

# TMP461-SP Total Ionizing Dose (TID) Report



## ABSTRACT

This report covers Total Ionizing Dose (TID) radiation characterization test results of the TMP461-SP (high-accuracy, remote and local temperature sensor). The study shows TID effects under Low Dose Rate (LDR) up to 100 krad(Si). TMP461-SP (5962R1721801VXC) test results meet and/or exceed specified test limits up to 100 krad(Si).

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## 1 Device Information

### 1.1 Product Description

The TMP461-SP device is a radiation-hardened, high-accuracy, low-power remote temperature sensor monitor with a built-in local temperature sensor. The remote temperature sensors are typically low-cost discrete NPN or PNP transistors, or substrate thermal transistors or diodes that are integral parts of microprocessors, analog-to-digital converters (ADC), digital-to-analog converters (DAC), microcontrollers, or field-programmable gate arrays (FPGA). Temperature is represented as a 12-bit digital code for both local and remote sensors, giving a resolution of 0.0625°C. The two-wire serial interface accepts the SMBus communication protocol with up to nine different pin-programmable addresses.

Advanced features such as series resistance cancellation, programmable non-ideality factor ( $\eta$ -factor), programmable offset, programmable temperature limits, and a programmable digital filter are combined to provide a robust thermal monitoring solution with improved accuracy and noise immunity.

The TMP461-SP is ideal for multi-location, high-accuracy temperature measurements in a variety of distributed telemetry applications. The integrated local and remote temperature sensors simplify spacecraft housekeeping activities by providing an easy way of measuring temperature gradients. The device is specified for operation over a supply voltage range of 1.7 V to 3.6 V, and a temperature range of –55°C to 125°C.

### 1.2 Device Details

Table 1-1 lists the device information used in the RHA TID characterization and qualification for LDR.

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

TID LDR Details: up to 50 krad(Si)	
TI Device Number	TMP461-SP
Parent Die Name	CTMP461AAV
Package	10-Pin CFP (HKU)
Technology	LBC8LV
LDR Quantity Tested	<ul style="list-style-type: none"> <li>• 5/5 biased/unbiased irradiated devices (3 krad(Si), 10 krad(Si), 30 krad(Si), 50 krad(Si))</li> <li>• 22/5 biased/unbiased irradiated (100 krad(Si))</li> <li>• 1 control</li> </ul>
LDR Radiation Facility	RAD/Aeroflex in Colorado Springs, CO
LDR Dose Level	3 krad(Si), 10 krad(Si), 30 krad(Si), 50 krad(Si), 100 krad(Si) <sup>(1)</sup>
LDR Dose Rate	0.01 rad(Si)/s
LDR Radiation Source	Gammacell JLSA 81-24 Co-60
Lot Accept/Reject	Devices all pass up to 100 krad(Si)
Irradiation Temperature	Ambient, room temperature

(1) 100-krad(Si) units pass Total Ionization Dose (TID) per MIL-STD-883 1019.9, Condition D.



Figure 1-1. TMP461-SP Device

## 2 Total Dose Test Setup

### 2.1 Test Overview

The TMP461-SP was tested according to MIL-STD-883, Test Method 1019.9. For this testing, Conditions A and D were used. For this test, 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). The device was functional and passed all parametric tests.

