

Applicant Name: Texas Instruments Incorporated

Applicant Address: 2nd Floor, No.72, Liangxiu Road, Pudong New Discrete,

Shanghai

Attn: Anda Zhang

Report Date: 2019-07-16

The f	ollowing samp	le (s) was/wer	e submitted	l and identified	l on behalf	of the client as:
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Product:	TPS92611-Q1
Samples Quantity:	1
Sample ID:	IAS19070134.001
Date Received:	2019-06-10
Date Test Conducted:	2019-06-10~2019-06-11

Test address different from lab address (if existed) :N/A

Tests Conducted:

Per Client's requirement

Conclusion:

Section No.	Test Name	Evaluation
N/A	See page 3	See page 3

Should you have any queries about the test report, please contact:

App	rov	ed	by:
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Title: Project Engineer

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Page 1 of 17



Approved test plan number: N/A

Report changes and revisions tracking:

Date	Chango	Requested	Revision
Date	Change	by	number
<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>





Approved test plan number: N/A

TEST RESULTS GENERAL SUMMARY:

Per Client's requirement						
IAS19070134.001	Remarks					
Bulk Current Injection						
Meet requirement	None					
RF Immunity-Anechoic chamber						
Meet requirement	None					





Approved test plan number: N/A

Table of Contents

1	DU	JT DESCRIPTION	5
		ST RESULTS AND PHOTOS	
	2.1	Bulk Current Injection	6
	2.2	RADIATED IMMUNITY	9
3	TE	ST EQUIPMENT	13
	1.1	TEST EQUIPMENT FOR BULK CURRENT INJECTION	13
	4.0	TEST FOUNDMENT FOR DARWING	4.4



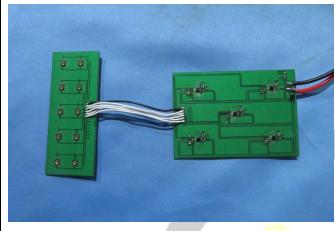


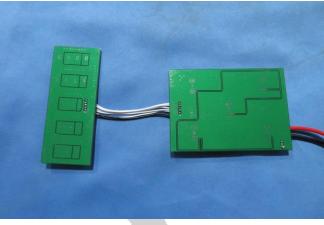
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DUT Description

DUT Name:	TPS92611-Q1
Sample Number:	IAS19070134.001

Close Photo:





Photos of the DUT

Mode 1:

The DUT was powered.



Approved test plan number: N/A

2 **Test Results and photos**

2.1 Bulk Current Injection

2.1.1 **Test Requirement**

Frequency (MHz)	Frequency Step Size (MHz)	Dwell time (sec)	Test level (mA)	Modulation		
1 - 200	4	1 2 200		200	200	CW
1 - 200	1	2	200	AM		
200 - 400	2	2	200	CW		
200 - 400		2	200	AM		

2.1.2 Acceptance criteria

	Working Monitoring Parameters		Acceptance	Test Level	Status
Mode	e1	LED	no flicker	200mA	Class A



Approved test plan number: N/A

2.1.3 Test results

Bulk Current Injection Test Results								
Product Name: T	PS92611-Q1			Mode nan	ne: Mode1			
Sample Number:	IAS19070134.00	1		Testing Lo	ocation: CHA 001			
Temperature: 22-	~24 degree C			Testing St	tart Date: 2019-06-10			
Humidity: 56~62	%			Testing End Date: 2019-06-10				
			M	ode 1				
Frequency	Injection	Position	Madulation	Test Test Results Description				
(MHZ)	Mode	(mm)	Modulation	Level	IAS19070134.001	IAS19070134.002		
		150	CW		No deviation observed	No deviation observed		
			AM		No deviation observed	No deviation observed		
4 400	CDCI	450	CW	200 4	No deviation observed	No deviation observed		
1~400	CBCI .		АМ	200mA	No deviation observed	No deviation observed		
		750	CW		No deviation observed	No deviation observed		
			AM		No deviation observed	No deviation observed		

Test Results Meet the Requirements

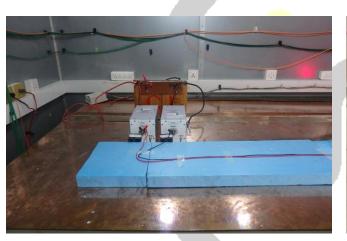


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2.1.4 **Test photographs**



Picture for general setup



Picture for DUT



Picture for Battery side



Picture for Battery grouding



Picture for outside setup

Picture for monitoring

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of 17 Page 8

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Approved test plan number: N/A

2.2 Radiated Immunity

Test Requirement 2.2.1

Frequency (MHz)	Frequency Step Size (MHz)	Dwell time(sec)	Test level (V/m)	Modulation	Antenna polariza-tion		
400 4000	400, 4000		CW	Log Per			
400 - 1000	5	2	100	AM	Hor.		
200 4000	-	2	400	CW	Log Per		
200 - 1000	5	2	100	AM	Vert.		
4000 2000	1000 0000	CW	Log Per				
1000 - 2000	10	2	100	PM	Hor./Vert.		
2000 2400	20	20			2 100	CW	Log Per
2000 - 3100		2	100	PM	Hor./Vert.		
0000 0400				CW	Log Per		
2000 - 3100	20	2	300	PM	Hor./Vert.		

