | 0.900    | 0.000 |
| 30                | 949      | 0.900   | 0.900    | 0.000 |
| 30                | 221      | 0.900   | 0.900    | 0.000 |
| 35                | 538      | 0.900   | 0.900    | 0.000 |
| 35                | 164      | 0.900   | 0.900    | 0.000 |
| 35                | 1018     | 0.900   | 0.900    | 0.000 |
| 35                | 462      | 0.900   | 0.900    | 0.000 |
| 35                | 1032     | 0.900   | 0.900    | 0.000 |
| 50                | 566      | 0.900   | 0.900    | 0.000 |
| 50                | 197      | 0.900   | 0.900    | 0.000 |
| 50                | 793      | 0.900   | 0.900    | 0.000 |
| 50                | 802      | 0.900   | 0.900    | 0.000 |
| 50                | 61       | 0.900   | 0.900    | 0.000 |
| 55                | 795      | 0.900   | 0.900    | 0.000 |
| 55                | 921      | 0.900   | 0.900    | 0.000 |
| 55                | 741      | 0.900   | 0.900    | 0.000 |
| 55                | 809      | 0.900   | 0.900    | 0.000 |
| 55                | 804      | 0.900   | 0.900    | 0.000 |
| 100               | 449      | 0.900   | 0.900    | 0.000 |
| 100               | 541      | 0.900   | 0.900    | 0.000 |
| 100               | 476      | 0.900   | 0.900    | 0.000 |
| 100               | 45       | 0.900   | 0.900    | 0.000 |
| 100               | 642      | 0.900   | 0.900    | 0.000 |
| 105               | 1036     | 0.900   | 0.900    | 0.000 |
| 105               | 1038     | 0.900   | 0.900    | 0.000 |
| 105               | 203      | 0.900   | 0.900    | 0.000 |
| 105               | 1029     | 0.900   | 0.900    | 0.000 |
| 105               | 1027     | 0.900   | 0.900    | 0.000 |
| 105               | Max      | 0.900   | 0.900    | 0.000 |
|                   | Average  | 0.900   | 0.900    | 0.000 |
|                   | Min      | 0.900   | 0.900    | 0.000 |
|                   | Std Dev  | 0.000   | 0.000    | 0.000 |



| 12.14_T_FAULT_MIN |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site         |       |       |       |       |       |       |       |       |       |       |       |
| Tester            |       |       |       |       |       |       |       |       |       |       |       |
| Test Number       |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit         | 1.2   | us    |       |       |       |       |       |       |       |       |       |
| Min Limit         | 0.6   | us    |       |       |       |       |       |       |       |       |       |
| krad              |       | 3     | 8     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 |
| Min               | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 |
| Average           | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 |
| Max               | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 | 0.900 |
| UL                | 1.200 | 1.200 | 1.200 | 1.200 | 1.200 | 1.200 | 1.200 | 1.200 | 1.200 | 1.200 | 1.200 |

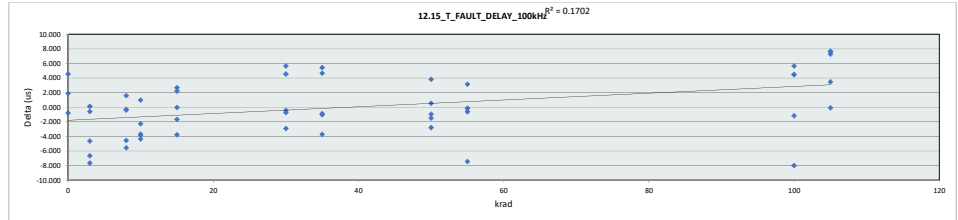


# HDR TID Report

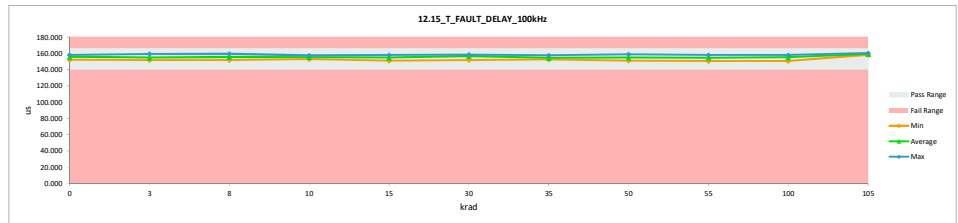
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.15_T_FAULT_DELAY_100kHz |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE HDR | POST HDR | Delta  |
| 0                          | 552      | 153.345 | 157.920  | 4.575  |
| 0                          | 726      | 153.027 | 152.271  | -0.756 |
| 0                          | 791      | 155.422 | 157.361  | 1.939  |
| 3                          | 689      | 159.157 | 159.309  | 0.152  |
| 3                          | 688      | 159.060 | 158.493  | -0.567 |
| 3                          | 700      | 159.416 | 151.790  | -7.626 |
| 3                          | 482      | 156.396 | 151.792  | -4.604 |
| 3                          | 1033     | 158.782 | 152.145  | -6.637 |
| 8                          | 442      | 158.111 | 152.576  | -5.535 |
| 8                          | 699      | 157.864 | 159.466  | 1.602  |
| 8                          | 344      | 156.353 | 151.821  | -4.532 |
| 8                          | 355      | 157.790 | 157.429  | -0.361 |
| 8                          | 790      | 156.613 | 156.347  | -0.266 |
| 10                         | 537      | 156.653 | 152.829  | -3.824 |
| 10                         | 396      | 156.469 | 157.480  | 1.011  |
| 10                         | 521      | 159.773 | 156.109  | -3.664 |
| 10                         | 535      | 158.606 | 154.300  | -4.306 |
| 10                         | 526      | 157.968 | 155.736  | -2.232 |
| 15                         | 940      | 154.672 | 150.922  | -3.750 |
| 15                         | 387      | 159.665 | 158.026  | -1.639 |
| 15                         | 787      | 155.485 | 155.487  | 0.002  |
| 15                         | 1042     | 152.690 | 155.387  | 2.697  |
| 15                         | 483      | 152.775 | 155.021  | 2.246  |
| 30                         | 597      | 152.874 | 158.557  | 5.683  |
| 30                         | 853      | 156.680 | 156.283  | -0.397 |
| 30                         | 416      | 153.270 | 157.849  | 4.579  |
| 30                         | 949      | 154.683 | 151.803  | -2.880 |
| 30                         | 221      | 159.283 | 158.571  | -0.712 |
| 35                         | 538      | 156.773 | 153.101  | -3.672 |
| 35                         | 164      | 152.068 | 157.531  | 5.463  |
| 35                         | 1018     | 153.257 | 152.412  | -0.845 |
| 35                         | 462      | 151.416 | 156.104  | 4.688  |
| 35                         | 1032     | 154.122 | 153.120  | -1.002 |
| 50                         | 566      | 156.314 | 155.399  | -0.915 |
| 50                         | 197      | 152.583 | 151.133  | -1.450 |
| 50                         | 793      | 160.110 | 157.358  | -2.752 |
| 50                         | 802      | 151.183 | 151.749  | 0.566  |
| 50                         | 61       | 155.102 | 158.952  | 3.850  |
| 55                         | 795      | 157.873 | 150.458  | -7.415 |
| 55                         | 921      | 158.551 | 157.956  | -0.595 |
| 55                         | 741      | 152.381 | 155.562  | 3.181  |
| 55                         | 809      | 155.133 | 155.018  | -0.115 |
| 55                         | 804      | 153.897 | 153.769  | -0.128 |
| 100                        | 449      | 158.594 | 150.631  | -7.963 |
| 100                        | 541      | 152.934 | 157.428  | 4.494  |
| 100                        | 476      | 152.209 | 157.891  | 5.682  |
| 100                        | 45       | 155.749 | 154.596  | -1.153 |
| 100                        | 642      | 150.718 | 155.234  | 4.516  |
| 105                        | 1036     | 152.667 | 160.277  | 7.610  |
| 105                        | 1038     | 155.458 | 158.960  | 3.502  |
| 105                        | 203      | 160.179 | 160.142  | -0.037 |
| 105                        | 1029     | 151.397 | 158.693  | 7.296  |
| 105                        | 1027     | 150.541 | 158.255  | 7.714  |
| 105                        | Max      | 160.179 | 160.277  | 7.714  |
|                            | Average  | 155.549 | 155.562  | 0.014  |
|                            | Min      | 150.541 | 150.458  | -7.963 |
|                            | Std Dev  | 2.828   | 2.842    | 3.984  |



| 12.15_T_FAULT_DELAY_100kHz |         |         |         |         |         |         |         |         |         |         |         |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site                  |         |         |         |         |         |         |         |         |         |         |         |
| Tester                     |         |         |         |         |         |         |         |         |         |         |         |
| Test Number                |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit                  |         |         |         |         |         |         |         |         |         |         |         |
| Min Limit                  |         |         |         |         |         |         |         |         |         |         |         |
| krad                       | 0       | 3       | 8       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                         | 140.000 | 140.000 | 140.000 | 140.000 | 140.000 | 140.000 | 140.000 | 140.000 | 140.000 | 140.000 | 140.000 |
| Min                        | 152.271 | 151.790 | 151.821 | 152.829 | 150.922 | 151.803 | 152.412 | 151.133 | 150.458 | 150.631 | 158.255 |
| Average                    | 155.851 | 154.706 | 155.528 | 155.291 | 154.969 | 156.613 | 154.454 | 154.918 | 154.553 | 155.156 | 159.265 |
| Max                        | 157.920 | 159.309 | 159.466 | 157.480 | 158.026 | 158.571 | 157.531 | 158.952 | 157.956 | 157.891 | 160.277 |
| UL                         | 166.000 | 166.000 | 166.000 | 166.000 | 166.000 | 166.000 | 166.000 | 166.000 | 166.000 | 166.000 | 166.000 |

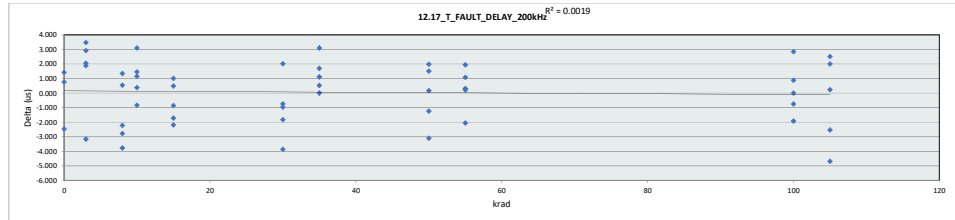


# HDR TID Report

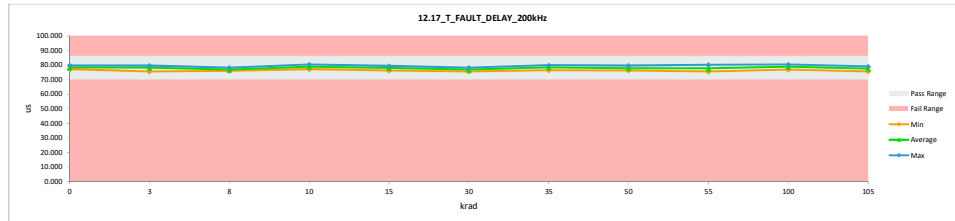
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.17_T_FAULT_DELAY_200kHz |          |         |          |        |
|----------------------------|----------|---------|----------|--------|
| Test Site                  |          |         |          |        |
| Tester                     |          |         |          |        |
| Test Number                |          |         |          |        |
| Unit                       |          |         |          |        |
| Max Limit                  |          |         |          |        |
| Min Limit                  |          |         |          |        |
| krad                       | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                          | 552      | 78.350  | 79.787   | 1.437  |
| 0                          | 726      | 79.631  | 77.178   | -2.453 |
| 0                          | 791      | 77.374  | 78.152   | 0.778  |
| 3                          | 689      | 75.928  | 78.867   | 2.939  |
| 3                          | 688      | 75.658  | 79.150   | 3.492  |
| 3                          | 700      | 75.896  | 77.795   | 1.899  |
| 3                          | 482      | 78.728  | 75.589   | -3.139 |
| 3                          | 1033     | 79.601  | 79.675   | 2.074  |
| 8                          | 442      | 80.420  | 78.212   | -2.208 |
| 8                          | 699      | 75.674  | 77.037   | 1.363  |
| 8                          | 344      | 79.738  | 75.989   | -3.749 |
| 8                          | 355      | 79.004  | 76.247   | -2.757 |
| 8                          | 790      | 76.296  | 76.853   | 0.557  |
| 10                         | 537      | 79.991  | 80.388   | 0.397  |
| 10                         | 396      | 75.831  | 78.948   | 3.117  |
| 10                         | 521      | 75.767  | 77.237   | 1.470  |
| 10                         | 535      | 78.311  | 77.494   | -0.817 |
| 10                         | 526      | 78.757  | 79.926   | 1.169  |
| 15                         | 540      | 79.191  | 77.491   | -1.700 |
| 15                         | 387      | 78.626  | 79.134   | 0.508  |
| 15                         | 787      | 76.961  | 76.126   | -0.835 |
| 15                         | 1042     | 78.357  | 79.378   | 1.021  |
| 15                         | 483      | 79.997  | 77.826   | -2.171 |
| 30                         | 597      | 78.929  | 78.204   | -0.725 |
| 30                         | 853      | 78.059  | 76.251   | -1.808 |
| 30                         | 416      | 77.632  | 76.684   | -0.948 |
| 30                         | 949      | 75.862  | 77.898   | 2.036  |
| 30                         | 221      | 79.389  | 75.553   | -3.836 |
| 35                         | 538      | 79.317  | 79.345   | 0.028  |
| 35                         | 164      | 78.208  | 79.924   | 1.716  |
| 35                         | 1018     | 75.822  | 76.366   | 0.544  |
| 35                         | 462      | 76.275  | 77.408   | 1.133  |
| 35                         | 1032     | 76.429  | 79.544   | 3.115  |
| 50                         | 566      | 77.083  | 78.616   | 1.533  |
| 50                         | 197      | 79.839  | 76.756   | -3.083 |
| 50                         | 793      | 77.516  | 76.292   | -1.224 |
| 50                         | 802      | 79.453  | 79.637   | 0.184  |
| 50                         | 61       | 76.138  | 78.141   | 2.003  |
| 55                         | 795      | 78.221  | 80.183   | 1.962  |
| 55                         | 921      | 77.099  | 77.431   | 0.332  |
| 55                         | 741      | 77.731  | 77.964   | 0.233  |
| 55                         | 809      | 76.215  | 77.309   | 1.094  |
| 55                         | 804      | 77.583  | 75.546   | -2.037 |
| 100                        | 449      | 75.994  | 76.887   | 0.893  |
| 100                        | 541      | 76.629  | 79.489   | 2.860  |
| 100                        | 476      | 79.926  | 78.024   | -1.902 |
| 100                        | 45       | 80.284  | 79.551   | -0.733 |
| 100                        | 642      | 80.336  | 80.360   | 0.024  |
| 105                        | 1036     | 78.389  | 78.641   | 0.252  |
| 105                        | 1038     | 78.488  | 75.976   | -2.512 |
| 105                        | 203      | 77.021  | 79.044   | 2.023  |
| 105                        | 1029     | 76.111  | 78.641   | 2.530  |
| 105                        | 1027     | 80.304  | 75.637   | -4.667 |
| 105                        | Max      | 80.420  | 80.388   | 3.452  |
|                            | Average  | 77.894  | 77.958   | 0.064  |
|                            | Min      | 75.658  | 75.546   | -4.667 |
|                            | Std Dev  | 1.527   | 1.428    | 2.037  |



| 12.17_T_FAULT_DELAY_200kHz |        |        |        |        |        |        |        |        |        |        |        |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                  |        |        |        |        |        |        |        |        |        |        |        |
| Tester                     |        |        |        |        |        |        |        |        |        |        |        |
| Test Number                |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                  |        |        |        |        |        |        |        |        |        |        |        |
| Min Limit                  |        |        |        |        |        |        |        |        |        |        |        |
| krad                       | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                         | 70.000 | 70.000 | 70.000 | 70.000 | 70.000 | 70.000 | 70.000 | 70.000 | 70.000 | 70.000 | 70.000 |
| Min                        | 77.178 | 75.589 | 75.989 | 77.237 | 76.126 | 75.553 | 76.366 | 76.292 | 75.546 | 76.887 | 75.637 |
| Average                    | 78.372 | 78.215 | 76.868 | 78.799 | 77.991 | 76.918 | 78.517 | 77.888 | 77.687 | 78.862 | 77.588 |
| Max                        | 79.787 | 79.675 | 78.212 | 80.388 | 79.378 | 78.204 | 79.924 | 79.637 | 80.183 | 80.360 | 79.044 |
| UL                         | 86.000 | 86.000 | 86.000 | 86.000 | 86.000 | 86.000 | 86.000 | 86.000 | 86.000 | 86.000 | 86.000 |