### 2.2 Test Description and Facilities

The TMP461-SP LDR exposure was performed on biased and unbiased devices in a Co60 gamma cell under a 10-mrad(Si)/s exposure rate. The dose rate of the irradiator used in the exposure ranges from < 10 mrad(Si)/s to a maximum of approximately 65 rad(Si)/s, determined by the distance from the source. For the LDR (10 mrad(Si)/s) exposure, the test box was positioned approximately 2 m from the source. The exposure boards are housed in a lead-aluminum box (as specified in MIL-STD-883 TM 1019.9) to harden the gamma spectrum and minimize dose enhancement effects. The irradiator calibration is maintained by Logmire Laboratories using Thermoluminescence Dosimeters (TLDs) traceable to the National Institute of Standards and Technology (NIST) and the dosimetry was verified using TLDs prior to the radiation exposures. After exposure, the devices were packed in dry ice (per MIL-STD-883 Method 1019.9 section 3.10) and returned to TI Dallas for a full post radiation electrical evaluation using Texas Instruments production Automated Test Equipment (ATE). ATE guard band test limits are set within SMD electrical limits to ensure a minimum Cpk and test error margin based on initial qualification and characterization data. Post radiation measurements were taken within 30 minutes of removal of 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 LDR exposure were tested in both; biased and unbiased conditions as described below.

#### 2.3.1 Unbiased

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

#### 2.3.2 Biased

Figure 2-1 shows bias conditions for each pin during LDR exposure.

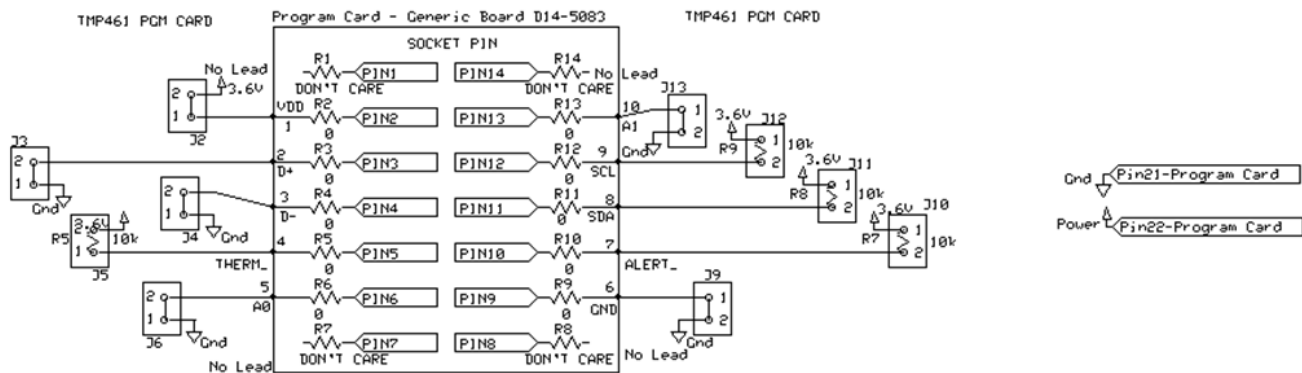


Figure 2-1. Bias Diagram Used in TID Exposure

### 2.4 Test Configuration and Condition

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

End point electrical test is performed on irradiated devices to verify they are within specified SMD electrical test limits. MIL-STD-883, Test Method 1019.9, Condition D is used in this case.

Table 2-1 show serialized devices used for LDR RHA characterization.

**Table 2-1. LDR = 10-mrad(Si)/s Biased and Unbiased Exposure Information**

LDR Exposure Level: 10 mrad(Si)/s					
Level		3 krad(Si)	10 krad(Si)	30 krad(Si)	50 krad(Si)
Device: 5962-1721801VXC Wafer Lot #: 7411803 A/T Lot #: 7502299MTT Date Code: 1749A	Biased	1,2,3,4,5	11,12,13,14,15	21,22,23,24,25	31,32,33,34,35
	Unbiased	6,7,8,9,10	16,17,18,19,20	26,27,28,29,30	36,37,38,39,40
	Control	C1			
Level		100 krad(Si)			
Device: 5962R1721801VHA Wafer Lot #: 7411803 A/T Lot #: 7500971MTT Date Code: 1736A	Biased	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22			
	Unbiased	23,24,25,26,27			
	Control	C1			

## **3 Total Ionizing Dose (RHA) Characterization Test Results**

### **3.1 Total Ionizing Dose RHA Characterization Summary Results**

The parametric data for the TMP461-SP passes up to 100-krad(Si) LDR TID per MIL-STD-883, TM1010, condition D.