2.2.2 Acceptance criteria

Working Mode	Monitoring Parameters	Acceptance	Test Level	Status
Mode1	LED	no flicker	100V/m	Class A

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Approved test plan number: N/A

2.2.3 Test results

Radiated Immunity Test Results					
Product Name: TPS92611-	Q1		Mode name: Mode1		
Sample Number: IAS19070	0134.001		Testing Location: CHA 010		
Temperature: 22~24 degre	e C		Testing Start Date: 2019-06-11		
Humidity: 56~62 %			Testing End Date: 2019-06-11		
		M	ode1		
			Test Results Description		
Frequency	Test Level	Modulation	IAS19070134.001	IAS19070134.002	
400MHz – 1GHz -HP		CW	No Deviation observed	No Deviation observed	
400MHz – 1GHz-HP		AM	No Deviation observed	No Deviation observed	
200MHz – 1GHz-VP		CW	No Deviation observed	No Deviation observed	
200MHz – 1GHz-VP		AM	No Deviation observed	No Deviation observed	
1GHz-2GHz-HP		CW	No Deviation observed	No Deviation observed	
1GHz-2GHz-HP	100V/m	PM	No Deviation observed	No Deviation observed	
1GHz-2GHz-VP	1000/111	CW	No Deviation observed	No Deviation observed	
1GHz-2GHz-VP		PM	No Deviation observed	No Deviation observed	
2GHz-3.1GHz-HP		CW	No Deviation observed	No Deviation observed	
2GHz-3.1GHz-HP		PM	No Deviation observed	No Deviation observed	
2GHz-3.1GHz-VP		CW	No Deviation observed	No Deviation observed	
2GHz-3.1GHz-VP		PM	No Deviation observed	No Deviation observed	

Test Results Meet the Requirements

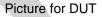


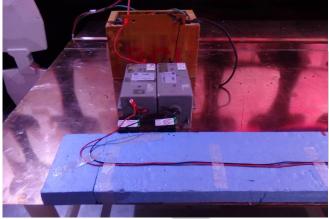
Approved test plan number: N/A

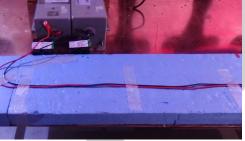
2.2.4 **Test photographs**



Picture for general setup

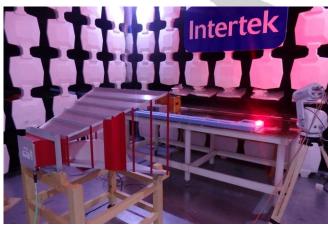


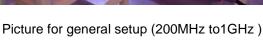


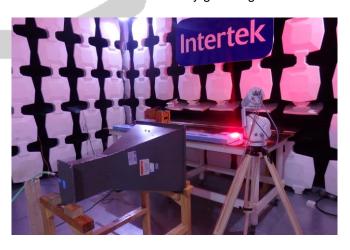


Picture for battery side

Picture for battery grouding







Picture for general setup (above 1GHz)

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Picture for monitoring





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3 Test Equipment

1.1 Test Equipment for Bulk Current Injection

Asset#	Description	Model or model number	Serial number	Calibration due date
SWT072	Intertek-Immunity-XinLab	Intertek Immunity-XinLab	version 3.1	Reference Only
EMS001	Signal Generator	Rohde & Schwarz SML01	104089	2019-11-13
EMS311	Amplifier	AR 200A400A	348789	2020-03-08
EMS299	Dual Directional Coupler	WERLATONE C6021-10	110374	2019-07-08
EMS222	Power meter	Agilent Technologies E4417A	MY5403001	2019-09-13
EMS217-1	Power sensor	Agilent E9304A	MY53190023	2019-06-11
EMS217-2	Power sensor	Agilent E9304A	MY53220004	2019-06-11
EMS032	Spectrum Analyzer	Advantest R3361C	81720168	2019-06-11
EMS171	Bulk current injection probe	FCC F-120-8	112396	Reference Only
EMS172	BCI calibration fixture BCI	FCC FCC-BCICF-4	112397	Reference Only
EMS105-2	Attenuator	Mini-Circuits BW-40N100W+	N/A	2019-07-08
EMS199	LISN	Solar Electronics Co,. Ltd 9117-5-TS-50-N	127778	2019-09-02
EMS201	LISN	Solar Electronics Co,. Ltd 9117-5-TS-50-N	127780	2019-09-02
EMS284-1	$50~\Omega$ Termination	N/A 25W DC-3GHz	N/A	2020-03-08
EMS284-2	$50~\Omega$ Termination	N/A 25W DC-3GHz	N/A	2020-03-08
EMS155	Termination	N/A BNC, 50Ω	N/A	Reference Only