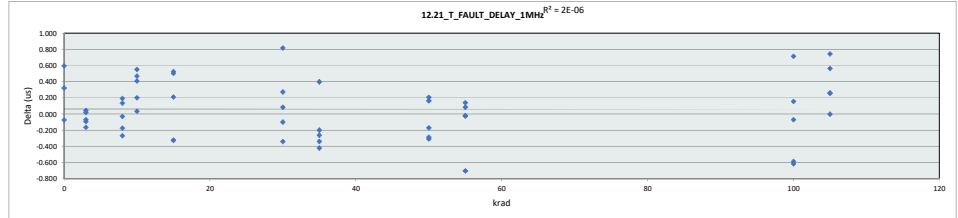


# HDR TID Report

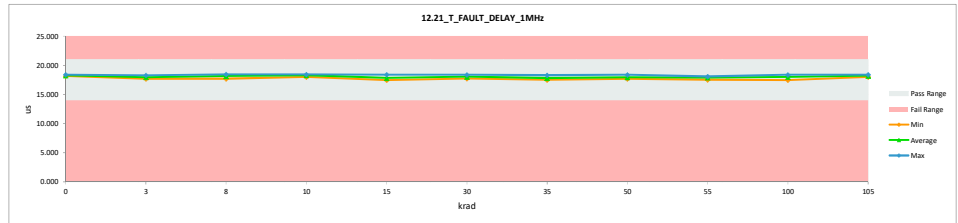
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.21_T_FAULT_DELAY_1MHZ |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     | us       | us      |          |        |
| Max Limit                | 21       | 21      |          |        |
| Min Limit                | 14       | 14      |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 17.799  | 18.397   | 0.598  |
| 0                        | 726      | 17.919  | 18.243   | 0.324  |
| 0                        | 791      | 18.218  | 18.146   | -0.072 |
| 3                        | 689      | 18.054  | 17.892   | -0.162 |
| 3                        | 688      | 17.980  | 18.025   | 0.045  |
| 3                        | 700      | 17.771  | 17.704   | -0.067 |
| 3                        | 482      | 18.262  | 18.283   | 0.021  |
| 3                        | 1033     | 17.947  | 17.947   | -0.091 |
| 8                        | 442      | 18.433  | 18.406   | -0.027 |
| 8                        | 699      | 18.025  | 17.759   | -0.266 |
| 8                        | 344      | 18.195  | 18.390   | 0.195  |
| 8                        | 355      | 18.315  | 18.452   | 0.137  |
| 8                        | 790      | 17.865  | 17.692   | -0.173 |
| 10                       | 537      | 18.370  | 18.420   | 0.410  |
| 10                       | 396      | 17.901  | 18.373   | 0.472  |
| 10                       | 521      | 17.882  | 18.436   | 0.554  |
| 10                       | 535      | 18.120  | 18.324   | 0.204  |
| 10                       | 526      | 17.946  | 17.983   | 0.037  |
| 15                       | 540      | 17.538  | 18.044   | 0.506  |
| 15                       | 387      | 17.832  | 17.512   | -0.320 |
| 15                       | 787      | 17.474  | 17.687   | 0.213  |
| 15                       | 1042     | 17.784  | 17.461   | -0.323 |
| 15                       | 483      | 17.876  | 18.403   | 0.527  |
| 30                       | 597      | 17.822  | 17.725   | -0.097 |
| 30                       | 853      | 17.601  | 17.876   | 0.275  |
| 30                       | 416      | 17.540  | 18.358   | 0.818  |
| 30                       | 949      | 18.118  | 18.204   | 0.086  |
| 30                       | 221      | 18.369  | 18.031   | -0.338 |
| 35                       | 538      | 17.973  | 17.776   | -0.197 |
| 35                       | 164      | 17.913  | 17.495   | -0.418 |
| 35                       | 1018     | 17.902  | 18.302   | 0.400  |
| 35                       | 462      | 17.861  | 17.524   | -0.337 |
| 35                       | 1032     | 18.230  | 17.970   | -0.260 |
| 50                       | 566      | 17.657  | 17.866   | 0.209  |
| 50                       | 197      | 17.988  | 17.682   | -0.306 |
| 50                       | 793      | 18.209  | 18.041   | -0.168 |
| 50                       | 802      | 17.996  | 17.712   | -0.284 |
| 50                       | 61       | 18.200  | 18.366   | 0.166  |
| 55                       | 795      | 18.029  | 18.011   | -0.018 |
| 55                       | 921      | 18.102  | 18.079   | -0.023 |
| 55                       | 741      | 18.232  | 17.531   | -0.701 |
| 55                       | 809      | 17.778  | 17.865   | 0.087  |
| 55                       | 804      | 17.890  | 18.032   | 0.142  |
| 100                      | 449      | 18.458  | 17.845   | -0.613 |
| 100                      | 541      | 18.066  | 17.481   | -0.585 |
| 100                      | 476      | 17.550  | 18.266   | 0.716  |
| 100                      | 45       | 18.203  | 18.361   | 0.158  |
| 100                      | 642      | 18.072  | 18.005   | -0.067 |
| 105                      | 1036     | 17.991  | 17.991   | 0.000  |
| 105                      | 1038     | 17.961  | 18.219   | 0.258  |
| 105                      | 203      | 18.137  | 18.401   | 0.264  |
| 105                      | 1029     | 17.603  | 18.169   | 0.566  |
| 105                      | 1027     | 17.474  | 18.219   | 0.745  |
| 105                      | Max      | 18.458  | 18.452   | 0.818  |
| 105                      | Average  | 17.965  | 18.026   | 0.061  |
| 105                      | Min      | 17.474  | 17.461   | -0.701 |
| 105                      | Std Dev  | 0.241   | 0.301    | 0.353  |



| 12.21_T_FAULT_DELAY_1MHZ |        |        |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 21     | us     |        |        |        |        |        |        |        |        |        |        |        |
| Min Limit                | 14     | us     |        |        |        |        |        |        |        |        |        |        |        |
| krad                     | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |        |        |
| LL                       | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |
| Min                      | 18.146 | 17.704 | 17.692 | 17.983 | 17.461 | 17.725 | 17.495 | 17.682 | 17.531 | 17.481 | 17.991 | 17.991 | 17.991 |
| Average                  | 18.262 | 17.970 | 18.140 | 18.307 | 17.821 | 18.039 | 17.813 | 17.933 | 17.904 | 17.992 | 18.200 | 18.200 | 18.200 |
| Max                      | 18.397 | 18.283 | 18.452 | 18.436 | 18.403 | 18.358 | 18.302 | 18.366 | 18.079 | 18.361 | 18.401 | 18.401 | 18.401 |
| UL                       | 21.000 | 21.000 | 21.000 | 21.000 | 21.000 | 21.000 | 21.000 | 21.000 | 21.000 | 21.000 | 21.000 | 21.000 | 21.000 |

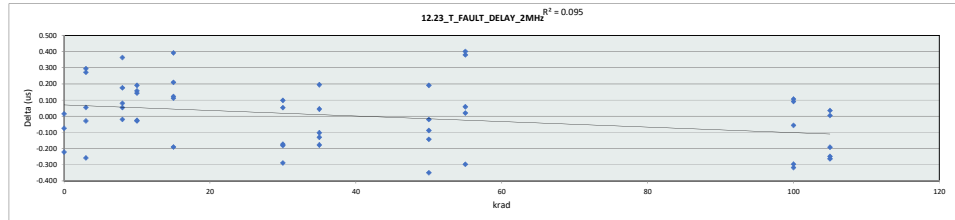


# HDR TID Report

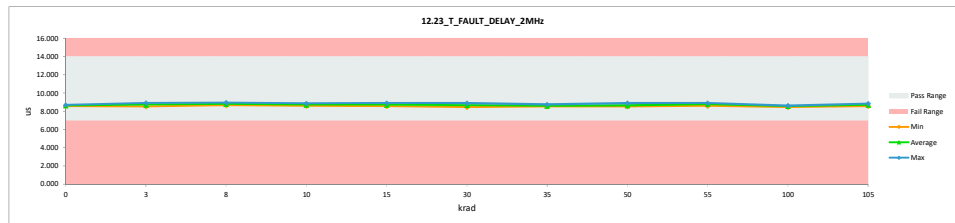
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 12.23_T_FAULT_DELAY_2MHz |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     | us       | us      |          |        |
| Max Limit                | 14       | 14      |          |        |
| Min Limit                | 7        | 7       |          |        |
| krad                     | Serial # | PRE HDR | POST HDR | Delta  |
| 0                        | 552      | 8.549   | 8.565    | 0.016  |
| 0                        | 726      | 8.769   | 8.696    | -0.073 |
| 0                        | 791      | 8.910   | 8.690    | -0.220 |
| 3                        | 689      | 8.549   | 8.521    | -0.028 |
| 3                        | 688      | 8.656   | 8.929    | 0.273  |
| 3                        | 700      | 8.545   | 8.841    | 0.296  |
| 3                        | 482      | 8.927   | 8.671    | -0.256 |
| 3                        | 1033     | 8.682   | 0.056    |        |
| 8                        | 442      | 8.594   | 8.959    | 0.365  |
| 8                        | 699      | 8.660   | 8.837    | 0.177  |
| 8                        | 344      | 8.730   | 8.712    | -0.018 |
| 8                        | 355      | 8.605   | 8.660    | 0.055  |
| 8                        | 750      | 8.777   | 8.858    | 0.081  |
| 10                       | 537      | 8.540   | 8.733    | 0.193  |
| 10                       | 396      | 8.617   | 8.593    | -0.024 |
| 10                       | 521      | 8.665   | 8.823    | 0.158  |
| 10                       | 535      | 8.691   | 8.663    | -0.028 |
| 10                       | 526      | 8.732   | 8.876    | 0.144  |
| 15                       | 540      | 8.502   | 8.895    | 0.393  |
| 15                       | 387      | 8.569   | 8.693    | 0.124  |
| 15                       | 787      | 8.475   | 8.588    | 0.113  |
| 15                       | 1042     | 8.703   | 8.914    | 0.211  |
| 15                       | 483      | 8.746   | 8.557    | -0.189 |
| 30                       | 597      | 8.747   | 8.459    | -0.288 |
| 30                       | 853      | 8.852   | 8.896    | 0.044  |
| 30                       | 416      | 8.958   | 8.787    | -0.171 |
| 30                       | 949      | 8.637   | 8.457    | -0.180 |
| 30                       | 221      | 8.649   | 8.749    | 0.100  |
| 35                       | 538      | 8.647   | 8.518    | -0.129 |
| 35                       | 164      | 8.666   | 8.565    | -0.101 |
| 35                       | 1018     | 8.598   | 8.644    | 0.046  |
| 35                       | 462      | 8.557   | 8.753    | 0.196  |
| 35                       | 1032     | 8.705   | 8.529    | -0.176 |
| 50                       | 566      | 8.691   | 8.672    | -0.019 |
| 50                       | 197      | 8.697   | 8.556    | -0.141 |
| 50                       | 793      | 8.877   | 8.529    | -0.348 |
| 50                       | 802      | 8.707   | 8.900    | 0.193  |
| 50                       | 61       | 8.704   | 8.618    | -0.086 |
| 55                       | 795      | 8.828   | 8.849    | 0.021  |
| 55                       | 921      | 8.513   | 8.915    | 0.402  |
| 55                       | 741      | 8.515   | 8.896    | 0.381  |
| 55                       | 809      | 8.651   | 8.711    | 0.060  |
| 55                       | 804      | 8.888   | 8.592    | -0.296 |
| 100                      | 449      | 8.616   | 8.561    | -0.055 |
| 100                      | 541      | 8.514   | 8.622    | 0.108  |
| 100                      | 476      | 8.766   | 8.450    | -0.316 |
| 100                      | 45       | 8.873   | 8.578    | -0.295 |
| 100                      | 642      | 8.487   | 8.579    | 0.092  |
| 105                      | 1036     | 8.956   | 8.694    | -0.262 |
| 105                      | 1038     | 8.772   | 8.582    | -0.190 |
| 105                      | 203      | 8.895   | 8.648    | -0.247 |
| 105                      | 1029     | 8.830   | 8.867    | 0.037  |
| 105                      | 1027     | 8.728   | 8.734    | 0.006  |
| 105                      | Max      | 8.958   | 8.959    | 0.001  |
| 105                      | Average  | 8.692   | 8.696    | 0.004  |
| 105                      | Min      | 8.475   | 8.450    | -0.348 |
| 105                      | Std Dev  | 0.130   | 0.142    | 0.197  |



| 12.23_T_FAULT_DELAY_2MHz |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 14     | us     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 7      | us     |        |        |        |        |        |        |        |        |        |
| krad                     | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       | 7.000  | 7.000  | 7.000  | 7.000  | 7.000  | 7.000  | 7.000  | 7.000  | 7.000  | 7.000  | 7.000  |
| Min                      | 8.565  | 8.521  | 8.660  | 8.593  | 8.557  | 8.457  | 8.518  | 8.529  | 8.592  | 8.450  | 8.582  |
| Average                  | 8.650  | 8.729  | 8.805  | 8.738  | 8.729  | 8.670  | 8.602  | 8.655  | 8.793  | 8.558  | 8.705  |
| Max                      | 8.696  | 8.929  | 8.959  | 8.876  | 8.914  | 8.896  | 8.753  | 8.900  | 8.915  | 8.622  | 8.867  |
| UL                       | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 | 14.000 |

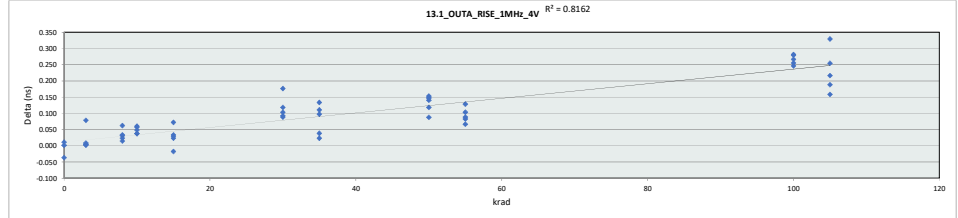


# HDR TID Report

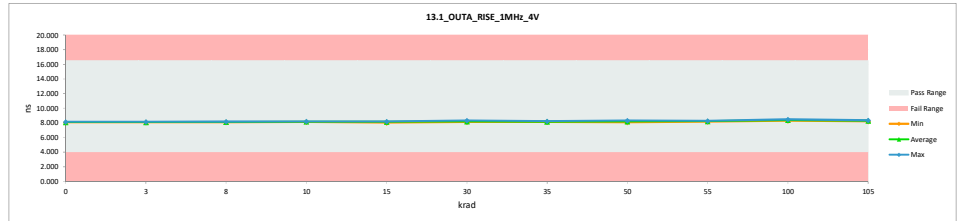
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.1_OUTA_RISE_1MHZ_4V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   | ns       | ns      |          |        |
| Max Limit              | 16.5     | 16.5    |          |        |
| Min Limit              | 4        | 4       |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 8.178   | 8.142    | -0.036 |
| 0                      | 726      | 8.096   | 8.098    | 0.002  |
| 0                      | 791      | 8.055   | 8.067    | 0.012  |
| 3                      | 689      | 8.065   | 8.074    | 0.009  |
| 3                      | 688      | 8.057   | 8.060    | 0.003  |
| 3                      | 700      | 8.092   | 8.095    | 0.003  |
| 3                      | 482      | 8.124   | 8.128    | 0.004  |
| 3                      | 1033     | 8.057   | 8.146    | 0.079  |
| 8                      | 442      | 8.067   | 8.082    | 0.015  |
| 8                      | 699      | 8.026   | 8.089    | 0.063  |
| 8                      | 344      | 8.062   | 8.096    | 0.034  |
| 8                      | 355      | 8.061   | 8.085    | 0.024  |
| 8                      | 790      | 8.151   | 8.183    | 0.032  |
| 10                     | 537      | 8.051   | 8.212    | 0.061  |
| 10                     | 396      | 8.100   | 8.138    | 0.038  |
| 10                     | 521      | 8.058   | 8.107    | 0.049  |
| 10                     | 535      | 8.126   | 8.164    | 0.038  |
| 10                     | 526      | 8.103   | 8.161    | 0.058  |
| 15                     | 540      | 8.173   | 8.197    | 0.024  |
| 15                     | 387      | 8.140   | 8.174    | 0.034  |
| 15                     | 787      | 8.040   | 8.023    | -0.017 |
| 15                     | 1042     | 8.104   | 8.177    | 0.073  |
| 15                     | 483      | 8.146   | 8.176    | 0.030  |
| 30                     | 597      | 8.144   | 8.321    | 0.177  |
| 30                     | 853      | 8.073   | 8.177    | 0.104  |
| 30                     | 416      | 8.074   | 8.167    | 0.093  |
| 30                     | 949      | 8.018   | 8.137    | 0.119  |
| 30                     | 221      | 8.110   | 8.199    | 0.089  |
| 35                     | 538      | 8.117   | 8.215    | 0.098  |
| 35                     | 164      | 8.109   | 8.243    | 0.134  |
| 35                     | 1018     | 8.130   | 8.169    | 0.039  |
| 35                     | 462      | 8.028   | 8.139    | 0.111  |
| 35                     | 1032     | 8.105   | 8.129    | 0.024  |
| 50                     | 566      | 8.054   | 8.195    | 0.141  |
| 50                     | 197      | 8.002   | 8.090    | 0.088  |
| 50                     | 793      | 8.043   | 8.197    | 0.154  |
| 50                     | 802      | 8.071   | 8.190    | 0.119  |
| 50                     | 61       | 8.169   | 8.317    | 0.148  |
| 55                     | 795      | 8.096   | 8.200    | 0.104  |
| 55                     | 921      | 8.215   | 8.282    | 0.067  |
| 55                     | 741      | 8.123   | 8.212    | 0.089  |
| 55                     | 809      | 8.095   | 8.178    | 0.083  |
| 55                     | 804      | 8.135   | 8.264    | 0.129  |
| 100                    | 449      | 8.135   | 8.382    | 0.247  |
| 100                    | 541      | 8.049   | 8.331    | 0.282  |
| 100                    | 476      | 8.086   | 8.353    | 0.267  |
| 100                    | 45       | 8.056   | 8.312    | 0.256  |
| 100                    | 642      | 8.204   | 8.484    | 0.280  |
| 105                    | 1036     | 8.101   | 8.290    | 0.189  |
| 105                    | 1038     | 8.033   | 8.363    | 0.330  |
| 105                    | 203      | 8.053   | 8.212    | 0.159  |
| 105                    | 1029     | 8.092   | 8.347    | 0.255  |
| 105                    | 1027     | 8.096   | 8.313    | 0.217  |
| 105                    | Max      | 8.215   | 8.484    | 0.330  |
| 105                    | Average  | 8.095   | 8.194    | 0.099  |
| 105                    | Min      | 8.002   | 8.023    | -0.036 |
| 105                    | Std Dev  | 0.048   | 0.097    | 0.088  |



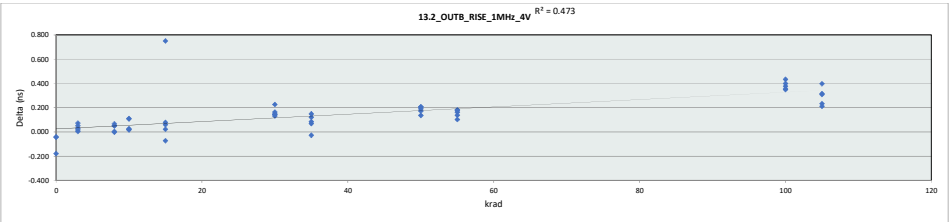
| 13.1_OUTA_RISE_1MHZ_4V |        |        |        |        |        |        |        |        |        |        |        |        |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site              |        |        |        |        |        |        |        |        |        |        |        |        |
| Tester                 |        |        |        |        |        |        |        |        |        |        |        |        |
| Test Number            |        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit              | 16.5   | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit              | 4      | ns     |        |        |        |        |        |        |        |        |        |        |
|                        | krad   |        |        | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                     | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                    | 8.067  | 8.060  | 8.082  | 8.107  | 8.107  | 8.023  | 8.137  | 8.129  | 8.090  | 8.178  | 8.312  | 8.212  |
| Average                | 8.102  | 8.101  | 8.107  | 8.156  | 8.149  | 8.200  | 8.179  | 8.198  | 8.227  | 8.372  | 8.305  | 8.305  |
| Max                    | 8.142  | 8.146  | 8.183  | 8.212  | 8.197  | 8.321  | 8.243  | 8.317  | 8.282  | 8.484  | 8.363  | 8.363  |
| UL                     | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |



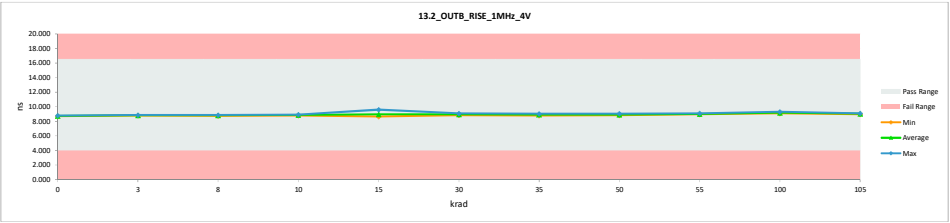
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.2_OUTB_RISE_1MHZ_4V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 8.977   | 8.800    | -0.177 |
| 0                      | 726      | 8.795   | 8.756    | -0.039 |
| 0                      | 791      | 8.748   | 8.707    | -0.041 |
| 3                      | 689      | 8.747   | 8.799    | 0.052  |
| 3                      | 688      | 8.784   | 8.790    | 0.006  |
| 3                      | 700      | 8.835   | 8.853    | 0.018  |
| 3                      | 482      | 8.844   | 8.876    | 0.032  |
| 3                      | 1033     | 8.834   | 8.834    | 0.075  |
| 8                      | 442      | 8.791   | 8.797    | 0.006  |
| 8                      | 699      | 8.706   | 8.759    | 0.053  |
| 8                      | 344      | 8.799   | 8.850    | 0.051  |
| 8                      | 355      | 8.795   | 8.864    | 0.069  |
| 8                      | 750      | 8.876   | 8.876    | 0.000  |
| 10                     | 537      | 8.911   | 8.933    | 0.022  |
| 10                     | 396      | 8.798   | 8.817    | 0.019  |
| 10                     | 521      | 8.720   | 8.829    | 0.109  |
| 10                     | 535      | 8.873   | 8.902    | 0.029  |
| 10                     | 526      | 8.810   | 8.923    | 0.113  |
| 15                     | 540      | 8.850   | 9.602    | 0.752  |
| 15                     | 387      | 8.826   | 8.850    | 0.024  |
| 15                     | 787      | 8.732   | 8.661    | -0.071 |
| 15                     | 1042     | 8.789   | 8.870    | 0.081  |
| 15                     | 483      | 8.864   | 8.925    | 0.061  |
| 30                     | 597      | 8.866   | 9.094    | 0.228  |
| 30                     | 853      | 8.774   | 8.907    | 0.133  |
| 30                     | 416      | 8.777   | 8.927    | 0.150  |
| 30                     | 949      | 8.722   | 8.866    | 0.144  |
| 30                     | 221      | 8.819   | 8.985    | 0.166  |
| 35                     | 538      | 8.843   | 8.966    | 0.123  |
| 35                     | 164      | 8.965   | 9.036    | 0.071  |
| 35                     | 1018     | 8.919   | 9.006    | 0.087  |
| 35                     | 462      | 8.693   | 8.843    | 0.150  |
| 35                     | 1032     | 8.813   | 8.787    | -0.026 |
| 50                     | 566      | 8.762   | 8.954    | 0.192  |
| 50                     | 197      | 8.683   | 8.821    | 0.138  |
| 50                     | 793      | 8.740   | 8.948    | 0.208  |
| 50                     | 802      | 8.729   | 8.938    | 0.209  |
| 50                     | 61       | 8.893   | 9.067    | 0.174  |
| 55                     | 795      | 8.805   | 8.970    | 0.165  |
| 55                     | 921      | 8.924   | 9.104    | 0.180  |
| 55                     | 741      | 8.830   | 9.014    | 0.184  |
| 55                     | 809      | 8.851   | 8.955    | 0.104  |
| 55                     | 804      | 8.877   | 9.016    | 0.139  |
| 100                    | 449      | 8.874   | 9.225    | 0.351  |
| 100                    | 541      | 8.736   | 9.171    | 0.435  |
| 100                    | 476      | 8.739   | 9.140    | 0.401  |
| 100                    | 45       | 8.733   | 9.089    | 0.356  |
| 100                    | 642      | 8.943   | 9.321    | 0.378  |
| 105                    | 1036     | 8.813   | 9.026    | 0.213  |
| 105                    | 1038     | 8.712   | 9.111    | 0.399  |
| 105                    | 203      | 8.733   | 8.968    | 0.235  |
| 105                    | 1029     | 8.729   | 9.047    | 0.318  |
| 105                    | 1027     | 8.783   | 9.093    | 0.310  |
| 105                    | Max      | 8.977   | 9.602    | 0.752  |
| 105                    | Average  | 8.806   | 8.948    | 0.143  |
| 105                    | Min      | 8.683   | 8.661    | -0.177 |
| 105                    | Std Dev  | 0.072   | 0.162    | 0.156  |



| 13.2_OUTB_RISE_1MHZ_4V |        |        |        |        |        |        |        |        |        |        |        |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site              |        |        |        |        |        |        |        |        |        |        |        |
| Tester                 |        |        |        |        |        |        |        |        |        |        |        |
| Test Number            |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit              |        |        |        |        |        |        |        |        |        |        |        |
| Min Limit              |        |        |        |        |        |        |        |        |        |        |        |
| krad                   | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                     | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                    | 8.707  | 8.790  | 8.759  | 8.817  | 8.661  | 8.866  | 8.787  | 8.821  | 8.955  | 9.089  | 8.968  |
| Average                | 8.754  | 8.830  | 8.829  | 8.881  | 8.982  | 8.956  | 8.928  | 8.946  | 9.012  | 9.189  | 9.049  |
| Max                    | 8.800  | 8.876  | 8.876  | 8.933  | 9.602  | 9.094  | 9.036  | 9.067  | 9.104  | 9.321  | 9.111  |
| UL                     | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

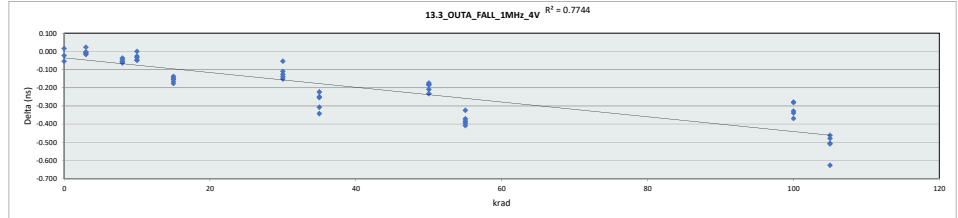


# HDR TID Report

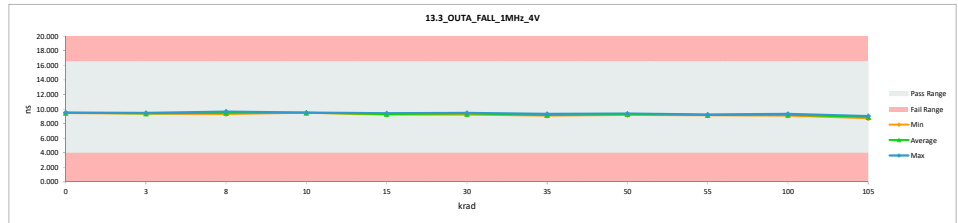
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.3_OUTA_FALL_1MHZ_4V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 9.589   | 9.536    | -0.053 |
| 0                      | 726      | 9.490   | 9.468    | -0.022 |
| 0                      | 791      | 9.427   | 9.444    | 0.017  |
| 3                      | 689      | 9.366   | 9.363    | -0.003 |
| 3                      | 688      | 9.489   | 9.475    | -0.014 |
| 3                      | 700      | 9.396   | 9.391    | -0.005 |
| 3                      | 482      | 9.417   | 9.401    | -0.016 |
| 3                      | 1033     | 9.355   | 9.379    | 0.024  |
| 8                      | 442      | 9.705   | 9.649    | -0.056 |
| 8                      | 699      | 9.362   | 9.326    | -0.036 |
| 8                      | 344      | 9.523   | 9.470    | -0.053 |
| 8                      | 355      | 9.642   | 9.600    | -0.042 |
| 8                      | 750      | 9.530   | 9.468    | -0.062 |
| 10                     | 537      | 9.502   | 9.469    | -0.033 |
| 10                     | 396      | 9.552   | 9.504    | -0.048 |
| 10                     | 521      | 9.471   | 9.472    | 0.001  |
| 10                     | 535      | 9.528   | 9.503    | -0.025 |
| 10                     | 526      | 9.560   | 9.513    | -0.047 |
| 15                     | 540      | 9.537   | 9.361    | -0.176 |
| 15                     | 387      | 9.569   | 9.424    | -0.145 |
| 15                     | 787      | 9.381   | 9.216    | -0.165 |
| 15                     | 1042     | 9.458   | 9.322    | -0.136 |
| 15                     | 483      | 9.425   | 9.272    | -0.153 |
| 30                     | 597      | 9.501   | 9.448    | -0.053 |
| 30                     | 853      | 9.361   | 9.222    | -0.139 |
| 30                     | 416      | 9.563   | 9.454    | -0.109 |
| 30                     | 949      | 9.492   | 9.367    | -0.125 |
| 30                     | 221      | 9.532   | 9.381    | -0.151 |
| 35                     | 538      | 9.466   | 9.213    | -0.253 |
| 35                     | 164      | 9.496   | 9.247    | -0.249 |
| 35                     | 1018     | 9.413   | 9.107    | -0.306 |
| 35                     | 462      | 9.558   | 9.336    | -0.222 |
| 35                     | 1032     | 9.435   | 9.094    | -0.341 |
| 50                     | 566      | 9.518   | 9.310    | -0.208 |
| 50                     | 197      | 9.374   | 9.201    | -0.173 |
| 50                     | 793      | 9.509   | 9.326    | -0.183 |
| 50                     | 802      | 9.588   | 9.356    | -0.232 |
| 50                     | 61       | 9.569   | 9.387    | -0.182 |
| 55                     | 795      | 9.477   | 9.154    | -0.323 |
| 55                     | 921      | 9.584   | 9.201    | -0.383 |
| 55                     | 741      | 9.511   | 9.141    | -0.370 |
| 55                     | 809      | 9.650   | 9.243    | -0.407 |
| 55                     | 804      | 9.523   | 9.130    | -0.393 |
| 100                    | 449      | 9.562   | 9.235    | -0.327 |
| 100                    | 541      | 9.609   | 9.329    | -0.280 |
| 100                    | 476      | 9.475   | 9.197    | -0.278 |
| 100                    | 45       | 9.437   | 9.099    | -0.338 |
| 100                    | 642      | 9.601   | 9.233    | -0.368 |
| 105                    | 1036     | 9.438   | 8.961    | -0.477 |
| 105                    | 1038     | 9.347   | 8.722    | -0.625 |
| 105                    | 203      | 9.564   | 9.060    | -0.504 |
| 105                    | 1029     | 9.335   | 8.875    | -0.460 |
| 105                    | 1027     | 9.432   | 8.924    | -0.508 |
| 105                    | Max      | 9.705   | 9.649    | 0.024  |
|                        | Average  | 9.494   | 9.301    | -0.193 |
|                        | Min      | 9.335   | 8.722    | -0.625 |
|                        | Std Dev  | 0.086   | 0.186    | 0.163  |



| 13.3_OUTA_FALL_1MHZ_4V |        |        |        |        |        |        |        |        |        |        |        |        |        |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site              |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Tester                 |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Test Number            |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit              | 16.5   | ns     |        |        |        |        |        |        |        |        |        |        |        |
| Min Limit              | 4      | ns     |        |        |        |        |        |        |        |        |        |        |        |
|                        | krad   |        | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                     | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                    | 9.444  | 9.363  | 9.326  | 9.469  | 9.216  | 9.222  | 9.094  | 9.201  | 9.130  | 9.099  | 8.722  | 8.722  |        |
| Average                | 9.483  | 9.402  | 9.503  | 9.492  | 9.319  | 9.374  | 9.199  | 9.316  | 9.174  | 9.219  | 8.908  | 8.908  |        |
| Max                    | 9.536  | 9.475  | 9.649  | 9.513  | 9.424  | 9.454  | 9.336  | 9.387  | 9.243  | 9.329  | 9.060  | 9.060  |        |
| UL                     | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

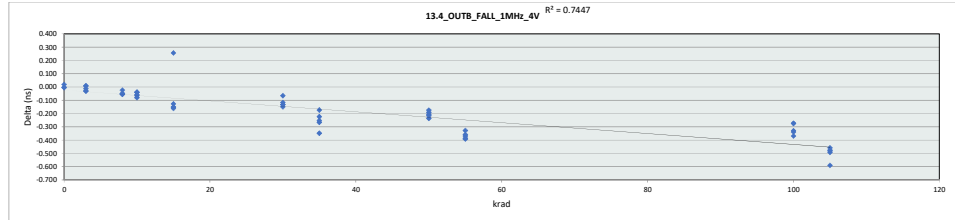


# HDR TID Report

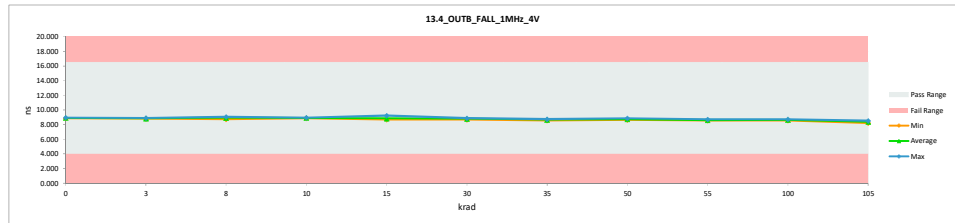
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.4_OUTB_FALL_1MHz_4V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   | ns       | ns      |          |        |
| Max Limit              | 16.5     | 16.5    |          |        |
| Min Limit              | 4        | 4       |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 8.972   | 8.972    | 0.000  |
| 0                      | 726      | 8.936   | 8.932    | -0.004 |
| 0                      | 791      | 8.832   | 8.853    | 0.021  |
| 3                      | 689      | 8.820   | 8.832    | 0.012  |
| 3                      | 688      | 8.949   | 8.921    | -0.028 |
| 3                      | 700      | 8.834   | 8.804    | -0.030 |
| 3                      | 482      | 8.896   | 8.884    | -0.012 |
| 3                      | 1033     | 8.831   | 8.811    | -0.008 |
| 8                      | 442      | 9.119   | 9.065    | -0.054 |
| 8                      | 699      | 8.776   | 8.754    | -0.022 |
| 8                      | 344      | 8.944   | 8.898    | -0.046 |
| 8                      | 355      | 9.077   | 9.024    | -0.053 |
| 8                      | 750      | 9.011   | 8.961    | -0.050 |
| 10                     | 537      | 8.971   | 8.933    | -0.038 |
| 10                     | 396      | 9.003   | 8.924    | -0.079 |
| 10                     | 521      | 8.929   | 8.874    | -0.055 |
| 10                     | 535      | 9.013   | 8.949    | -0.064 |
| 10                     | 526      | 9.000   | 8.963    | -0.037 |
| 15                     | 540      | 8.982   | 8.940    | -0.042 |
| 15                     | 387      | 8.973   | 8.813    | -0.160 |
| 15                     | 787      | 8.856   | 8.707    | -0.149 |
| 15                     | 1042     | 8.910   | 8.758    | -0.152 |
| 15                     | 483      | 8.899   | 8.773    | -0.126 |
| 30                     | 597      | 8.958   | 8.894    | -0.064 |
| 30                     | 853      | 8.820   | 8.672    | -0.148 |
| 30                     | 416      | 8.989   | 8.874    | -0.115 |
| 30                     | 949      | 8.909   | 8.778    | -0.131 |
| 30                     | 221      | 8.973   | 8.841    | -0.132 |
| 35                     | 538      | 8.899   | 8.647    | -0.252 |
| 35                     | 164      | 8.925   | 8.753    | -0.172 |
| 35                     | 1018     | 8.879   | 8.614    | -0.265 |
| 35                     | 462      | 8.984   | 8.762    | -0.222 |
| 35                     | 1032     | 8.931   | 8.584    | -0.347 |
| 50                     | 566      | 8.938   | 8.723    | -0.215 |
| 50                     | 197      | 8.866   | 8.662    | -0.204 |
| 50                     | 793      | 8.897   | 8.724    | -0.173 |
| 50                     | 802      | 8.959   | 8.723    | -0.236 |
| 50                     | 61       | 9.056   | 8.866    | -0.190 |
| 55                     | 795      | 8.886   | 8.559    | -0.327 |
| 55                     | 921      | 9.048   | 8.679    | -0.369 |
| 55                     | 741      | 8.997   | 8.612    | -0.385 |
| 55                     | 809      | 9.115   | 8.724    | -0.391 |
| 55                     | 804      | 8.919   | 8.562    | -0.357 |
| 100                    | 449      | 9.018   | 8.690    | -0.328 |
| 100                    | 541      | 9.020   | 8.748    | -0.272 |
| 100                    | 476      | 8.909   | 8.636    | -0.273 |
| 100                    | 45       | 8.926   | 8.558    | -0.368 |
| 100                    | 642      | 9.023   | 8.685    | -0.338 |
| 105                    | 1036     | 8.910   | 8.435    | -0.475 |
| 105                    | 1038     | 8.812   | 8.223    | -0.589 |
| 105                    | 203      | 9.031   | 8.539    | -0.492 |
| 105                    | 1029     | 8.774   | 8.317    | -0.457 |
| 105                    | 1027     | 8.888   | 8.408    | -0.480 |
| 105                    | Max      | 9.119   | 9.240    | 0.258  |
| 105                    | Average  | 8.939   | 8.758    | -0.182 |
| 105                    | Min      | 8.774   | 8.223    | -0.589 |
| 105                    | Std Dev  | 0.080   | 0.187    | 0.169  |



| 13.4_OUTB_FALL_1MHz_4V |        |        |        |        |        |        |        |        |        |        |        |        |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site              |        |        |        |        |        |        |        |        |        |        |        |        |
| Tester                 |        |        |        |        |        |        |        |        |        |        |        |        |
| Test Number            |        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit              | 16.5   | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit              | 4      | ns     |        |        |        |        |        |        |        |        |        |        |
|                        | krad   | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                     | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                    | 8.853  | 8.804  | 8.754  | 8.874  | 8.707  | 8.672  | 8.584  | 8.662  | 8.559  | 8.558  | 8.223  |        |
| Average                | 8.919  | 8.854  | 8.940  | 8.929  | 8.858  | 8.812  | 8.672  | 8.740  | 8.627  | 8.663  | 8.384  |        |
| Max                    | 8.972  | 8.921  | 9.065  | 8.963  | 9.240  | 8.894  | 8.762  | 8.866  | 8.724  | 8.748  | 8.539  |        |
| UL                     | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