TID performance is based on “Pre” and “Post” radiation test measurements with respect to SMD electrical min-max specification limits. Measurements were taken at each radiation level depict in [List item](#). Data and graphs show some increase in Quiescent current (IQ) at 1.7 V and 3.6 V for LDR at higher dose levels. Nonetheless, characterization results for all irradiated devices in the sample are within SMD electrical “Pre-rad” test limits. Both 1.7-V and 3.6-V supply voltage conditions have similar behavior overall at each exposure level. Tables in [Appendix A](#) depict “Pre & Post” radiation minimum and maximum values measured at each radiation exposure level.

Please see [Appendix A](#) for device specific parameters and graphs.

### 3.2 Specification Compliance Matrix

**Table 3-1. Electrical Test Parameters**

TEST	SYMBOL	CONDITIONS <sup>(1)</sup>	GROUP A SUBGROUPS	DEVICE TYPE	LIMITS		UNIT	TEST NUMBER
					MIN	MAX		
<b>TEMPERATURE MEASUREMENT</b>								
Local temperature sensor accuracy	T <sub>A(LOCAL)</sub>	T <sub>A</sub> = -55°C to 125°C, V+ = 1.7 V to 3.6 V	1, 2, 3	1	-2	2	°C	4.24, 4.26, 4.27
Remote temperature sensor accuracy	T <sub>A(REMOTE)</sub>	T <sub>A</sub> = -55°C to 125°C, T <sub>D</sub> = -55°C to 150°C, V+ = 1.7 V to 3.6 V	1, 2, 3	1	-1.5	1.5	°C	4.10, 4.11, 4.12, 1.14, 4.15, 4.17, 4.18
Temperature sensor error versus supply (local or remote)		V+ = 1.7 V to 3.6 V	1, 2, 3	1	-0.3	0.3	°C/V	4.29
ADC conversion time		One-shot mode, per channel (local or remote)	9, 10, 11	1		17	ms	4.3
Remote sensor source current high		Series resistance 1 kΩ (max)	1, 2, 3	1	88	152	μA	4.4
Remote sensor source current medium		Series resistance 1 kΩ (max)	1, 2, 3	1	33	57	μA	4.2
Remote sensor source current low		Series resistance 1 kΩ (max)	1, 2, 3	1	5.5	9.5	μA	4.0
<b>SERIAL INTERFACE</b>								
Low-level input voltage	V <sub>OL</sub>	I <sub>OUT</sub> = -6 mA	1, 2, 3	1		0.4	V	2.4, 2.5, 2.6
Serial bus timeout			9, 10, 11	1	20	30	ms	2.24
<b>POWER SUPPLY</b>								
Specified supply voltage range	V+		1, 2, 3	1	1.7	3.6	V	
Quiescent current	I <sub>Q</sub>	Active conversion, local sensor	1, 2, 3	1		375	μA	1.11, 5.2
		Active conversion, remote sensor	1, 2, 3			600		1.12, 5.3
		Standby mode (between conversions)	1, 2, 3			35		1.1, 5.1
		Shutdown mode, serial bus inactive	1, 2, 3			8		1.9, 5.0
			R		1			25

**Table 3-1. Electrical Test Parameters (continued)**

TEST	SYMBOL	CONDITIONS <sup>(1)</sup>	GROUP A SUBGROUPS	DEVICE TYPE	LIMITS		UNIT	TEST NUMBER
					MIN	MAX		
Two-wire timing requirements 1/								
SCL operating frequency	f <sub>(SCL)</sub>	Fast mode	4, 5, 6	1	0.001	0.4	MHz	Built-in test
		High speed mode			0.001	2.17		
Bus free time between stop and start condition	t <sub>(BUF)</sub>	Fast mode	9, 10, 11	1	1300		ns	
		High speed mode			160			
Hold time after repeated start condition. After this period, the first clock is generated.	t <sub>(HDSTA)</sub>	Fast mode	9, 10, 11	1	600		ns	
		High speed mode			160			

(1)  $-55^{\circ}\text{C} \leq T_A \leq 125^{\circ}\text{C}$ , V+ = 1.7 V to 3.6 V, unless otherwise specified.