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Page 13 of 17

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EMS156	Attenuator	Mini-Circuits 20dB/50Ω,UNAT-20t	15542	2019-07-08
EMS216	Attenuator	Mini-Circuits BW-40N100W+	VN292501318	2019-07-08
EMS158-1	Cable	HUBER+SUHNER EF-393U/2*11N-50-7-5/4m	N/A	2019-07-08
EMS234	Cable	intertek 3m	N/A	2019-07-08
EMS235	Cable	intertek 1.5m	N/A	2019-07-08
EMS236	Cable	intertek1.5m	N/A	2019-07-08
EMS031-15	Cable	Micro-coax N/A	N/A	Reference Only
ESD027-3	Temperature and Humidity Recorder	Testo 174H	26922355	2020-05-20
CHA010-1	Monitor	PONTIS Con4201	6061339312	Reference Only
CHA001	BCI Shielded Room	ETS-Lindgren 5*3.1*2.5	N/A	2020-01-12
EMI010	Digital Multimeter	Fluke 187	90140298	2019-10-16
EMS005-1	Matching Network	FCC F-140A	544	Reference Only
EMS149-4	Tape measure	SIJIAWU 3m	N/A	Initial Calibration Only
EMS233	Cable	intertek 1m	N/A	2019-07-08

1.2 Test Equipment for Radiated Immunity

Asset#	Description	Model or model number	Serial number	Calibration due date
SWT072	Intertek-Immunity-XinLab	Intertek Immunity-XinLab	version 3.1	Reference Only
EMS112	Signal Genera lase unit	Agilent N5181A	MY48180867	2019-11-13

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Page 14 of 17

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			1	
EMS113	Power Meter	Agilent E4417A	MY45101508	2019-11-13
EMS113-1	Power Sensor	Agilent E9321A	MY44420432	2019-09-26
EMS187	Amplifier	Milmega AS0104-100/100	1053823	2019-09-08
EMS304	Amplifier	Milmega CBA 1G-1000	T44364	2019-09-08
EMS195	Horn Antenna	AR RF/microwave Instrumentation ATH800M5GA	0341743	Reference Only
EMS302	Horn Antenna	ETS-LINDGREN 3106B 7/16	203229	Reference Only
EMI019	LISN	Solar 9117-5-TS-50-N	511103	2019-09-02
EMI002	LISN	Solar 9117-5-TS-50-N	511102	2019-09-02
EMS284-8	50Ω Termination	N/A 25W DC-3GHz	N/A	2019-09-08
EMS284-9	50Ω Termination	N/A 25W DC-3GHz	N/A	2019-09-08
EMS039	Fiber Optic systems	MICHIGAN SCIENTIFIC N/A	05122	2019-06-08
EMS194	Field Probe	AR RF/microwave Instrumentation FL7006kit	341498	2021-08-14
EMS022	Dual Directional coupler	AR DC6280	313168	2019-07-08
EMS275	DC Power Supply	Rek RPS3030D-2	BEAL022	Reference Only
CHA012-1	Monitor	ETS-Lindgren N/A	N/A	Reference Only
EMS250-1	Cable	Mini-Circuits CBL-6FT-NMNM+	29451	2019-07-08
EMS250-2	Cable	Mini-Circuits CBL-6FT-NMNM+	29554	2019-07-08
EMS250-3	Cable	Mini-Circuits CBL-6FT-NMNM+	29597	2019-07-08
EMS108-5	Cable	Teseq TCN-Cab5:LMR400	5	2019-07-08
EMS280-1	Cable	Mini-CircuitsA11-07-07-4M	16021001	2019-07-08

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Page 15 of 17

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EMS221-2	Cable	Micro-coax UFB311A-1-1575-50U51U	SFC222765-002	2019-07-08
ESD027-5	Temperature and	Testo	26922270	2020-05-20
E3D027-3	Humidity Recorder	174H	20922270	2020-05-20
CHA010	CISPR25 Semi-Anechoic	ETS-Lindgren	NI / A	2020-01-12
	Chamber	5.8*6.3*3.9	N/A	
EMS093	Field Probe	AR	0327422	Reference
	Field Probe	FL7006		Only
EMS204-1	Cable	Micro-coax UFB311A-1-0394-50U50U	SFC221201-001	2019-07-08
EMS149-8	Tape measure	TAJIMA HILOCK-25	N/A	Initial Calibration Only





Approved test plan number: N/A

The End of Report

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