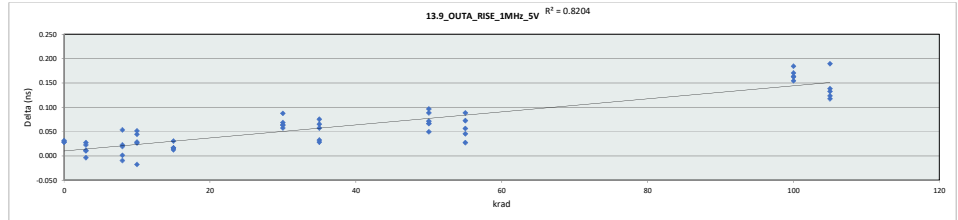


# HDR TID Report

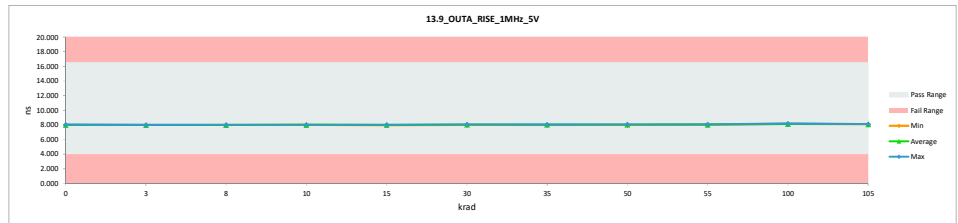
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.9_OUTA_RISE_1MHZ_5V |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   |          |         |          |        |
| Max Limit              |          |         |          |        |
| Min Limit              |          |         |          |        |
| krad                   | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                      | 552      | 8.014   | 8.043    | 0.029  |
| 0                      | 726      | 7.975   | 8.004    | 0.029  |
| 0                      | 791      | 7.940   | 7.972    | 0.032  |
| 3                      | 689      | 7.973   | 7.984    | 0.011  |
| 3                      | 688      | 7.941   | 7.964    | 0.023  |
| 3                      | 700      | 7.974   | 7.971    | -0.003 |
| 3                      | 482      | 7.979   | 8.007    | 0.028  |
| 3                      | 1033     | 8.004   | 8.004    | 0.012  |
| 8                      | 442      | 7.966   | 7.968    | 0.002  |
| 8                      | 699      | 7.928   | 7.982    | 0.054  |
| 8                      | 344      | 7.945   | 7.968    | 0.023  |
| 8                      | 355      | 7.970   | 7.990    | 0.020  |
| 8                      | 750      | 8.020   | 8.011    | -0.009 |
| 10                     | 537      | 7.979   | 8.024    | 0.045  |
| 10                     | 396      | 7.975   | 8.004    | 0.029  |
| 10                     | 521      | 7.982   | 7.965    | -0.017 |
| 10                     | 535      | 7.977   | 8.029    | 0.052  |
| 10                     | 526      | 7.992   | 8.019    | 0.027  |
| 15                     | 540      | 7.990   | 8.021    | 0.031  |
| 15                     | 387      | 8.000   | 8.013    | 0.013  |
| 15                     | 787      | 7.929   | 7.946    | 0.017  |
| 15                     | 1042     | 7.950   | 7.967    | 0.017  |
| 15                     | 483      | 8.005   | 8.022    | 0.017  |
| 30                     | 597      | 8.009   | 8.078    | 0.069  |
| 30                     | 853      | 7.950   | 8.008    | 0.058  |
| 30                     | 416      | 7.963   | 8.027    | 0.064  |
| 30                     | 949      | 7.942   | 8.006    | 0.064  |
| 30                     | 221      | 7.970   | 8.058    | 0.088  |
| 35                     | 538      | 7.986   | 8.052    | 0.066  |
| 35                     | 164      | 7.966   | 8.024    | 0.058  |
| 35                     | 1018     | 7.991   | 8.024    | 0.033  |
| 35                     | 462      | 7.927   | 8.003    | 0.076  |
| 35                     | 1032     | 7.992   | 8.021    | 0.029  |
| 50                     | 566      | 7.966   | 8.038    | 0.072  |
| 50                     | 197      | 7.874   | 7.963    | 0.089  |
| 50                     | 793      | 7.990   | 8.040    | 0.050  |
| 50                     | 802      | 7.956   | 8.053    | 0.097  |
| 50                     | 61       | 8.020   | 8.087    | 0.067  |
| 55                     | 795      | 7.975   | 8.048    | 0.073  |
| 55                     | 921      | 8.024   | 8.081    | 0.057  |
| 55                     | 741      | 8.004   | 8.050    | 0.046  |
| 55                     | 809      | 7.986   | 8.014    | 0.028  |
| 55                     | 804      | 7.996   | 8.085    | 0.089  |
| 100                    | 449      | 7.983   | 8.146    | 0.163  |
| 100                    | 541      | 7.933   | 8.104    | 0.171  |
| 100                    | 476      | 7.952   | 8.116    | 0.164  |
| 100                    | 45       | 7.950   | 8.135    | 0.185  |
| 100                    | 642      | 8.028   | 8.183    | 0.155  |
| 105                    | 1036     | 7.974   | 8.107    | 0.133  |
| 105                    | 1038     | 7.914   | 8.104    | 0.190  |
| 105                    | 203      | 7.953   | 8.071    | 0.118  |
| 105                    | 1029     | 7.967   | 8.091    | 0.124  |
| 105                    | 1027     | 7.974   | 8.113    | 0.139  |
| 105                    | Max      | 8.028   | 8.183    | 0.190  |
| Average                |          | 7.972   | 8.034    | 0.062  |
| Min                    |          | 7.874   | 7.946    | -0.017 |
| Std Dev                |          | 0.030   | 0.053    | 0.053  |



| 13.9_OUTA_RISE_1MHZ_5V |      |        |        |        |        |        |        |        |        |        |        |        |
|------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site              |      |        |        |        |        |        |        |        |        |        |        |        |
| Tester                 |      |        |        |        |        |        |        |        |        |        |        |        |
| Test Number            |      |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit              | 16.5 | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit              | 4    | ns     |        |        |        |        |        |        |        |        |        |        |
|                        | krad |        |        |        |        |        |        |        |        |        |        |        |
|                        |      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                     |      | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                    |      | 7.972  | 7.964  | 7.968  | 7.965  | 7.946  | 8.006  | 8.003  | 7.963  | 8.014  | 8.104  | 8.071  |
| Average                |      | 8.006  | 7.986  | 7.984  | 8.008  | 7.994  | 8.035  | 8.025  | 8.036  | 8.056  | 8.137  | 8.097  |
| Max                    |      | 8.043  | 8.007  | 8.011  | 8.029  | 8.022  | 8.078  | 8.052  | 8.087  | 8.085  | 8.183  | 8.113  |
| UL                     |      | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

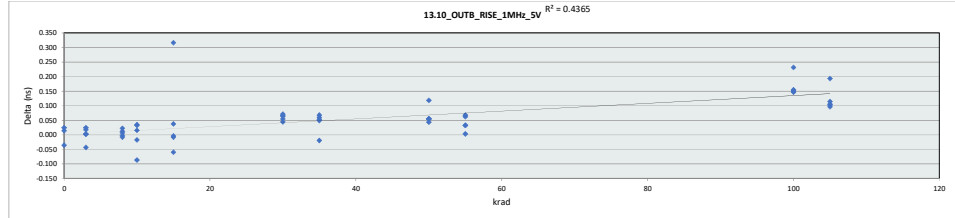


# HDR TID Report

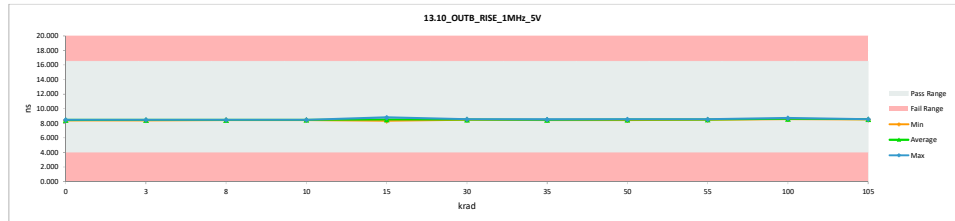
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.10_OUTB_RISE_1MHz_5V |          |         |          |        |
|-------------------------|----------|---------|----------|--------|
| Test Site               |          |         |          |        |
| Tester                  |          |         |          |        |
| Test Number             |          |         |          |        |
| Unit                    |          |         |          |        |
| Max Limit               |          |         |          |        |
| Min Limit               |          |         |          |        |
| krad                    | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                       | 552      | 8.537   | 8.502    | -0.035 |
| 0                       | 726      | 8.444   | 8.469    | 0.025  |
| 0                       | 791      | 8.404   | 8.419    | 0.015  |
| 3                       | 689      | 8.460   | 8.417    | -0.043 |
| 3                       | 688      | 8.455   | 8.458    | 0.003  |
| 3                       | 700      | 8.469   | 8.494    | 0.025  |
| 3                       | 482      | 8.476   | 8.494    | 0.018  |
| 3                       | 1033     | 8.459   | 8.462    | 0.003  |
| 8                       | 442      | 8.468   | 8.481    | 0.013  |
| 8                       | 699      | 8.421   | 8.444    | 0.023  |
| 8                       | 344      | 8.469   | 8.467    | -0.002 |
| 8                       | 355      | 8.463   | 8.470    | 0.007  |
| 8                       | 750      | 8.499   | 8.492    | -0.007 |
| 10                      | 537      | 8.536   | 8.450    | -0.086 |
| 10                      | 396      | 8.468   | 8.501    | 0.033  |
| 10                      | 521      | 8.484   | 8.467    | -0.017 |
| 10                      | 535      | 8.471   | 8.506    | 0.035  |
| 10                      | 526      | 8.487   | 8.503    | 0.016  |
| 15                      | 540      | 8.498   | 8.815    | 0.317  |
| 15                      | 387      | 8.493   | 8.486    | -0.007 |
| 15                      | 787      | 8.427   | 8.368    | -0.059 |
| 15                      | 1042     | 8.461   | 8.458    | -0.003 |
| 15                      | 483      | 8.488   | 8.526    | 0.038  |
| 30                      | 597      | 8.511   | 8.583    | 0.072  |
| 30                      | 853      | 8.445   | 8.490    | 0.045  |
| 30                      | 416      | 8.460   | 8.515    | 0.055  |
| 30                      | 949      | 8.419   | 8.483    | 0.064  |
| 30                      | 221      | 8.471   | 8.538    | 0.067  |
| 35                      | 538      | 8.475   | 8.528    | 0.053  |
| 35                      | 164      | 8.494   | 8.544    | 0.050  |
| 35                      | 1018     | 8.478   | 8.546    | 0.068  |
| 35                      | 462      | 8.420   | 8.480    | 0.060  |
| 35                      | 1032     | 8.464   | 8.445    | -0.019 |
| 50                      | 566      | 8.466   | 8.522    | 0.056  |
| 50                      | 197      | 8.375   | 8.430    | 0.055  |
| 50                      | 793      | 8.454   | 8.509    | 0.055  |
| 50                      | 802      | 8.411   | 8.530    | 0.119  |
| 50                      | 61       | 8.522   | 8.566    | 0.044  |
| 55                      | 795      | 8.485   | 8.489    | 0.004  |
| 55                      | 921      | 8.538   | 8.571    | 0.033  |
| 55                      | 741      | 8.476   | 8.544    | 0.068  |
| 55                      | 809      | 8.471   | 8.504    | 0.033  |
| 55                      | 804      | 8.494   | 8.557    | 0.063  |
| 100                     | 449      | 8.489   | 8.643    | 0.154  |
| 100                     | 541      | 8.425   | 8.580    | 0.155  |
| 100                     | 476      | 8.435   | 8.585    | 0.150  |
| 100                     | 45       | 8.435   | 8.582    | 0.147  |
| 100                     | 642      | 8.496   | 8.728    | 0.232  |
| 105                     | 1036     | 8.470   | 8.573    | 0.103  |
| 105                     | 1038     | 8.388   | 8.582    | 0.194  |
| 105                     | 203      | 8.421   | 8.518    | 0.097  |
| 105                     | 1029     | 8.429   | 8.535    | 0.106  |
| 105                     | 1027     | 8.466   | 8.581    | 0.115  |
| 105                     | Max      | 8.538   | 8.815    | 0.317  |
| Average                 |          | 8.465   | 8.518    | 0.053  |
| Min                     |          | 8.375   | 8.368    | -0.086 |
| Std Dev                 |          | 0.036   | 0.074    | 0.072  |



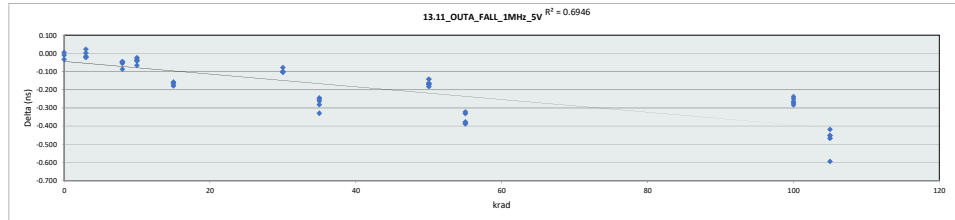
| 13.10_OUTB_RISE_1MHz_5V |      |        |        |        |        |        |        |        |        |        |        |        |
|-------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site               |      |        |        |        |        |        |        |        |        |        |        |        |
| Tester                  |      |        |        |        |        |        |        |        |        |        |        |        |
| Test Number             |      |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit               | 16.5 | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit               | 4    | ns     |        |        |        |        |        |        |        |        |        |        |
|                         | krad |        |        |        |        |        |        |        |        |        |        |        |
|                         |      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                      |      | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                     |      | 8.419  | 8.417  | 8.444  | 8.450  | 8.368  | 8.483  | 8.445  | 8.430  | 8.489  | 8.580  | 8.518  |
| Average                 |      | 8.463  | 8.465  | 8.471  | 8.485  | 8.531  | 8.522  | 8.509  | 8.511  | 8.533  | 8.624  | 8.558  |
| Max                     |      | 8.502  | 8.494  | 8.492  | 8.506  | 8.815  | 8.583  | 8.546  | 8.566  | 8.571  | 8.728  | 8.582  |
| UL                      |      | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |



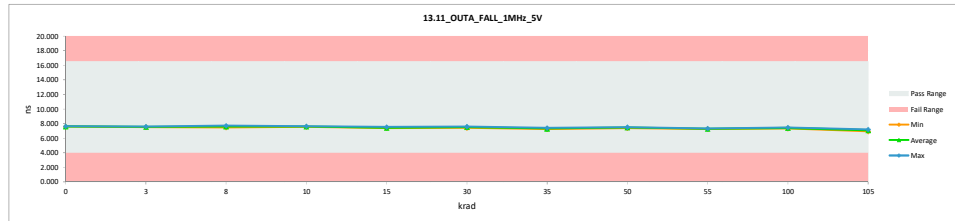
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.11_OUTA_FALL_1MHz_5V |          |         |          |        |
|-------------------------|----------|---------|----------|--------|
| Test Site               |          |         |          |        |
| Tester                  |          |         |          |        |
| Test Number             |          |         |          |        |
| Unit                    |          |         |          |        |
| Max Limit               |          |         |          |        |
| Min Limit               |          |         |          |        |
| krad                    | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                       | 552      | 7.677   | 7.645    | -0.032 |
| 0                       | 726      | 7.632   | 7.623    | -0.009 |
| 0                       | 791      | 7.579   | 7.585    | 0.006  |
| 3                       | 689      | 7.526   | 7.529    | 0.003  |
| 3                       | 688      | 7.628   | 7.606    | -0.022 |
| 3                       | 700      | 7.533   | 7.517    | -0.016 |
| 3                       | 482      | 7.556   | 7.537    | -0.019 |
| 3                       | 1033     | 7.515   | 7.515    | 0.024  |
| 8                       | 442      | 7.769   | 7.715    | -0.054 |
| 8                       | 699      | 7.523   | 7.479    | -0.044 |
| 8                       | 344      | 7.637   | 7.589    | -0.048 |
| 8                       | 355      | 7.714   | 7.668    | -0.046 |
| 8                       | 790      | 7.633   | 7.547    | -0.086 |
| 10                      | 537      | 7.518   | 7.576    | -0.042 |
| 10                      | 396      | 7.679   | 7.656    | -0.023 |
| 10                      | 521      | 7.630   | 7.565    | -0.065 |
| 10                      | 535      | 7.630   | 7.595    | -0.035 |
| 10                      | 526      | 7.664   | 7.627    | -0.037 |
| 15                      | 940      | 7.641   | 7.465    | -0.176 |
| 15                      | 387      | 7.699   | 7.535    | -0.164 |
| 15                      | 787      | 7.542   | 7.383    | -0.159 |
| 15                      | 1042     | 7.570   | 7.393    | -0.177 |
| 15                      | 483      | 7.585   | 7.428    | -0.157 |
| 30                      | 597      | 7.624   | 7.526    | -0.098 |
| 30                      | 853      | 7.512   | 7.411    | -0.101 |
| 30                      | 416      | 7.567   | 7.590    | -0.077 |
| 30                      | 949      | 7.626   | 7.524    | -0.102 |
| 30                      | 221      | 7.645   | 7.544    | -0.101 |
| 35                      | 538      | 7.592   | 7.342    | -0.250 |
| 35                      | 164      | 7.560   | 7.316    | -0.244 |
| 35                      | 1018     | 7.535   | 7.254    | -0.281 |
| 35                      | 462      | 7.667   | 7.406    | -0.261 |
| 35                      | 1032     | 7.560   | 7.232    | -0.328 |
| 50                      | 566      | 7.659   | 7.488    | -0.171 |
| 50                      | 197      | 7.514   | 7.373    | -0.141 |
| 50                      | 793      | 7.665   | 7.501    | -0.164 |
| 50                      | 802      | 7.683   | 7.520    | -0.163 |
| 50                      | 61       | 7.678   | 7.496    | -0.182 |
| 55                      | 795      | 7.601   | 7.280    | -0.321 |
| 55                      | 921      | 7.630   | 7.300    | -0.330 |
| 55                      | 741      | 7.618   | 7.242    | -0.376 |
| 55                      | 809      | 7.727   | 7.340    | -0.387 |
| 55                      | 804      | 7.630   | 7.249    | -0.381 |
| 100                     | 449      | 7.645   | 7.408    | -0.237 |
| 100                     | 541      | 7.746   | 7.475    | -0.271 |
| 100                     | 476      | 7.610   | 7.347    | -0.263 |
| 100                     | 45       | 7.563   | 7.314    | -0.249 |
| 100                     | 642      | 7.678   | 7.395    | -0.283 |
| 105                     | 1036     | 7.568   | 7.151    | -0.417 |
| 105                     | 1038     | 7.512   | 6.919    | -0.593 |
| 105                     | 203      | 7.649   | 7.197    | -0.452 |
| 105                     | 1029     | 7.510   | 7.044    | -0.466 |
| 105                     | 1027     | 7.574   | 7.125    | -0.449 |
| 105                     | Max      | 7.769   | 7.715    | 0.024  |
| 105                     | Average  | 7.615   | 7.436    | -0.180 |
| 105                     | Min      | 7.491   | 6.919    | -0.593 |
| 105                     | Std Dev  | 0.065   | 0.168    | 0.149  |



| 13.11_OUTA_FALL_1MHz_5V |              |        |        |        |        |        |        |        |        |        |        |
|-------------------------|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site               |              |        |        |        |        |        |        |        |        |        |        |
| Tester                  |              |        |        |        |        |        |        |        |        |        |        |
| Test Number             |              |        |        |        |        |        |        |        |        |        |        |
| Max Limit               | 16.5      ns |        |        |        |        |        |        |        |        |        |        |
| Min Limit               | 4      ns    |        |        |        |        |        |        |        |        |        |        |
| krad                    |              |        |        |        |        |        |        |        |        |        |        |
|                         | 0            | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                      | 4.000        | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                     | 7.585        | 7.515  | 7.479  | 7.565  | 7.383  | 7.411  | 7.232  | 7.373  | 7.242  | 7.314  | 6.919  |
| Average                 | 7.618        | 7.541  | 7.600  | 7.604  | 7.441  | 7.519  | 7.310  | 7.476  | 7.282  | 7.388  | 7.087  |
| Max                     | 7.645        | 7.606  | 7.715  | 7.656  | 7.535  | 7.590  | 7.406  | 7.520  | 7.340  | 7.475  | 7.197  |
| UL                      | 16.500       | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