## 4 Applicable and Reference Documents

### 4.1 Applicable Documents

- [TMP461-SP Radiation Hardened Remote and Local Digital Temperature Sensor](#) Data Sheet (SBOS876)
- [TMP461EVM-CVAL Evaluation Module and Software Tutorial](#) User's Guide (SBOU197)

### 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.

<http://www.landandmaritime.dla.mil/programs/milspec/ListDocs.aspx?BasicDoc=MIL-STD-883>

## **A LDR Total Ionizing Dose Report**

This appendix provides the TMP461-SP LDR TID report.

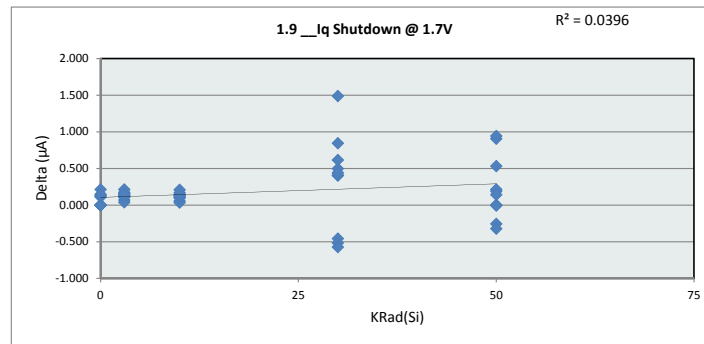
Delta Threshold 10.00%

TID LDR Report (3 - 50krad)  
TMP461-H

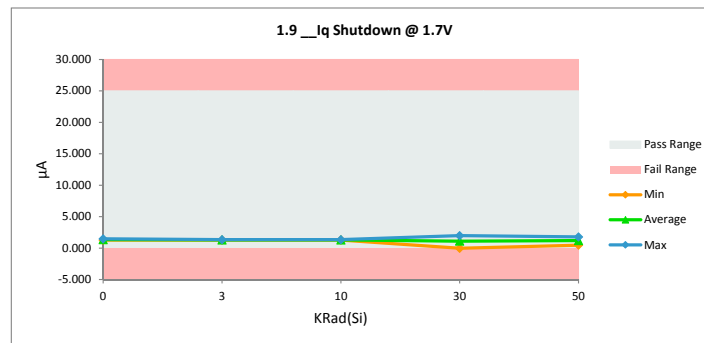
# TID LDR Report (3 - 50krad) TMP461-H

1.9 __Iq Shutdown @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	25	25
Min Limit		

