

XXX### REV E1 Bill of Materials

| Item # | Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|--------|------------------------------|----------|---------|----------------------|---------------------------|---|------------------------------------|
| 1 | IPCB | 1 | | XXX### | Any | Printed Circuit Board | |
| 2 | C1, C7, C9, C12 | 4 | 100pF | 8.85012E+11 | Würth Elektronik | CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| 3 | C2, C14, C15 | 3 | 0.1uF | C1608X7R1H104K080AA | TDK | CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| 4 | C3, C11 | 2 | 4700pF | C0603C472J1GAC7867 | Kemet | CAP, CERM, 4700 pF, 100 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| 5 | C4, C13, C16, C17 | 4 | 1000pF | C0603C102K5RACTU | Kemet | CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| 6 | C5, C6, C18 | 3 | 1uF | C0603C105K3RACTU | Kemet | CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603 | 0603 |
| 7 | C19 | 1 | 100nF | 8.85012E+11 | Würth Electronics | 0.1uF ±10% 10V Ceramic Capacitor X7R 0402 (1005 Metric) | 0402 |
| 8 | C20, C21 | 2 | 15pF | GRM1555C1H150JA01D | MuRata | CAP, CERM, 15 pF, 50 V, +/- 5%, C0G/NP0, 0402 | 0402 |
| 9 | C22, C33, C34, C35, C36, C37 | 6 | 0.1uF | CGA3E2X8R1E104K080AA | TDK | CAP, CERM, 0.1 uF, 25 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0603 | 0603 |
| 10 | C23 | 1 | 0.47uF | GRM188R61A474KA61D | MuRata | CAP, CERM, 0.47 uF, 10 V, +/- 10%, X5R, 0603 | 0603 |
| 11 | C25 | 1 | 10uF | GRM188R61A106KAALD | MuRata | CAP, CERM, 10 uF, 10 V, +/- 10%, X5R, 0603 | 0603 |
| 12 | C26, C27 | 2 | 2.2uF | GRT188R61H225KE13D | MuRata | CAP, CERM, 2.2 uF, 50 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0603 | 0603 |
| 13 | C28 | 1 | 10nF | 8.85012E+11 | Würth Electronics | 10000pF ±10% 25V Ceramic Capacitor X7R 0402 (1005 Metric) | 0402 |
| 14 | C29 | 1 | 1uF | CGA3E1X7R1E105M080AC | TDK | CAP, CERM, 1 uF, 25 V, +/- 20%, X7R, AEC-Q200 Grade 1, 0603 | 0603 |
| 15 | C31, C32 | 2 | 0.1uF | C0603X104K3RACTU | Kemet | CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603 | 0603 |
| 16 | D1, D2 | 2 | Red | CMD17-21SRC/TR8 | Visual Communications Com | LED, Red, SMD | 2x1.25mm |
| 17 | D3, D4 | 2 | 75V | 1N4148WT | Fairchild Semiconductor | Diode, Switching, 75 V, 0.3 A, SOD-523F | SOD-523F |
| 18 | FB1, FB3, FB5, FB6 | 4 | | BLM21HE472SH1L | Murata | 4.7 kOhms @ 100 MHz 1 Signal Line Ferrite Bead 0805 (2012 Metric) 850mA 400mOhm | 0805 |
| 19 | FB2, FB4 | 2 | | 74269244182 | Würth Electronics | 1.8 kOhms @ 100MHz 1 Power, Signal Line Ferrite Bead 0402 (1005 Metric) 210mA 2.1Ohm | 0402 |
| 20 | H1 | 1 | | 573300D00010G | Aavid | Heatsink, DDPak/TO-263, SMT | Heatsink, DDPak |
| 21 | H2, H3, H4, H5 | 4 | | 5MM HOLE | Any | 5 mm PCB Hole | 5mm PCB Hole |
| 22 | H6, H7, H8, H9 | 4 | | RM3X6MM 2701 | APM HEXSEAL | MACHINE SCREW PAN PHILLIPS M3 | |
| 23 | J1 | 1 | | 2011-1X02G00SB | Ouplin | Connector Header Through Hole 2 position 0.100" (2.54mm) | HDR |