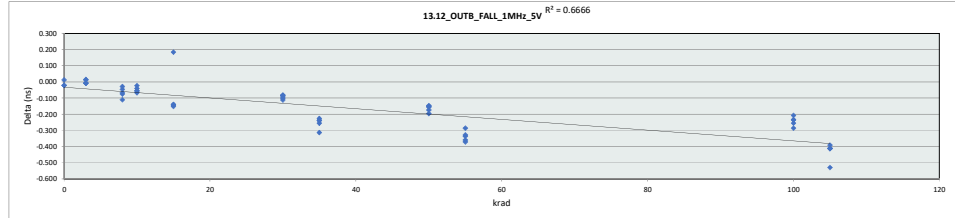


# HDR TID Report

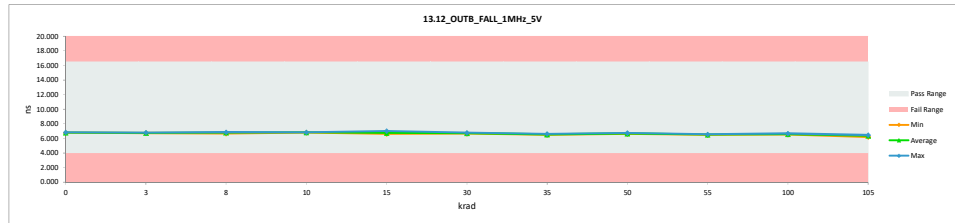
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.12_OUTB_FALL_1MHz_5V |          |         |          |        |
|-------------------------|----------|---------|----------|--------|
| Test Site               |          |         |          |        |
| Tester                  |          |         |          |        |
| Test Number             |          |         |          |        |
| Unit                    | ns       | ns      |          |        |
| Max Limit               | 16.5     | 16.5    |          |        |
| Min Limit               | 4        | 4       |          |        |
| krad                    | Serial # | PRE HDR | POST HDR | Delta  |
| 0                       | 552      | 6.870   | 6.849    | -0.021 |
| 0                       | 726      | 6.859   | 6.839    | -0.020 |
| 0                       | 791      | 6.779   | 6.793    | 0.014  |
| 3                       | 689      | 6.762   | 6.755    | -0.007 |
| 3                       | 688      | 6.828   | 6.821    | -0.007 |
| 3                       | 700      | 6.747   | 6.740    | -0.007 |
| 3                       | 482      | 6.768   | 6.782    | 0.014  |
| 3                       | 1033     | 6.775   | 6.755    | 0.017  |
| 8                       | 442      | 6.981   | 6.872    | -0.109 |
| 8                       | 699      | 6.717   | 6.690    | -0.027 |
| 8                       | 344      | 6.834   | 6.789    | -0.045 |
| 8                       | 355      | 6.935   | 6.869    | -0.066 |
| 8                       | 750      | 6.881   | 6.807    | -0.074 |
| 10                      | 537      | 6.878   | 6.825    | -0.053 |
| 10                      | 396      | 6.877   | 6.838    | -0.039 |
| 10                      | 521      | 6.863   | 6.797    | -0.066 |
| 10                      | 535      | 6.866   | 6.844    | -0.022 |
| 10                      | 526      | 6.908   | 6.853    | -0.055 |
| 15                      | 540      | 6.848   | 7.033    | 0.185  |
| 15                      | 387      | 6.863   | 6.725    | -0.138 |
| 15                      | 787      | 6.810   | 6.671    | -0.139 |
| 15                      | 1042     | 6.794   | 6.649    | -0.145 |
| 15                      | 483      | 6.830   | 6.680    | -0.150 |
| 30                      | 597      | 6.857   | 6.746    | -0.111 |
| 30                      | 853      | 6.753   | 6.653    | -0.100 |
| 30                      | 416      | 6.875   | 6.793    | -0.082 |
| 30                      | 949      | 6.815   | 6.723    | -0.092 |
| 30                      | 221      | 6.859   | 6.779    | -0.080 |
| 35                      | 538      | 6.805   | 6.567    | -0.238 |
| 35                      | 164      | 6.829   | 6.593    | -0.236 |
| 35                      | 1018     | 6.773   | 6.519    | -0.254 |
| 35                      | 462      | 6.866   | 6.641    | -0.225 |
| 35                      | 1032     | 6.828   | 6.516    | -0.312 |
| 50                      | 566      | 6.844   | 6.690    | -0.154 |
| 50                      | 197      | 6.777   | 6.632    | -0.145 |
| 50                      | 793      | 6.858   | 6.686    | -0.172 |
| 50                      | 802      | 6.853   | 6.703    | -0.150 |
| 50                      | 61       | 6.948   | 6.753    | -0.195 |
| 55                      | 795      | 6.810   | 6.525    | -0.285 |
| 55                      | 921      | 6.865   | 6.538    | -0.327 |
| 55                      | 741      | 6.871   | 6.536    | -0.335 |
| 55                      | 809      | 6.955   | 6.585    | -0.370 |
| 55                      | 804      | 6.834   | 6.476    | -0.358 |
| 100                     | 449      | 6.885   | 6.653    | -0.232 |
| 100                     | 541      | 6.890   | 6.684    | -0.206 |
| 100                     | 476      | 6.822   | 6.588    | -0.234 |
| 100                     | 45       | 6.817   | 6.563    | -0.254 |
| 100                     | 642      | 6.882   | 6.597    | -0.285 |
| 105                     | 1036     | 6.828   | 6.417    | -0.411 |
| 105                     | 1038     | 6.741   | 6.213    | -0.528 |
| 105                     | 203      | 6.890   | 6.478    | -0.412 |
| 105                     | 1029     | 6.726   | 6.317    | -0.409 |
| 105                     | 1027     | 6.815   | 6.425    | -0.390 |
| 105                     | Max      | 6.981   | 7.033    | 0.185  |
| 105                     | Average  | 6.838   | 6.677    | -0.161 |
| 105                     | Min      | 6.717   | 6.213    | -0.528 |
| 105                     | Std Dev  | 0.058   | 0.154    | 0.144  |



| 13.12_OUTB_FALL_1MHz_5V |        |        |        |        |        |        |        |        |        |        |        |
|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site               |        |        |        |        |        |        |        |        |        |        |        |
| Tester                  |        |        |        |        |        |        |        |        |        |        |        |
| Test Number             |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit               | 16.5   | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit               | 4      | ns     |        |        |        |        |        |        |        |        |        |
| krad                    | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                      | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                     | 6.793  | 6.740  | 6.690  | 6.797  | 6.649  | 6.653  | 6.516  | 6.632  | 6.476  | 6.563  | 6.213  |
| Average                 | 6.827  | 6.771  | 6.805  | 6.831  | 6.752  | 6.739  | 6.567  | 6.693  | 6.532  | 6.617  | 6.370  |
| Max                     | 6.849  | 6.821  | 6.872  | 6.853  | 7.033  | 6.793  | 6.641  | 6.753  | 6.585  | 6.684  | 6.478  |
| UL                      | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

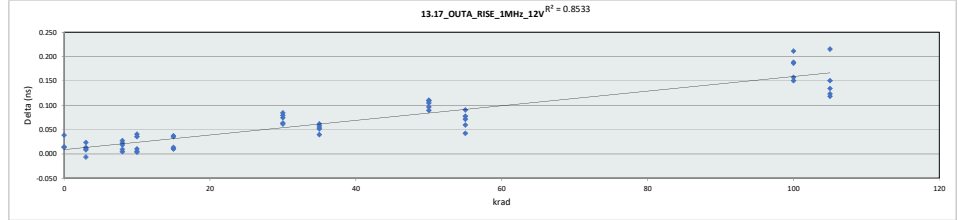


# HDR TID Report

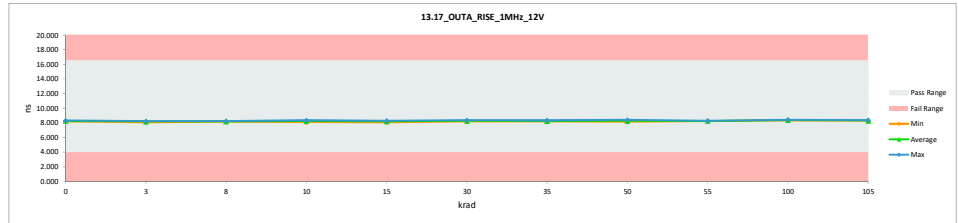
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.17_OUTA_RISE_1MHz_12V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 8.309   | 8.324    | 0.015  |
| 0                        | 726      | 8.190   | 8.229    | 0.039  |
| 0                        | 791      | 8.188   | 8.202    | 0.014  |
| 3                        | 689      | 8.228   | 8.239    | 0.011  |
| 3                        | 688      | 8.186   | 8.180    | -0.006 |
| 3                        | 700      | 8.093   | 8.102    | 0.009  |
| 3                        | 482      | 8.200   | 8.214    | 0.014  |
| 3                        | 1033     | 8.164   | 8.196    | 0.024  |
| 8                        | 442      | 8.167   | 8.195    | 0.028  |
| 8                        | 699      | 8.220   | 8.239    | 0.019  |
| 8                        | 344      | 8.151   | 8.161    | 0.010  |
| 8                        | 355      | 8.138   | 8.161    | 0.023  |
| 8                        | 750      | 8.244   | 8.249    | 0.005  |
| 10                       | 537      | 8.319   | 8.355    | 0.036  |
| 10                       | 396      | 8.254   | 8.260    | 0.006  |
| 10                       | 521      | 8.168   | 8.209    | 0.041  |
| 10                       | 535      | 8.289   | 8.293    | 0.004  |
| 10                       | 526      | 8.107   | 8.118    | 0.011  |
| 15                       | 540      | 8.179   | 8.217    | 0.038  |
| 15                       | 387      | 8.250   | 8.286    | 0.036  |
| 15                       | 787      | 8.077   | 8.088    | 0.011  |
| 15                       | 1042     | 8.261   | 8.272    | 0.011  |
| 15                       | 483      | 8.148   | 8.162    | 0.014  |
| 30                       | 597      | 8.288   | 8.368    | 0.080  |
| 30                       | 853      | 8.163   | 8.225    | 0.062  |
| 30                       | 416      | 8.188   | 8.253    | 0.075  |
| 30                       | 949      | 8.181   | 8.245    | 0.064  |
| 30                       | 221      | 8.144   | 8.229    | 0.085  |
| 35                       | 538      | 8.317   | 8.357    | 0.040  |
| 35                       | 164      | 8.132   | 8.184    | 0.052  |
| 35                       | 1018     | 8.164   | 8.226    | 0.062  |
| 35                       | 462      | 8.139   | 8.197    | 0.058  |
| 35                       | 1032     | 8.144   | 8.198    | 0.054  |
| 50                       | 566      | 8.218   | 8.315    | 0.097  |
| 50                       | 197      | 8.067   | 8.172    | 0.105  |
| 50                       | 793      | 8.143   | 8.233    | 0.090  |
| 50                       | 802      | 8.298   | 8.408    | 0.110  |
| 50                       | 61       | 8.227   | 8.338    | 0.111  |
| 55                       | 795      | 8.210   | 8.270    | 0.060  |
| 55                       | 921      | 8.173   | 8.251    | 0.078  |
| 55                       | 741      | 8.192   | 8.235    | 0.043  |
| 55                       | 809      | 8.164   | 8.255    | 0.091  |
| 55                       | 804      | 8.237   | 8.309    | 0.072  |
| 100                      | 449      | 8.285   | 8.436    | 0.151  |
| 100                      | 541      | 8.215   | 8.373    | 0.158  |
| 100                      | 476      | 8.145   | 8.357    | 0.212  |
| 100                      | 45       | 8.165   | 8.354    | 0.189  |
| 100                      | 642      | 8.176   | 8.363    | 0.187  |
| 105                      | 1036     | 8.262   | 8.381    | 0.119  |
| 105                      | 1038     | 8.135   | 8.351    | 0.216  |
| 105                      | 203      | 8.154   | 8.278    | 0.124  |
| 105                      | 1029     | 8.160   | 8.311    | 0.151  |
| 105                      | 1027     | 8.197   | 8.312    | 0.115  |
| 105                      | Max      | 8.319   | 8.436    | 0.216  |
| 105                      | Average  | 8.192   | 8.259    | 0.067  |
| 105                      | Min      | 8.067   | 8.088    | -0.006 |
| 105                      | Std Dev  | 0.060   | 0.079    | 0.058  |



| 13.17_OUTA_RISE_1MHz_12V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 16.5   | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 4      | ns     |        |        |        |        |        |        |        |        |        |
| krad                     | 0      | ns     |        |        |        |        |        |        |        |        |        |
| LL                       | 4.000  | 4.000  | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| Min                      | 8.202  | 8.102  | 8.161  | 8.118  | 8.088  | 8.225  | 8.184  | 8.172  | 8.235  | 8.354  | 8.278  |
| Average                  | 8.252  | 8.186  | 8.201  | 8.247  | 8.205  | 8.266  | 8.232  | 8.293  | 8.264  | 8.377  | 8.327  |
| Max                      | 8.324  | 8.239  | 8.249  | 8.355  | 8.286  | 8.368  | 8.357  | 8.408  | 8.309  | 8.436  | 8.381  |
| UL                       | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

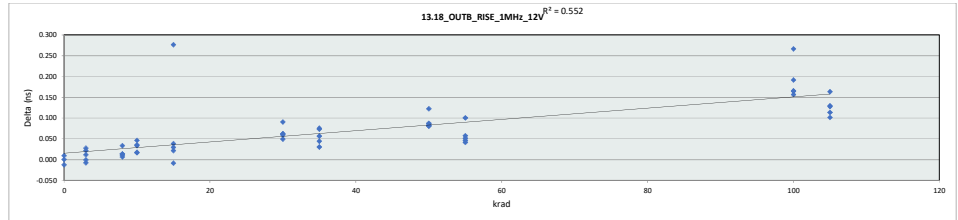


# HDR TID Report

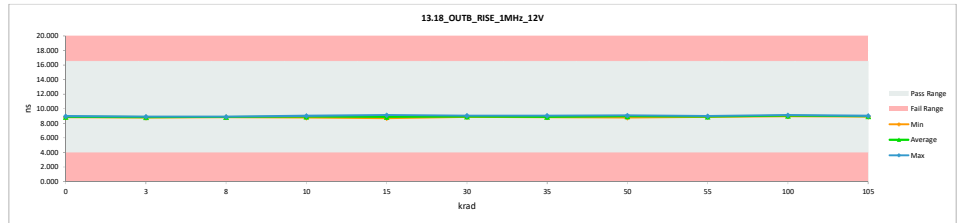
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.18_OUTB_RISE_1MHz_12V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     | ns       | ns      |          |        |
| Max Limit                | 16.5     | 16.5    |          |        |
| Min Limit                | 4        | 4       |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 9.001   | 8.989    | -0.012 |
| 0                        | 726      | 8.865   | 8.875    | 0.010  |
| 0                        | 791      | 8.846   | 8.847    | 0.001  |
| 3                        | 689      | 8.896   | 8.918    | 0.022  |
| 3                        | 688      | 8.876   | 8.869    | -0.007 |
| 3                        | 700      | 8.768   | 8.796    | 0.028  |
| 3                        | 482      | 8.874   | 8.874    | 0.000  |
| 3                        | 1033     | 8.839   | 8.851    | 0.012  |
| 8                        | 442      | 8.846   | 8.880    | 0.034  |
| 8                        | 699      | 8.879   | 8.886    | 0.007  |
| 8                        | 344      | 8.841   | 8.852    | 0.011  |
| 8                        | 355      | 8.826   | 8.840    | 0.014  |
| 8                        | 750      | 8.894   | 8.908    | 0.014  |
| 10                       | 537      | 9.016   | 9.033    | 0.017  |
| 10                       | 396      | 8.933   | 8.951    | 0.018  |
| 10                       | 521      | 8.846   | 8.880    | 0.034  |
| 10                       | 535      | 8.951   | 8.987    | 0.036  |
| 10                       | 526      | 8.763   | 8.810    | 0.047  |
| 15                       | 540      | 8.850   | 9.127    | 0.277  |
| 15                       | 387      | 8.901   | 8.940    | 0.039  |
| 15                       | 787      | 8.732   | 8.724    | -0.008 |
| 15                       | 1042     | 8.931   | 8.961    | 0.030  |
| 15                       | 483      | 8.789   | 8.811    | 0.022  |
| 30                       | 597      | 8.957   | 9.048    | 0.091  |
| 30                       | 853      | 8.825   | 8.885    | 0.060  |
| 30                       | 416      | 8.858   | 8.921    | 0.063  |
| 30                       | 949      | 8.848   | 8.898    | 0.050  |
| 30                       | 221      | 8.825   | 8.887    | 0.062  |
| 35                       | 538      | 9.011   | 9.056    | 0.045  |
| 35                       | 164      | 8.825   | 8.901    | 0.076  |
| 35                       | 1018     | 8.834   | 8.891    | 0.057  |
| 35                       | 462      | 8.808   | 8.882    | 0.074  |
| 35                       | 1032     | 8.803   | 8.834    | 0.031  |
| 50                       | 566      | 8.900   | 8.988    | 0.088  |
| 50                       | 197      | 8.724   | 8.806    | 0.082  |
| 50                       | 793      | 8.796   | 8.880    | 0.084  |
| 50                       | 802      | 8.968   | 9.091    | 0.123  |
| 50                       | 61       | 8.917   | 8.998    | 0.081  |
| 55                       | 795      | 8.912   | 8.964    | 0.052  |
| 55                       | 921      | 8.842   | 8.900    | 0.058  |
| 55                       | 741      | 8.858   | 8.905    | 0.047  |
| 55                       | 809      | 8.861   | 8.903    | 0.042  |
| 55                       | 804      | 8.897   | 8.998    | 0.101  |
| 100                      | 449      | 8.965   | 9.131    | 0.166  |
| 100                      | 541      | 8.893   | 9.058    | 0.165  |
| 100                      | 476      | 8.820   | 9.012    | 0.192  |
| 100                      | 45       | 8.831   | 8.988    | 0.157  |
| 100                      | 642      | 8.785   | 9.052    | 0.267  |
| 105                      | 1036     | 8.909   | 9.037    | 0.128  |
| 105                      | 1038     | 8.825   | 8.989    | 0.164  |
| 105                      | 203      | 8.788   | 8.918    | 0.130  |
| 105                      | 1029     | 8.806   | 8.920    | 0.114  |
| 105                      | 1027     | 8.843   | 8.945    | 0.102  |
| 105                      | Max      | 9.016   | 9.131    | 0.277  |
| 105                      | Average  | 8.862   | 8.930    | 0.068  |
| 105                      | Min      | 8.724   | 8.724    | -0.012 |
| 105                      | Std Dev  | 0.066   | 0.087    | 0.065  |