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	1.363	1.363	0.000
0	2	1.380	1.380	0.000
0	3	1.470	1.470	0.000
0	4	1.376	1.376	0.000
0	5	1.456	1.456	0.000
0	6	1.489	1.276	0.213
0	7	1.416	1.280	0.136
0	8	1.413	1.303	0.110
0	9	1.406	1.281	0.125
0	10	1.421	1.272	0.149
3	1	1.363	1.294	0.069
3	2	1.380	1.342	0.038
3	3	1.470	1.295	0.175
3	4	1.376	1.265	0.111
3	5	1.456	1.297	0.159
3	6	1.489	1.276	0.213
3	7	1.416	1.280	0.136
3	8	1.413	1.303	0.110
3	9	1.406	1.281	0.125
3	10	1.421	1.272	0.149
10	11	1.363	1.307	0.056
10	12	1.380	1.346	0.034
10	13	1.470	1.302	0.168
10	14	1.376	1.277	0.099
10	15	1.456	1.320	0.136
10	16	1.489	1.279	0.210
10	17	1.416	1.286	0.130
10	18	1.413	1.306	0.107
10	19	1.406	1.283	0.123
10	20	1.421	1.277	0.144
30	21	1.421	1.878	-0.457
30	22	1.363	1.878	-0.515
30	23	1.380	0.973	0.407
30	24	1.470	0.973	0.497
30	25	1.376	0.973	0.403
30	26	1.456	-0.032	1.488
30	27	1.489	0.873	0.616
30	28	1.416	0.571	0.845
30	29	1.413	0.973	0.440
30	30	1.406	1.979	-0.573
50	31	1.421	1.677	-0.256
50	32	1.363	1.174	0.189
50	33	1.380	1.375	0.005
50	34	1.470	1.476	-0.006
50	35	1.376	0.470	0.906
50	36	1.456	1.778	-0.322
50	37	1.489	1.275	0.214
50	38	1.416	1.275	0.141
50	39	1.413	0.470	0.943
50	40	1.406	0.873	0.533
Max		1.489	1.979	1.488
Average		1.419	1.245	0.174
Min		1.363	-0.032	-0.573
Std Dev		0.040	0.349	0.353



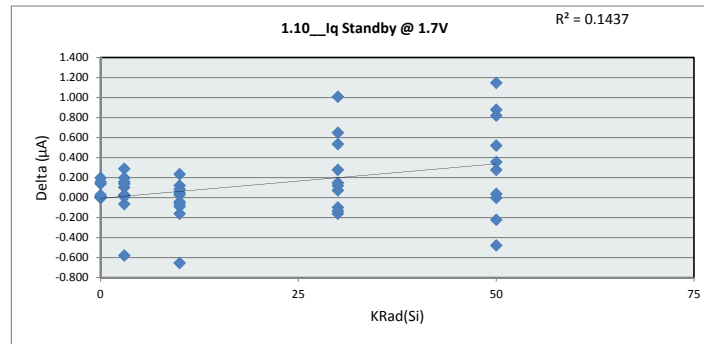
1.9 __Iq Shutdown @ 1.7V					
Test Site	Junkins				
Tester	ETS36401				
Test Number	EF901400				
Max Limit	25 µA				
Min Limit	µA				
KRad(Si)	0	3	10	30	50
LL					
Min	1.272	1.265	1.277	-0.032	0.470
Average	1.346	1.291	1.298	1.104	1.184
Max	1.470	1.342	1.346	1.979	1.778
UL	25.000	25.000	25.000	25.000	25.000



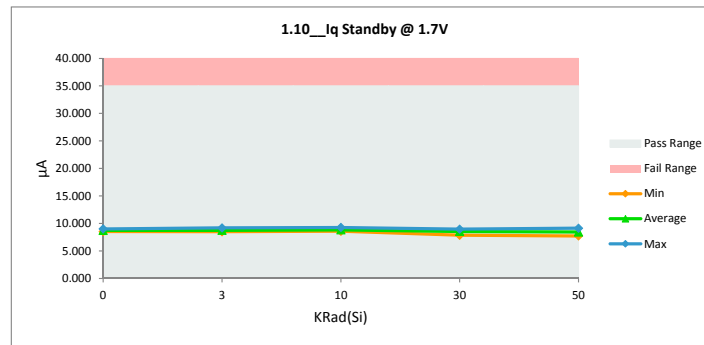
# TID LDR Report (3 - 50krad) TMP461-H

1.10_Iq Standby @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	35	35
Min Limit	0	0