| 24 | J2 | 1 | | PPTC021LGBN-RC | Sullins | 2 Position Header Connector 0.100" (2.54mm) Through Hole, Right Angle Tin | CONN_HDR2 |
| 25 | J3 | 1 | | 22284030 | Molex | Header, 2.54mm, 3x1, Tin, TH | Header, 2.54mm, 3x1, Tin, TH |
| 26 | J4 | 1 | | FTSH-105-01-L-DV-K | Samtec | Header(Shrouded), 1.27mm, 5x2, Gold, SMT | Header(Shrouded), 1.27mm, 5x2, SMT |
| 27 | J7 | 1 | | 1935776 | Phoenix Contact | Terminal Block, 2x1, 5mm, Green, TH | Terminal Block, 2x1, 5mm, TH |
| 28 | LBL1 | 1 | | THT-14-423-10 | Brady | Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll | PCB Label 0.650 x 0.200 inch |
| 29 | R1, R2, R3, R4 | 4 | 2.00Meg | TNPV12062M00BEEN | Vishay Draloric | RES, 2.00 M, 0.1%, 1 W, 1206 | 1206 |
| 30 | R5, R10 | 2 | 49.9 | CRCW060349R9FKEA | Vishay-Dale | RES, 49.9, 1%, 0.1 W, 0603 | 0603 |
| 31 | R6, R9 | 2 | 49.9 | CRCW060349R9FKEA | Vishay-Dale | RES, 49.9, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 0603 |
| 32 | R7 | 1 | 8k | RT0603BRE078KLL | Yageo | 8 kOhms ±0.1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Thin Film | 0603 |
| 33 | R8 | 1 | 1m | EBWM2512F1L00S9 | RESI | 1 mOhms ±1% 6W Chip Resistor 2512 (6332 Metric) Automotive AEC-Q200, Current Sense Metal Element | 2512 |
| 34 | R11, R12 | 2 | 470 | RC0402FR-07470RL | Yageo America | RES, 470, 1%, 0.063 W, 0402 | 0402 |
| 35 | R13 | 1 | 47k | CRCW040247K0JNED | Vishay-Dale | RES, 47 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402 | 0402 |
| 36 | R14 | 1 | 4.7k | CRCW06034K70JNEA | Vishay-Dale | RES, 4.7 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603 | 0603 |
| 37 | R20 | 1 | 0.0005 | WSLF2512L5000FEA | Vishay-Dale | RES, 0.0005, 1%, 6 W, AEC-Q200 Grade 0, 6.35x3.02mm | 6.35x3.02mm |
| 38 | R21 | 1 | 50u | SBZ-8420-CM2-R00005 | Shivalik Bimetal Controls | Low Ohmic EB Welded Precision Resistor 0.05mOhm 36W AEC-Q200 | 8420 |
| 39 | RS1 | 1 | | 2-5747706-0 | TE Connectivity | Receptacle, D-SUB-9, 2.74mm, Gold, TH | Receptacle, D-SUB-9, 2.74mm, TH |
| 40 | SW1 | 1 | | TL1015AF160QG | E-Switch | Switch, Tactile, SPST-NO, 0.05A, 12V, SMT | Switch, 4.4x2x2.9 mm |
| 41 | T2, T3 | 2 | | CB70-14-CY | Panduit | Terminal 90A Lug | CB70-14-CY |
| 42 | U1 | 1 | | AMC131M03DFM | Texas Instruments | 3-Channel, Simultaneously-Sampling, 24-Bit, Reinforced Isolated DeltaSigma ADC With Integrated DC/DC Converter | SOIC20 |
| 43 | U2 | 1 | | MSPM0G1506SRHB | Texas Instruments | Mixed-Signal Microcontrollers | VQFN32 |
| 44 | U3 | 1 | | TPS70933DBVR | Texas Instruments | 150-mA, 30-V, Ultra-Low IQ, Wide Input Low-Dropout Regulator with Reverse Current Protection, DBV0005A (SOT-23-5) | DBV0005A |
| 45 | U4 | 1 | | ISO6731DWR | Texas Instruments | | SOIC16 |
| 46 | U6 | 1 | | | | 3-V to 5.5-V Multichannel RS-232 Line Driver / Receiver with ±15-kV IEC ESD Protection, -40 to 85 degC, 16-Pin SSOP (DB), Green (RoHS & no Sb/Br) | DB0016A |
| 47 | Y1 | 1 | | CDC6CE05000CDLE | Texas Instruments | Crystal replacement: Ultra-low Power LVCMOS Oscillator 4-pin, VSON 3.2 x 2.5 x 0.9mm | VSON4 |

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