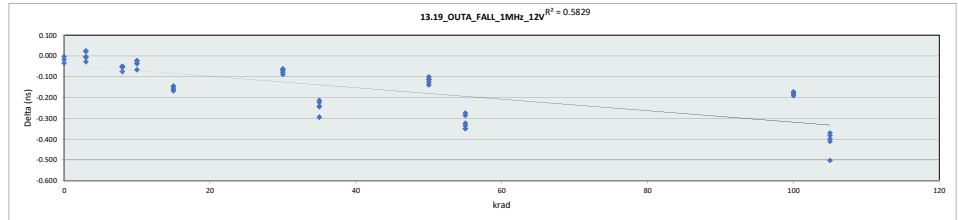
| 13.18_OUTB_RISE_1MHz_12V |      |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |      |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |      |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |      |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 16.5 | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit                | 4    | ns     |        |        |        |        |        |        |        |        |        |        |
|                          | krad |        |        |        |        |        |        |        |        |        |        |        |
|                          |      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       |      | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                      |      | 8.847  | 8.796  | 8.840  | 8.810  | 8.724  | 8.885  | 8.834  | 8.806  | 8.900  | 8.988  | 8.918  |
| Average                  |      | 8.904  | 8.862  | 8.873  | 8.932  | 8.913  | 8.928  | 8.913  | 8.953  | 8.934  | 9.048  | 8.962  |
| Max                      |      | 8.989  | 8.918  | 8.908  | 9.033  | 9.127  | 9.048  | 9.056  | 9.091  | 8.998  | 9.131  | 9.037  |
| UL                       |      | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |



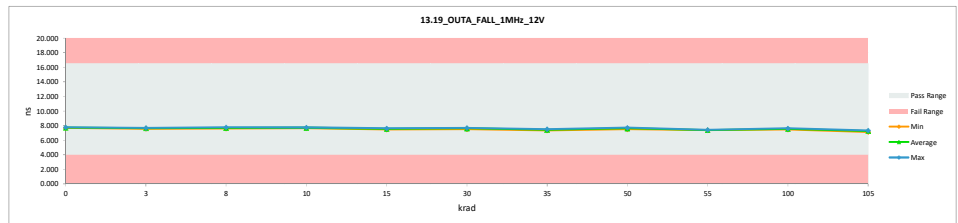
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.19_OUTA_FALL_1MHz_12V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 7.800   | 7.767    | -0.033 |
| 0                        | 726      | 7.710   | 7.694    | -0.016 |
| 0                        | 791      | 7.684   | 7.682    | -0.002 |
| 3                        | 689      | 7.628   | 7.654    | 0.026  |
| 3                        | 688      | 7.706   | 7.679    | -0.027 |
| 3                        | 700      | 7.572   | 7.566    | -0.006 |
| 3                        | 482      | 7.634   | 7.657    | 0.023  |
| 3                        | 1033     | 7.602   | 7.602    | -0.002 |
| 8                        | 442      | 7.814   | 7.765    | -0.049 |
| 8                        | 699      | 7.664   | 7.612    | -0.052 |
| 8                        | 344      | 7.711   | 7.662    | -0.049 |
| 8                        | 355      | 7.757   | 7.705    | -0.052 |
| 8                        | 750      | 7.708   | 7.634    | -0.074 |
| 10                       | 537      | 7.771   | 7.748    | -0.023 |
| 10                       | 396      | 7.780   | 7.759    | -0.021 |
| 10                       | 521      | 7.693   | 7.657    | -0.036 |
| 10                       | 535      | 7.782   | 7.717    | -0.065 |
| 10                       | 526      | 7.667   | 7.632    | -0.035 |
| 15                       | 540      | 7.690   | 7.526    | -0.164 |
| 15                       | 387      | 7.772   | 7.629    | -0.143 |
| 15                       | 787      | 7.616   | 7.461    | -0.155 |
| 15                       | 1042     | 7.733   | 7.567    | -0.166 |
| 15                       | 483      | 7.639   | 7.493    | -0.146 |
| 30                       | 597      | 7.740   | 7.680    | -0.060 |
| 30                       | 853      | 7.611   | 7.523    | -0.088 |
| 30                       | 416      | 7.747   | 7.684    | -0.063 |
| 30                       | 949      | 7.711   | 7.634    | -0.077 |
| 30                       | 221      | 7.695   | 7.625    | -0.070 |
| 35                       | 538      | 7.758   | 7.516    | -0.242 |
| 35                       | 164      | 7.632   | 7.411    | -0.221 |
| 35                       | 1018     | 7.606   | 7.364    | -0.242 |
| 35                       | 462      | 7.707   | 7.495    | -0.212 |
| 35                       | 1032     | 7.638   | 7.345    | -0.293 |
| 50                       | 566      | 7.763   | 7.651    | -0.112 |
| 50                       | 197      | 7.592   | 7.493    | -0.099 |
| 50                       | 793      | 7.704   | 7.593    | -0.111 |
| 50                       | 802      | 7.848   | 7.723    | -0.125 |
| 50                       | 61       | 7.748   | 7.610    | -0.138 |
| 55                       | 795      | 7.672   | 7.399    | -0.273 |
| 55                       | 921      | 7.674   | 7.389    | -0.285 |
| 55                       | 741      | 7.685   | 7.363    | -0.322 |
| 55                       | 809      | 7.772   | 7.423    | -0.349 |
| 55                       | 804      | 7.721   | 7.387    | -0.334 |
| 100                      | 449      | 7.766   | 7.583    | -0.183 |
| 100                      | 541      | 7.796   | 7.625    | -0.171 |
| 100                      | 476      | 7.690   | 7.500    | -0.190 |
| 100                      | 45       | 7.641   | 7.468    | -0.173 |
| 100                      | 642      | 7.672   | 7.496    | -0.176 |
| 105                      | 1036     | 7.703   | 7.321    | -0.382 |
| 105                      | 1038     | 7.632   | 7.131    | -0.501 |
| 105                      | 203      | 7.699   | 7.330    | -0.369 |
| 105                      | 1029     | 7.606   | 7.196    | -0.410 |
| 105                      | 1027     | 7.669   | 7.221    | -0.398 |
| 105                      | Max      | 7.848   | 7.767    | 0.026  |
|                          | Average  | 7.699   | 7.549    | -0.150 |
|                          | Min      | 7.572   | 7.131    | -0.501 |
|                          | Std Dev  | 0.064   | 0.151    | 0.129  |



| 13.19_OUTA_FALL_1MHz_12V |      |        |        |        |        |        |        |        |        |        |        |
|--------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |      |        |        |        |        |        |        |        |        |        |        |
| Tester                   |      |        |        |        |        |        |        |        |        |        |        |
| Test Number              |      |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 16.5 | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 4    | ns     |        |        |        |        |        |        |        |        |        |
|                          | krad |        |        |        |        |        |        |        |        |        |        |
| Average                  | LL   | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
|                          | Min  | 7.682  | 7.566  | 7.612  | 7.632  | 7.461  | 7.523  | 7.345  | 7.493  | 7.363  | 7.468  |
|                          | Max  | 7.714  | 7.632  | 7.676  | 7.703  | 7.535  | 7.629  | 7.426  | 7.614  | 7.392  | 7.534  |
|                          | UL   | 7.767  | 7.679  | 7.765  | 7.759  | 7.629  | 7.684  | 7.516  | 7.723  | 7.423  | 7.625  |
|                          | UL   | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

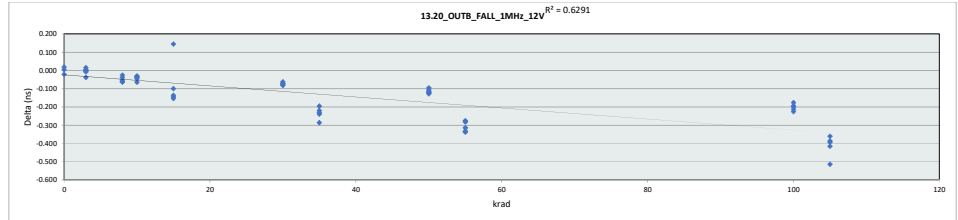


# HDR TID Report

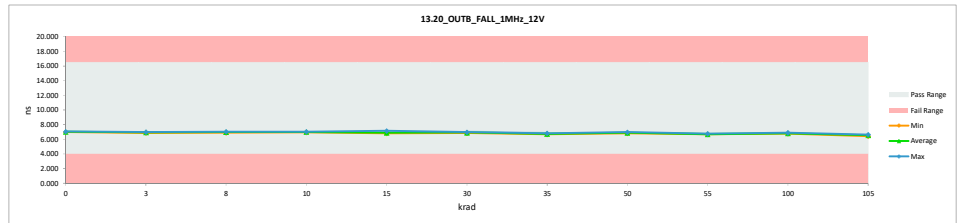
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.20_OUTB_FALL_1MHZ_12V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     | ns       | ns      |          |        |
| Max Limit                | 16.5     | 16.5    |          |        |
| Min Limit                | 4        | 4       |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 7.076   | 7.056    | -0.020 |
| 0                        | 726      | 7.005   | 7.011    | 0.006  |
| 0                        | 791      | 6.963   | 6.983    | 0.020  |
| 3                        | 689      | 6.985   | 6.948    | -0.037 |
| 3                        | 688      | 6.995   | 6.999    | 0.004  |
| 3                        | 700      | 6.880   | 6.884    | 0.004  |
| 3                        | 482      | 6.956   | 6.973    | 0.017  |
| 3                        | 1033     | 6.930   | 6.932    | -0.006 |
| 8                        | 442      | 7.085   | 7.048    | -0.037 |
| 8                        | 699      | 6.926   | 6.902    | -0.024 |
| 8                        | 344      | 6.991   | 6.940    | -0.051 |
| 8                        | 355      | 7.047   | 6.985    | -0.062 |
| 8                        | 730      | 7.026   | 6.965    | -0.061 |
| 10                       | 537      | 7.039   | 7.045    | -0.033 |
| 10                       | 396      | 7.058   | 7.021    | -0.037 |
| 10                       | 521      | 7.004   | 6.941    | -0.063 |
| 10                       | 535      | 7.083   | 7.038    | -0.045 |
| 10                       | 526      | 6.975   | 6.946    | -0.029 |
| 15                       | 540      | 7.005   | 7.151    | 0.146  |
| 15                       | 387      | 7.023   | 6.888    | -0.135 |
| 15                       | 787      | 6.927   | 6.829    | -0.098 |
| 15                       | 1042     | 7.013   | 6.870    | -0.143 |
| 15                       | 483      | 6.960   | 6.808    | -0.152 |
| 30                       | 597      | 7.034   | 6.964    | -0.070 |
| 30                       | 853      | 6.933   | 6.845    | -0.088 |
| 30                       | 416      | 7.033   | 6.972    | -0.061 |
| 30                       | 949      | 6.993   | 6.912    | -0.081 |
| 30                       | 221      | 6.998   | 6.923    | -0.075 |
| 35                       | 538      | 7.050   | 6.831    | -0.219 |
| 35                       | 164      | 6.976   | 6.746    | -0.230 |
| 35                       | 1018     | 6.930   | 6.692    | -0.238 |
| 35                       | 462      | 6.980   | 6.786    | -0.194 |
| 35                       | 1032     | 6.957   | 6.672    | -0.285 |
| 50                       | 566      | 7.025   | 6.908    | -0.117 |
| 50                       | 197      | 6.907   | 6.813    | -0.094 |
| 50                       | 793      | 6.968   | 6.850    | -0.118 |
| 50                       | 802      | 7.079   | 6.973    | -0.106 |
| 50                       | 61       | 7.078   | 6.951    | -0.127 |
| 55                       | 795      | 6.955   | 6.681    | -0.274 |
| 55                       | 921      | 6.985   | 6.704    | -0.281 |
| 55                       | 741      | 7.022   | 6.691    | -0.331 |
| 55                       | 809      | 7.073   | 6.760    | -0.313 |
| 55                       | 804      | 7.025   | 6.688    | -0.337 |
| 100                      | 449      | 7.083   | 6.871    | -0.212 |
| 100                      | 541      | 7.067   | 6.892    | -0.175 |
| 100                      | 476      | 6.985   | 6.787    | -0.198 |
| 100                      | 45       | 6.986   | 6.794    | -0.192 |
| 100                      | 642      | 7.021   | 6.797    | -0.224 |
| 105                      | 1036     | 7.006   | 6.647    | -0.359 |
| 105                      | 1038     | 6.937   | 6.424    | -0.513 |
| 105                      | 203      | 7.010   | 6.625    | -0.385 |
| 105                      | 1029     | 6.916   | 6.502    | -0.414 |
| 105                      | 1027     | 6.977   | 6.585    | -0.392 |
| 105                      | Max      | 7.085   | 7.151    | 0.146  |
| 105                      | Average  | 6.999   | 6.858    | -0.142 |
| 105                      | Min      | 6.880   | 6.424    | -0.513 |
| 105                      | Std Dev  | 0.052   | 0.149    | 0.136  |



| 13.20_OUTB_FALL_1MHZ_12V |      |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |      |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |      |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |      |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 16.5 | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit                | 4    | ns     |        |        |        |        |        |        |        |        |        |        |
|                          | krad |        |        |        |        |        |        |        |        |        |        |        |
|                          |      | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       |      | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                      |      | 6.983  | 6.884  | 6.902  | 6.941  | 6.808  | 6.845  | 6.672  | 6.813  | 6.681  | 6.787  | 6.424  |
| Average                  |      | 7.017  | 6.947  | 6.968  | 6.998  | 6.909  | 6.923  | 6.745  | 6.899  | 6.705  | 6.828  | 6.557  |
| Max                      |      | 7.056  | 6.999  | 7.048  | 7.045  | 7.151  | 6.972  | 6.831  | 6.973  | 6.760  | 6.892  | 6.647  |
| UL                       |      | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

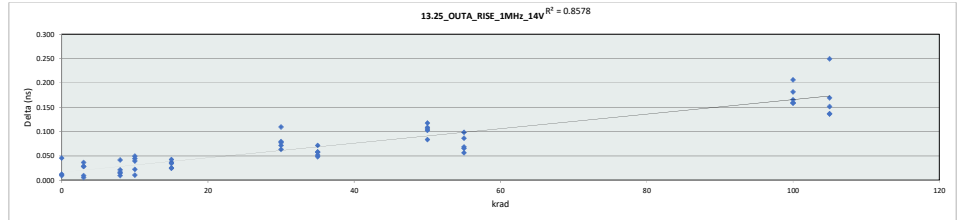


# HDR TID Report

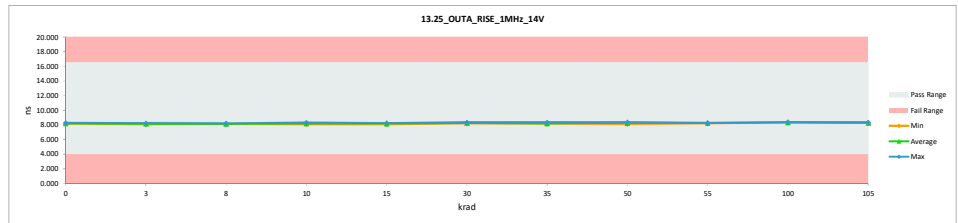
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.25_OUTA_RISE_1MHz_14V |          |         |          |       |
|--------------------------|----------|---------|----------|-------|
| Test Site                |          |         |          |       |
| Tester                   |          |         |          |       |
| Test Number              |          |         |          |       |
| Unit                     |          |         |          |       |
| Max Limit                |          |         |          |       |
| Min Limit                |          |         |          |       |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta |
| 0                        | 552      | 8.279   | 8.292    | 0.013 |
| 0                        | 726      | 8.152   | 8.198    | 0.046 |
| 0                        | 791      | 8.166   | 8.176    | 0.010 |
| 3                        | 689      | 8.203   | 8.232    | 0.029 |
| 3                        | 688      | 8.145   | 8.151    | 0.006 |
| 3                        | 700      | 8.065   | 8.075    | 0.010 |
| 3                        | 482      | 8.163   | 8.200    | 0.037 |
| 3                        | 1033     | 8.146   | 8.170    | 0.029 |
| 8                        | 442      | 8.147   | 8.162    | 0.015 |
| 8                        | 699      | 8.161   | 8.203    | 0.042 |
| 8                        | 344      | 8.141   | 8.158    | 0.017 |
| 8                        | 355      | 8.109   | 8.131    | 0.022 |
| 8                        | 750      | 8.206   | 8.216    | 0.010 |
| 10                       | 537      | 8.296   | 8.336    | 0.040 |
| 10                       | 396      | 8.214   | 8.259    | 0.045 |
| 10                       | 521      | 8.138   | 8.188    | 0.050 |
| 10                       | 535      | 8.242   | 8.253    | 0.011 |
| 10                       | 526      | 8.076   | 8.099    | 0.023 |
| 15                       | 540      | 8.150   | 8.187    | 0.037 |
| 15                       | 387      | 8.221   | 8.247    | 0.026 |
| 15                       | 787      | 8.047   | 8.082    | 0.035 |
| 15                       | 1042     | 8.237   | 8.262    | 0.025 |
| 15                       | 483      | 8.105   | 8.148    | 0.043 |
| 30                       | 597      | 8.247   | 8.357    | 0.110 |
| 30                       | 853      | 8.131   | 8.195    | 0.064 |
| 30                       | 416      | 8.170   | 8.248    | 0.078 |
| 30                       | 949      | 8.152   | 8.224    | 0.072 |
| 30                       | 221      | 8.136   | 8.216    | 0.080 |
| 35                       | 538      | 8.302   | 8.354    | 0.052 |
| 35                       | 164      | 8.117   | 8.189    | 0.072 |
| 35                       | 1018     | 8.146   | 8.205    | 0.059 |
| 35                       | 462      | 8.123   | 8.172    | 0.049 |
| 35                       | 1032     | 8.124   | 8.182    | 0.058 |
| 50                       | 566      | 8.194   | 8.303    | 0.109 |
| 50                       | 197      | 8.044   | 8.128    | 0.084 |
| 50                       | 793      | 8.107   | 8.210    | 0.103 |
| 50                       | 802      | 8.266   | 8.384    | 0.118 |
| 50                       | 61       | 8.217   | 8.323    | 0.106 |
| 55                       | 795      | 8.147   | 8.246    | 0.099 |
| 55                       | 921      | 8.145   | 8.211    | 0.066 |
| 55                       | 741      | 8.160   | 8.217    | 0.057 |
| 55                       | 809      | 8.138   | 8.225    | 0.087 |
| 55                       | 804      | 8.213   | 8.282    | 0.069 |
| 100                      | 449      | 8.235   | 8.394    | 0.159 |
| 100                      | 541      | 8.197   | 8.357    | 0.160 |
| 100                      | 476      | 8.137   | 8.344    | 0.207 |
| 100                      | 45       | 8.136   | 8.318    | 0.182 |
| 100                      | 642      | 8.172   | 8.338    | 0.166 |
| 105                      | 1036     | 8.213   | 8.350    | 0.137 |
| 105                      | 1038     | 8.106   | 8.356    | 0.250 |
| 105                      | 203      | 8.106   | 8.258    | 0.152 |
| 105                      | 1029     | 8.126   | 8.296    | 0.170 |
| 105                      | 1027     | 8.150   | 8.287    | 0.137 |
| 105                      | Max      | 8.302   | 8.394    | 0.250 |
| 105                      | Average  | 8.163   | 8.238    | 0.074 |
| 105                      | Min      | 8.044   | 8.075    | 0.006 |
| 105                      | Std Dev  | 0.059   | 0.080    | 0.057 |