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	8.614	8.614	0.000
0	2	8.867	8.867	0.000
0	3	9.004	9.004	0.000
0	4	8.527	8.527	0.000
0	5	8.808	8.808	0.000
0	6	8.861	8.665	0.196
0	7	8.663	8.655	0.008
0	8	8.872	8.735	0.137
0	9	8.702	8.676	0.026
0	10	8.859	8.703	0.156
3	1	8.614	9.194	-0.580
3	2	8.867	8.765	0.102
3	3	9.004	8.716	0.288
3	4	8.527	8.503	0.024
3	5	8.808	8.874	-0.066
3	6	8.861	8.665	0.196
3	7	8.663	8.655	0.008
3	8	8.872	8.735	0.137
3	9	8.702	8.676	0.026
3	10	8.859	8.703	0.156
10	11	8.614	9.268	-0.654
10	12	8.867	8.840	0.027
10	13	9.004	8.770	0.234
10	14	8.527	8.591	-0.064
10	15	8.808	8.970	-0.162
10	16	8.861	8.741	0.120
10	17	8.663	8.752	-0.089
10	18	8.872	8.826	0.046
10	19	8.702	8.745	-0.043
10	20	8.859	8.778	0.081
30	21	8.859	8.959	-0.100
30	22	8.614	8.775	-0.161
30	23	8.867	7.859	1.008
30	24	9.004	8.470	0.534
30	25	8.527	8.409	0.118
30	26	8.808	8.531	0.277
30	27	8.861	8.714	0.147
30	28	8.663	8.592	0.071
30	29	8.872	8.225	0.647
30	30	8.702	8.837	-0.135
50	31	8.859	9.081	-0.222
50	32	8.614	7.736	0.878
50	33	8.867	8.347	0.520
50	34	9.004	7.858	1.146
50	35	8.527	8.531	-0.004
50	36	8.808	8.531	0.277
50	37	8.861	8.042	0.819
50	38	8.663	9.142	-0.479
50	39	8.872	8.836	0.036
50	40	8.702	8.347	0.355
	Max	9.004	9.268	1.146
	Average	8.778	8.657	0.121
	Min	8.527	7.736	-0.654
	Std Dev	0.140	0.313	0.344



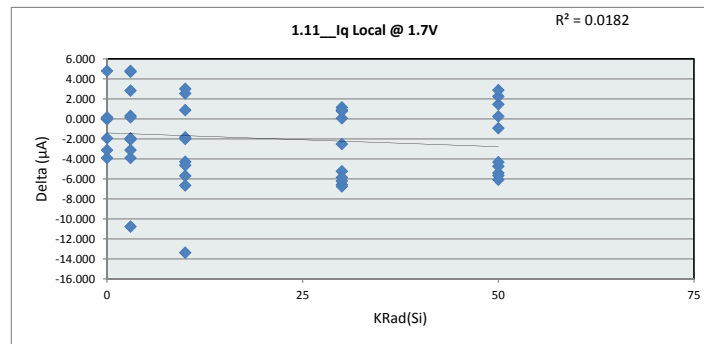
1.10_Iq Standby @ 1.7V					
Test Site	Junkins				
Tester	ETS36401				
Test Number	EF901400				
Max Limit	35 µA				
Min Limit	0 µA				
KRad(Si)	0	3	10	30	50
LL	0.000	0.000	0.000	0.000	0.000
Min	8.527	8.503	8.591	7.859	7.736
Average	8.725	8.749	8.828	8.537	8.445
Max	9.004	9.194	9.268	8.959	9.142
UL	35.000	35.000	35.000	35.000	35.000



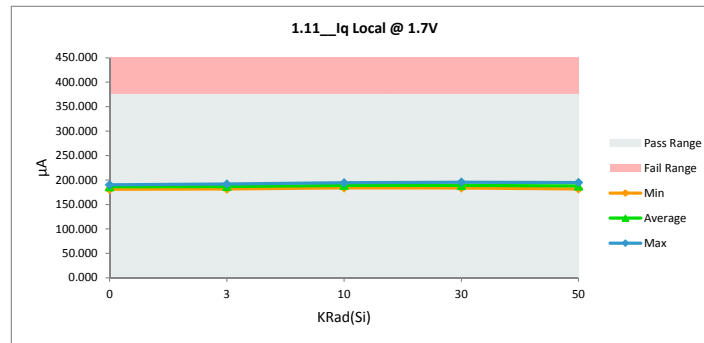
# TID LDR Report (3 - 50krad) TMP461-H

1.11_Iq Local @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	375	375
Min Limit	0	0