| 13.25_OUTA_RISE_1MHz_14V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 16.5   | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 4      | ns     |        |        |        |        |        |        |        |        |        |
|                          | krad   |        | 0      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                      | 8.176  | 8.075  | 8.131  | 8.099  | 8.082  | 8.195  | 8.172  | 8.128  | 8.211  | 8.318  | 8.258  |
| Average                  | 8.222  | 8.166  | 8.174  | 8.227  | 8.185  | 8.248  | 8.220  | 8.270  | 8.236  | 8.350  | 8.309  |
| Max                      | 8.292  | 8.232  | 8.216  | 8.336  | 8.262  | 8.357  | 8.354  | 8.384  | 8.282  | 8.394  | 8.356  |
| UL                       | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

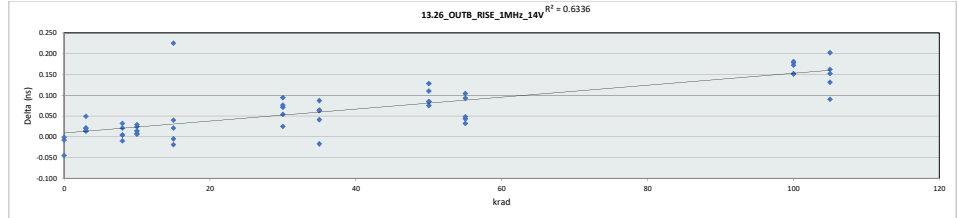


# HDR TID Report

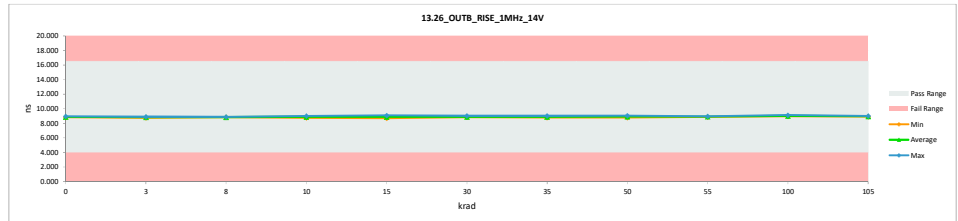
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.26_OUTB_RISE_1MHZ_14V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE HDR | POST HDR | Delta  |
| 0                        | 552      | 9.006   | 8.962    | -0.044 |
| 0                        | 726      | 8.859   | 8.859    | 0.000  |
| 0                        | 791      | 8.839   | 8.832    | -0.007 |
| 3                        | 689      | 8.858   | 8.908    | 0.050  |
| 3                        | 688      | 8.839   | 8.854    | 0.015  |
| 3                        | 700      | 8.753   | 8.768    | 0.015  |
| 3                        | 482      | 8.858   | 8.880    | 0.022  |
| 3                        | 1033     | 8.835   | 8.835    | 0.022  |
| 8                        | 442      | 8.850   | 8.855    | 0.005  |
| 8                        | 699      | 8.857   | 8.879    | 0.022  |
| 8                        | 344      | 8.850   | 8.841    | -0.009 |
| 8                        | 355      | 8.801   | 8.834    | 0.033  |
| 8                        | 750      | 8.880   | 8.885    | 0.005  |
| 10                       | 937      | 9.010   | 9.017    | 0.007  |
| 10                       | 396      | 8.919   | 8.934    | 0.015  |
| 10                       | 521      | 8.834   | 8.864    | 0.030  |
| 10                       | 535      | 8.939   | 8.948    | 0.009  |
| 10                       | 526      | 8.756   | 8.781    | 0.025  |
| 15                       | 540      | 8.863   | 9.089    | 0.226  |
| 15                       | 387      | 8.873   | 8.914    | 0.041  |
| 15                       | 787      | 8.726   | 8.708    | -0.018 |
| 15                       | 1042     | 8.942   | 8.938    | -0.004 |
| 15                       | 483      | 8.793   | 8.815    | 0.022  |
| 30                       | 597      | 8.936   | 9.031    | 0.095  |
| 30                       | 853      | 8.797   | 8.852    | 0.055  |
| 30                       | 416      | 8.838   | 8.910    | 0.072  |
| 30                       | 949      | 8.846   | 8.872    | 0.026  |
| 30                       | 221      | 8.803   | 8.880    | 0.077  |
| 35                       | 538      | 8.992   | 9.034    | 0.042  |
| 35                       | 164      | 8.826   | 8.890    | 0.064  |
| 35                       | 1018     | 8.834   | 8.899    | 0.065  |
| 35                       | 462      | 8.787   | 8.875    | 0.088  |
| 35                       | 1032     | 8.800   | 8.784    | -0.016 |
| 50                       | 566      | 8.863   | 8.992    | 0.129  |
| 50                       | 197      | 8.712   | 8.798    | 0.086  |
| 50                       | 793      | 8.779   | 8.855    | 0.076  |
| 50                       | 802      | 8.954   | 9.065    | 0.111  |
| 50                       | 61       | 8.881   | 8.966    | 0.085  |
| 55                       | 795      | 8.841   | 8.946    | 0.105  |
| 55                       | 921      | 8.828   | 8.922    | 0.094  |
| 55                       | 741      | 8.845   | 8.878    | 0.033  |
| 55                       | 809      | 8.844   | 8.888    | 0.044  |
| 55                       | 804      | 8.920   | 8.969    | 0.049  |
| 100                      | 449      | 8.954   | 9.127    | 0.173  |
| 100                      | 541      | 8.883   | 9.036    | 0.153  |
| 100                      | 476      | 8.809   | 8.988    | 0.179  |
| 100                      | 45       | 8.827   | 8.979    | 0.152  |
| 100                      | 842      | 8.947   | 9.029    | 0.082  |
| 105                      | 1036     | 8.881   | 9.013    | 0.132  |
| 105                      | 1038     | 8.797   | 9.000    | 0.203  |
| 105                      | 203      | 8.770   | 8.933    | 0.163  |
| 105                      | 1029     | 8.763   | 8.916    | 0.153  |
| 105                      | 1027     | 8.845   | 8.936    | 0.091  |
| 105                      | Max      | 9.010   | 9.127    | 0.226  |
|                          | Average  | 8.849   | 8.914    | 0.065  |
|                          | Min      | 8.712   | 8.708    | -0.044 |
|                          | Std Dev  | 0.066   | 0.086    | 0.064  |



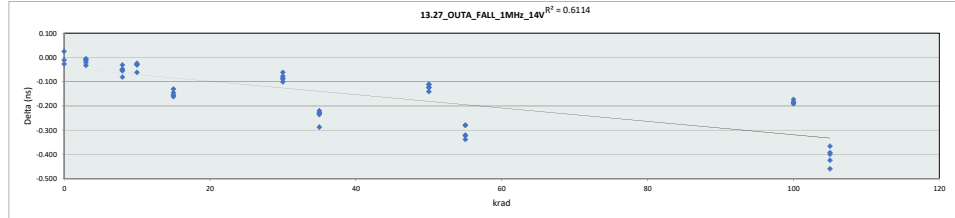
| 13.26_OUTB_RISE_1MHZ_14V |      |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |      |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |      |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |      |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 16.5 | ns     |        |        |        |        |        |        |        |        |        |        |
| Min Limit                | 4    | ns     |        |        |        |        |        |        |        |        |        |        |
|                          | krad |        |        |        |        |        |        |        |        |        |        |        |
|                          |      | 4.000  | 4.000  | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       |      | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                      |      | 8.832  | 8.768  | 8.834  | 8.781  | 8.708  | 8.852  | 8.784  | 8.798  | 8.878  | 8.979  | 8.916  |
| Average                  |      | 8.884  | 8.849  | 8.859  | 8.909  | 8.893  | 8.909  | 8.896  | 8.935  | 8.921  | 9.032  | 8.960  |
| Max                      |      | 8.962  | 8.908  | 8.885  | 9.017  | 9.089  | 9.031  | 9.034  | 9.065  | 8.969  | 9.127  | 9.013  |
| UL                       |      | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |



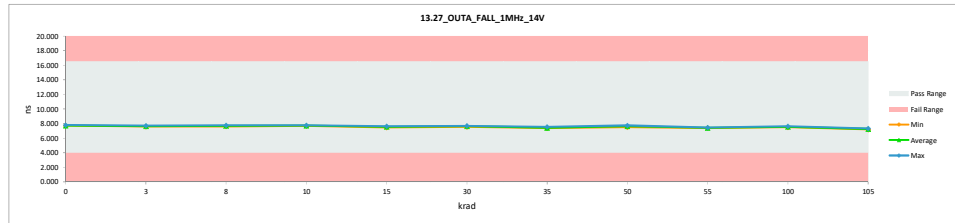
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.27_OUTA_FALL_1MHz_14V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     |          |         |          |        |
| Max Limit                |          |         |          |        |
| Min Limit                |          |         |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 7.826   | 7.800    | -0.026 |
| 0                        | 726      | 7.728   | 7.718    | -0.010 |
| 0                        | 791      | 7.692   | 7.718    | 0.026  |
| 3                        | 689      | 7.677   | 7.666    | -0.011 |
| 3                        | 688      | 7.744   | 7.712    | -0.032 |
| 3                        | 700      | 7.592   | 7.583    | -0.009 |
| 3                        | 482      | 7.671   | 7.651    | -0.020 |
| 3                        | 1033     | 7.630   | 7.626    | -0.004 |
| 8                        | 442      | 7.823   | 7.775    | -0.048 |
| 8                        | 699      | 7.656   | 7.626    | -0.030 |
| 8                        | 344      | 7.727   | 7.673    | -0.054 |
| 8                        | 355      | 7.771   | 7.723    | -0.048 |
| 8                        | 790      | 7.737   | 7.657    | -0.080 |
| 10                       | 537      | 7.794   | 7.767    | -0.027 |
| 10                       | 396      | 7.815   | 7.787    | -0.028 |
| 10                       | 521      | 7.709   | 7.686    | -0.023 |
| 10                       | 535      | 7.800   | 7.740    | -0.060 |
| 10                       | 526      | 7.693   | 7.663    | -0.030 |
| 15                       | 940      | 7.720   | 7.559    | -0.161 |
| 15                       | 387      | 7.800   | 7.656    | -0.144 |
| 15                       | 787      | 7.635   | 7.479    | -0.156 |
| 15                       | 1042     | 7.738   | 7.585    | -0.153 |
| 15                       | 483      | 7.649   | 7.520    | -0.129 |
| 30                       | 597      | 7.761   | 7.685    | -0.076 |
| 30                       | 853      | 7.633   | 7.549    | -0.084 |
| 30                       | 416      | 7.758   | 7.698    | -0.060 |
| 30                       | 949      | 7.732   | 7.632    | -0.100 |
| 30                       | 221      | 7.715   | 7.627    | -0.088 |
| 35                       | 538      | 7.783   | 7.549    | -0.234 |
| 35                       | 164      | 7.650   | 7.431    | -0.219 |
| 35                       | 1018     | 7.619   | 7.389    | -0.230 |
| 35                       | 462      | 7.721   | 7.495    | -0.226 |
| 35                       | 1032     | 7.656   | 7.370    | -0.286 |
| 50                       | 566      | 7.799   | 7.676    | -0.123 |
| 50                       | 197      | 7.627   | 7.505    | -0.122 |
| 50                       | 793      | 7.714   | 7.604    | -0.110 |
| 50                       | 802      | 7.858   | 7.748    | -0.110 |
| 50                       | 61       | 7.767   | 7.627    | -0.140 |
| 55                       | 795      | 7.695   | 7.417    | -0.278 |
| 55                       | 921      | 7.689   | 7.410    | -0.279 |
| 55                       | 741      | 7.714   | 7.392    | -0.322 |
| 55                       | 809      | 7.787   | 7.450    | -0.337 |
| 55                       | 804      | 7.742   | 7.423    | -0.319 |
| 100                      | 449      | 7.789   | 7.605    | -0.184 |
| 100                      | 541      | 7.826   | 7.637    | -0.189 |
| 100                      | 476      | 7.719   | 7.530    | -0.189 |
| 100                      | 45       | 7.668   | 7.486    | -0.182 |
| 100                      | 642      | 7.692   | 7.520    | -0.172 |
| 105                      | 1036     | 7.719   | 7.328    | -0.391 |
| 105                      | 1038     | 7.641   | 7.183    | -0.458 |
| 105                      | 203      | 7.712   | 7.347    | -0.365 |
| 105                      | 1029     | 7.628   | 7.205    | -0.423 |
| 105                      | 1027     | 7.676   | 7.278    | -0.398 |
| 105                      | Max      | 7.858   | 7.800    | 0.026  |
| 105                      | Average  | 7.719   | 7.569    | -0.150 |
| 105                      | Min      | 7.592   | 7.183    | -0.458 |
| 105                      | Std Dev  | 0.064   | 0.150    | 0.125  |



| 13.27_OUTA_FALL_1MHz_14V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 16.5   | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 4      | ns     |        |        |        |        |        |        |        |        |        |
| krad                     |        |        | 0      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                      | 7.718  | 7.583  | 7.626  | 7.663  | 7.479  | 7.549  | 7.370  | 7.505  | 7.392  | 7.486  | 7.183  |
| Average                  | 7.745  | 7.648  | 7.691  | 7.729  | 7.560  | 7.638  | 7.447  | 7.632  | 7.418  | 7.556  | 7.268  |
| Max                      | 7.800  | 7.712  | 7.775  | 7.787  | 7.656  | 7.698  | 7.549  | 7.748  | 7.450  | 7.637  | 7.347  |
| UL                       | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |

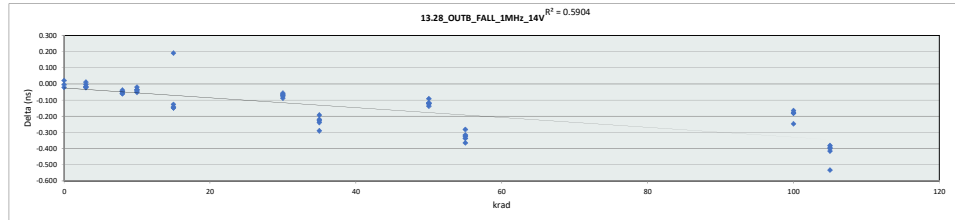


# HDR TID Report

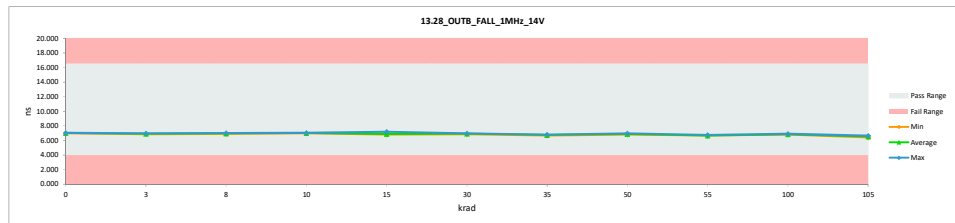
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.28_OUTB_FALL_1MHz_14V |          |         |          |        |
|--------------------------|----------|---------|----------|--------|
| Test Site                |          |         |          |        |
| Tester                   |          |         |          |        |
| Test Number              |          |         |          |        |
| Unit                     | ns       | ns      |          |        |
| Max Limit                | 16.5     | 16.5    |          |        |
| Min Limit                | 4        | 4       |          |        |
| krad                     | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                        | 552      | 7.072   | 7.052    | -0.020 |
| 0                        | 726      | 7.016   | 7.013    | -0.003 |
| 0                        | 791      | 6.968   | 6.990    | 0.022  |
| 3                        | 689      | 6.959   | 6.942    | -0.017 |
| 3                        | 688      | 7.007   | 6.986    | -0.021 |
| 3                        | 700      | 6.889   | 6.874    | -0.015 |
| 3                        | 482      | 6.970   | 6.968    | -0.002 |
| 3                        | 1033     | 6.920   | 6.933    | 0.013  |
| 8                        | 442      | 7.082   | 7.035    | -0.047 |
| 8                        | 699      | 6.933   | 6.897    | -0.036 |
| 8                        | 344      | 6.995   | 6.936    | -0.059 |
| 8                        | 355      | 7.043   | 6.999    | -0.044 |
| 8                        | 750      | 7.026   | 6.968    | -0.058 |
| 10                       | 537      | 7.093   | 7.032    | -0.061 |
| 10                       | 396      | 7.063   | 7.029    | -0.034 |
| 10                       | 521      | 7.005   | 6.970    | -0.035 |
| 10                       | 535      | 7.082   | 7.040    | -0.042 |
| 10                       | 526      | 6.983   | 6.965    | -0.018 |
| 15                       | 540      | 6.995   | 7.187    | 0.192  |
| 15                       | 387      | 7.043   | 6.918    | -0.125 |
| 15                       | 787      | 6.955   | 6.815    | -0.140 |
| 15                       | 1042     | 7.020   | 6.874    | -0.146 |
| 15                       | 483      | 6.961   | 6.814    | -0.147 |
| 30                       | 597      | 7.038   | 6.976    | -0.062 |
| 30                       | 853      | 6.926   | 6.840    | -0.086 |
| 30                       | 416      | 7.023   | 6.968    | -0.055 |
| 30                       | 949      | 6.987   | 6.915    | -0.072 |
| 30                       | 221      | 7.002   | 6.930    | -0.072 |
| 35                       | 538      | 7.030   | 6.812    | -0.218 |
| 35                       | 164      | 6.985   | 6.759    | -0.226 |
| 35                       | 1018     | 6.921   | 6.684    | -0.237 |
| 35                       | 462      | 6.991   | 6.800    | -0.191 |
| 35                       | 1032     | 6.981   | 6.693    | -0.288 |
| 50                       | 566      | 7.019   | 6.898    | -0.121 |
| 50                       | 197      | 6.913   | 6.823    | -0.090 |
| 50                       | 793      | 6.965   | 6.845    | -0.120 |
| 50                       | 802      | 7.090   | 6.975    | -0.115 |
| 50                       | 61       | 7.078   | 6.942    | -0.136 |
| 55                       | 795      | 6.975   | 6.695    | -0.280 |
| 55                       | 921      | 6.998   | 6.684    | -0.314 |
| 55                       | 741      | 7.018   | 6.655    | -0.363 |
| 55                       | 809      | 7.078   | 6.757    | -0.321 |
| 55                       | 804      | 7.009   | 6.674    | -0.335 |
| 100                      | 449      | 7.071   | 6.908    | -0.163 |
| 100                      | 541      | 7.070   | 6.895    | -0.175 |
| 100                      | 476      | 6.983   | 6.803    | -0.180 |
| 100                      | 45       | 6.977   | 6.798    | -0.179 |
| 100                      | 642      | 7.049   | 6.804    | -0.245 |
| 105                      | 1036     | 7.012   | 6.633    | -0.379 |
| 105                      | 1038     | 6.935   | 6.404    | -0.531 |
| 105                      | 203      | 7.038   | 6.648    | -0.390 |
| 105                      | 1029     | 6.925   | 6.511    | -0.414 |
| 105                      | 1027     | 6.978   | 6.579    | -0.399 |
| 105                      | Max      | 7.090   | 7.187    | 0.192  |
| 105                      | Average  | 7.003   | 6.859    | -0.143 |
| 105                      | Min      | 6.889   | 6.404    | -0.531 |
| 105                      | Std Dev  | 0.051   | 0.153    | 0.141  |



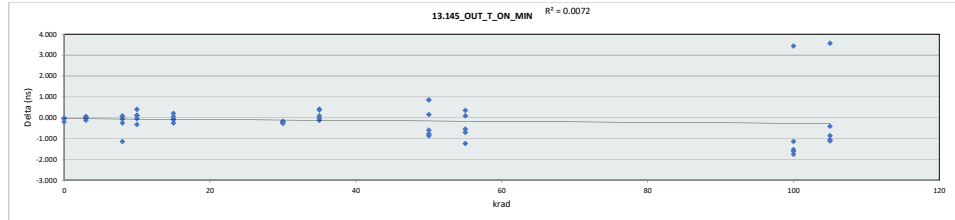
| 13.28_OUTB_FALL_1MHz_14V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                |        |        |        |        |        |        |        |        |        |        |        |
| Tester                   |        |        |        |        |        |        |        |        |        |        |        |
| Test Number              |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                | 16.5   | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit                | 4      | ns     |        |        |        |        |        |        |        |        |        |
| krad                     | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                       | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  | 4.000  |
| Min                      | 6.990  | 6.874  | 6.897  | 6.965  | 6.814  | 6.840  | 6.684  | 6.823  | 6.655  | 6.798  | 6.404  |
| Average                  | 7.018  | 6.941  | 6.967  | 7.007  | 6.922  | 6.926  | 6.750  | 6.897  | 6.693  | 6.842  | 6.555  |
| Max                      | 7.052  | 6.986  | 7.035  | 7.040  | 7.187  | 6.976  | 6.812  | 6.975  | 6.757  | 6.908  | 6.648  |
| UL                       | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 | 16.500 |



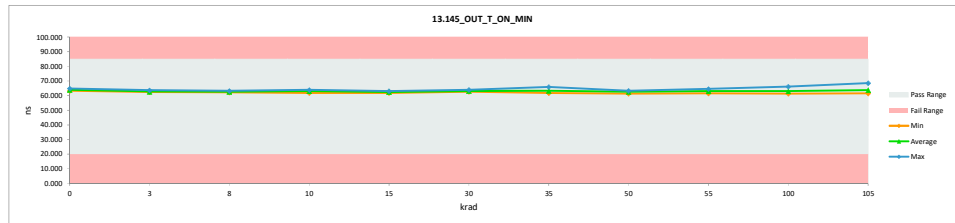
HDR TID Report  
TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.145_OUT_T_ON_MIN |          |         |          |        |
|---------------------|----------|---------|----------|--------|
| Test Site           |          |         |          |        |
| Tester              |          |         |          |        |
| Test Number         |          |         |          |        |
| Unit                | ns       | ns      |          |        |
| Max Limit           | 85       | 85      |          |        |
| Min Limit           | 20       | 20      |          |        |
| krad                | Serial # | PRE_HDR | POST_HDR | Delta  |
| 0                   | 552      | 63.485  | 63.297   | -0.188 |
| 0                   | 726      | 63.653  | 63.639   | -0.014 |
| 0                   | 791      | 64.902  | 64.884   | -0.018 |
| 3                   | 689      | 62.389  | 62.448   | 0.059  |
| 3                   | 688      | 62.464  | 62.353   | -0.111 |
| 3                   | 700      | 62.729  | 62.775   | 0.046  |
| 3                   | 482      | 62.643  | 62.622   | -0.021 |
| 3                   | 1033     | 63.611  | 63.658   | 0.047  |
| 8                   | 442      | 63.204  | 63.307   | 0.103  |
| 8                   | 699      | 62.208  | 62.156   | -0.052 |
| 8                   | 344      | 63.564  | 62.430   | -1.134 |
| 8                   | 355      | 62.464  | 62.521   | 0.057  |
| 8                   | 790      | 63.551  | 63.309   | -0.242 |
| 10                  | 537      | 64.132  | 63.839   | -0.313 |
| 10                  | 396      | 63.000  | 62.967   | -0.033 |
| 10                  | 521      | 63.792  | 63.916   | 0.124  |
| 10                  | 535      | 62.401  | 62.813   | 0.412  |
| 10                  | 526      | 61.673  | 61.798   | 0.125  |
| 15                  | 540      | 62.893  | 63.115   | 0.222  |
| 15                  | 387      | 62.210  | 62.121   | -0.089 |
| 15                  | 787      | 61.874  | 61.831   | -0.043 |
| 15                  | 1042     | 62.702  | 62.766   | 0.064  |
| 15                  | 483      | 63.162  | 62.916   | -0.246 |
| 30                  | 597      | 64.081  | 63.817   | -0.264 |
| 30                  | 853      | 62.839  | 62.669   | -0.170 |
| 30                  | 416      | 63.103  | 62.911   | -0.192 |
| 30                  | 949      | 64.162  | 63.987   | -0.175 |
| 30                  | 221      | 62.954  | 62.763   | -0.191 |
| 35                  | 538      | 62.999  | 62.979   | -0.020 |
| 35                  | 164      | 66.029  | 65.920   | -0.109 |
| 35                  | 1018     | 61.625  | 61.722   | 0.097  |
| 35                  | 462      | 62.180  | 62.594   | 0.414  |
| 35                  | 1032     | 62.878  | 63.267   | 0.389  |
| 50                  | 566      | 61.143  | 61.307   | 0.164  |
| 50                  | 197      | 62.969  | 62.382   | -0.587 |
| 50                  | 793      | 64.119  | 63.357   | -0.762 |
| 50                  | 802      | 63.615  | 62.764   | -0.851 |
| 50                  | 61       | 62.300  | 63.163   | 0.863  |
| 55                  | 795      | 64.457  | 63.924   | -0.533 |
| 55                  | 921      | 62.667  | 63.031   | 0.364  |
| 55                  | 741      | 64.482  | 64.581   | 0.099  |
| 55                  | 809      | 62.716  | 61.486   | -1.230 |
| 55                  | 804      | 62.994  | 62.298   | -0.696 |
| 100                 | 449      | 63.662  | 62.144   | -1.518 |
| 100                 | 541      | 63.473  | 61.727   | -1.746 |
| 100                 | 476      | 65.143  | 64.019   | -1.124 |
| 100                 | 45       | 62.709  | 66.161   | 3.452  |
| 100                 | 642      | 62.892  | 61.293   | -1.599 |
| 105                 | 1036     | 64.022  | 62.919   | -1.103 |
| 105                 | 1038     | 63.421  | 62.565   | -0.856 |
| 105                 | 203      | 62.510  | 61.455   | -1.055 |
| 105                 | 1029     | 64.330  | 63.930   | -0.400 |
| 105                 | 1027     | 64.925  | 68.508   | 3.583  |
| 105                 | Max      | 66.029  | 68.508   | 3.583  |
|                     | Average  | 63.210  | 63.078   | -0.132 |
|                     | Min      | 61.143  | 61.293   | -1.746 |
|                     | Std Dev  | 0.956   | 1.268    | 0.914  |



| 13.145_OUT_T_ON_MIN |        |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site           |        |        |        |        |        |        |        |        |        |        |        |
| Tester              |        |        |        |        |        |        |        |        |        |        |        |
| Test Number         |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit           | 85     | ns     |        |        |        |        |        |        |        |        |        |
| Min Limit           | 20     | ns     |        |        |        |        |        |        |        |        |        |
| krad                | 0      | 3      | 8      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                  | 20.000 | 20.000 | 20.000 | 20.000 | 20.000 | 20.000 | 20.000 | 20.000 | 20.000 | 20.000 | 20.000 |
| Min                 | 63.297 | 62.353 | 62.156 | 61.798 | 61.831 | 62.669 | 61.722 | 61.307 | 61.486 | 61.293 | 61.455 |
| Average             | 63.940 | 62.771 | 62.745 | 63.067 | 62.550 | 63.229 | 63.296 | 62.595 | 63.064 | 63.069 | 63.875 |
| Max                 | 64.884 | 63.658 | 63.309 | 63.916 | 63.115 | 63.987 | 65.920 | 63.357 | 64.581 | 66.161 | 68.508 |
| UL                  | 85.000 | 85.000 | 85.000 | 85.000 | 85.000 | 85.000 | 85.000 | 85.000 | 85.000 | 85.000 | 85.000 |

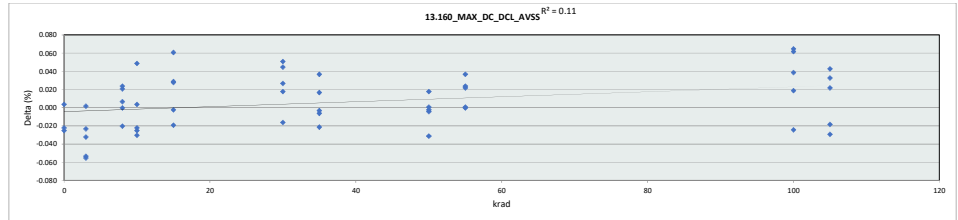


# HDR TID Report

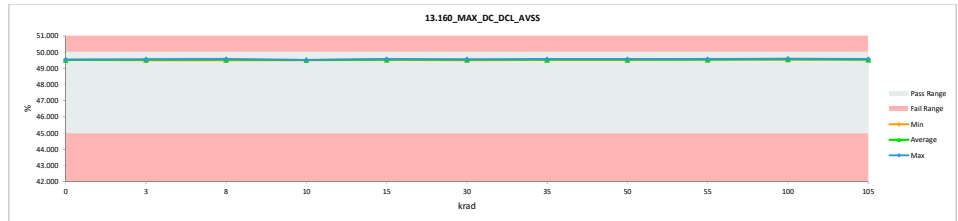
## TPS7H5004-SP QMLP

| krad(Si) | Description       |
|----------|-------------------|
| 0        | Control Units     |
| 3        | 3 krad Unbiased   |
| 8        | 3 krad Biased     |
| 10       | 10 krad Unbiased  |
| 15       | 10 krad Biased    |
| 30       | 30 krad Unbiased  |
| 35       | 30 krad Biased    |
| 50       | 50 krad Unbiased  |
| 55       | 50 krad Biased    |
| 100      | 100 krad Unbiased |
| 105      | 100 krad Biased   |

| 13.160_MAX_DC_DCL_AVSS |          |         |          |        |
|------------------------|----------|---------|----------|--------|
| Test Site              |          |         |          |        |
| Tester                 |          |         |          |        |
| Test Number            |          |         |          |        |
| Unit                   | %        | %       |          |        |
| Max Limit              | 50       | 50      |          |        |
| Min Limit              | 45       | 45      |          |        |
| krad                   | Serial # | PRE HDR | POST HDR | Delta  |
| 0                      | 552      | 49.512  | 49.516   | 0.004  |
| 0                      | 726      | 49.543  | 49.518   | -0.025 |
| 0                      | 791      | 49.556  | 49.534   | -0.022 |
| 3                      | 689      | 49.577  | 49.522   | -0.055 |
| 3                      | 688      | 49.543  | 49.511   | -0.032 |
| 3                      | 700      | 49.560  | 49.562   | 0.002  |
| 3                      | 482      | 49.557  | 49.504   | -0.053 |
| 3                      | 1033     | 49.527  | 49.534   | -0.023 |
| 8                      | 442      | 49.512  | 49.519   | 0.007  |
| 8                      | 699      | 49.547  | 49.571   | 0.024  |
| 8                      | 344      | 49.543  | 49.523   | -0.020 |
| 8                      | 355      | 49.499  | 49.499   | 0.000  |
| 8                      | 790      | 49.532  | 49.553   | 0.021  |
| 10                     | 537      | 49.538  | 49.513   | -0.025 |
| 10                     | 396      | 49.507  | 49.511   | 0.004  |
| 10                     | 521      | 49.538  | 49.508   | -0.030 |
| 10                     | 535      | 49.472  | 49.521   | 0.049  |
| 10                     | 526      | 49.524  | 49.502   | -0.022 |
| 15                     | 540      | 49.520  | 49.548   | 0.028  |
| 15                     | 387      | 49.554  | 49.552   | -0.002 |
| 15                     | 787      | 49.506  | 49.567   | 0.061  |
| 15                     | 1042     | 49.534  | 49.515   | -0.019 |
| 15                     | 483      | 49.527  | 49.556   | 0.029  |
| 30                     | 597      | 49.528  | 49.546   | 0.018  |
| 30                     | 853      | 49.510  | 49.494   | -0.016 |
| 30                     | 416      | 49.492  | 49.537   | 0.045  |
| 30                     | 949      | 49.510  | 49.561   | 0.051  |
| 30                     | 221      | 49.504  | 49.531   | 0.027  |
| 35                     | 538      | 49.524  | 49.521   | -0.003 |
| 35                     | 164      | 49.502  | 49.519   | 0.017  |
| 35                     | 1018     | 49.528  | 49.565   | 0.037  |
| 35                     | 462      | 49.541  | 49.520   | -0.021 |
| 35                     | 1032     | 49.536  | 49.530   | -0.006 |
| 50                     | 566      | 49.518  | 49.514   | -0.004 |
| 50                     | 197      | 49.517  | 49.518   | 0.001  |
| 50                     | 793      | 49.537  | 49.506   | -0.031 |
| 50                     | 802      | 49.540  | 49.538   | -0.002 |
| 50                     | 61       | 49.547  | 49.565   | 0.018  |
| 55                     | 795      | 49.524  | 49.548   | 0.024  |
| 55                     | 921      | 49.569  | 49.569   | 0.000  |
| 55                     | 741      | 49.490  | 49.527   | 0.037  |
| 55                     | 809      | 49.532  | 49.533   | 0.001  |
| 55                     | 804      | 49.528  | 49.550   | 0.022  |
| 100                    | 449      | 49.522  | 49.561   | 0.039  |
| 100                    | 541      | 49.533  | 49.552   | 0.019  |
| 100                    | 476      | 49.501  | 49.566   | 0.065  |
| 100                    | 45       | 49.557  | 49.533   | -0.024 |
| 100                    | 642      | 49.530  | 49.592   | 0.062  |
| 105                    | 1036     | 49.536  | 49.569   | 0.033  |
| 105                    | 1038     | 49.500  | 49.543   | 0.043  |
| 105                    | 203      | 49.556  | 49.527   | -0.029 |
| 105                    | 1029     | 49.555  | 49.537   | -0.018 |
| 105                    | 1027     | 49.525  | 49.547   | 0.022  |
| 105                    | Max      | 49.577  | 49.592   | 0.065  |
|                        | Average  | 49.529  | 49.535   | 0.006  |
|                        | Min      | 49.472  | 49.494   | -0.055 |
|                        | Std Dev  | 0.022   | 0.023    | 0.029  |



| 13.160_MAX_DC_DCL_AVSS |        |        |        |        |        |        |        |        |        |        |        |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site              |        |        |        |        |        |        |        |        |        |        |        |
| Tester                 |        |        |        |        |        |        |        |        |        |        |        |
| Test Number            |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit              | 50     | %      |        |        |        |        |        |        |        |        |        |
| Min Limit              | 45     | %      |        |        |        |        |        |        |        |        |        |
| krad                   |        |        | 0      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                     | 45.000 | 45.000 | 45.000 | 45.000 | 45.000 | 45.000 | 45.000 | 45.000 | 45.000 | 45.000 | 45.000 |
| Min                    | 49.516 | 49.504 | 49.499 | 49.502 | 49.515 | 49.494 | 49.519 | 49.506 | 49.527 | 49.533 | 49.527 |
| Average                | 49.523 | 49.527 | 49.533 | 49.511 | 49.548 | 49.534 | 49.531 | 49.528 | 49.545 | 49.561 | 49.545 |
| Max                    | 49.534 | 49.562 | 49.571 | 49.521 | 49.567 | 49.561 | 49.565 | 49.565 | 49.569 | 49.592 | 49.569 |
| UL                     | 50.000 | 50.000 | 50.000 | 50.000 | 50.000 | 50.000 | 50.000 | 50.000 | 50.000 | 50.000 | 50.000 |



## 7 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

| Changes from Revision * (August 2024) to Revision A (July 2026) | Page |
|-----------------------------------------------------------------|------|
| • Updated title.....                                            | 0    |

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