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	183.858	183.858	0.000
0	2	186.577	186.577	0.000
0	3	188.874	188.874	0.000
0	4	180.987	180.987	0.000
0	5	186.606	186.606	0.000
0	6	186.271	190.183	-3.912
0	7	184.823	186.761	-1.938
0	8	189.279	189.128	0.151
0	9	184.686	187.811	-3.125
0	10	186.447	181.660	4.787
3	1	183.858	183.565	0.293
3	2	186.577	188.644	-2.067
3	3	188.874	184.160	4.714
3	4	180.987	191.759	-10.772
3	5	186.606	183.774	2.832
3	6	186.271	190.183	-3.912
3	7	184.823	186.761	-1.938
3	8	189.279	189.128	0.151
3	9	184.686	187.811	-3.125
3	10	186.447	181.660	4.787
10	11	183.858	185.696	-1.838
10	12	186.577	190.875	-4.298
10	13	188.874	185.876	2.998
10	14	180.987	194.371	-13.384
10	15	186.606	185.732	0.874
10	16	186.271	192.927	-6.656
10	17	184.823	189.459	-4.636
10	18	189.279	191.281	-2.002
10	19	184.686	190.379	-5.693
10	20	186.447	183.909	2.538
30	21	186.447	185.669	0.778
30	22	183.858	190.437	-6.579
30	23	186.577	185.424	1.153
30	24	188.874	195.632	-6.758
30	25	180.987	186.219	-5.232
30	26	186.606	192.820	-6.214
30	27	186.271	188.786	-2.515
30	28	184.823	190.681	-5.858
30	29	189.279	189.214	0.065
30	30	184.686	183.774	0.912
50	31	186.447	184.996	1.451
50	32	183.858	189.275	-5.417
50	33	186.577	184.324	2.253
50	34	188.874	194.960	-6.086
50	35	180.987	186.647	-5.660
50	36	186.606	191.353	-4.747
50	37	186.271	187.197	-0.926
50	38	184.823	189.153	-4.330
50	39	189.279	189.031	0.248
50	40	184.686	181.818	2.868
	Max	189.279	195.632	4.787
	Average	185.841	187.756	-1.915
	Min	180.987	180.987	-13.384
	Std Dev	2.316	3.530	3.898



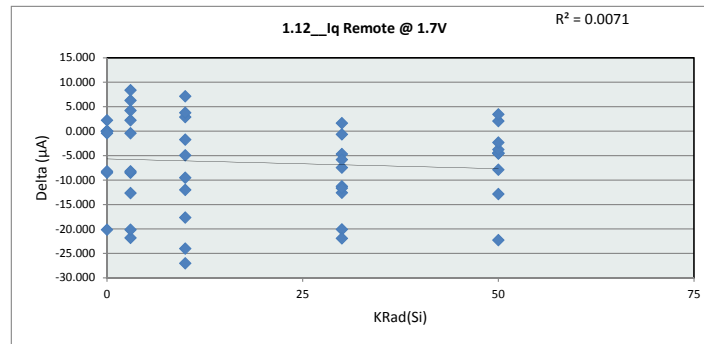
1.11_Iq Local @ 1.7V					
Test Site	Junkins				
Tester	ETS36401				
Test Number	EF901400				
Max Limit	375 µA				
Min Limit	0 µA				
KRad(Si)	0	3	10	30	50
LL	0.000	0.000	0.000	0.000	0.000
Min	180.987	181.660	183.909	183.774	181.818
Average	186.245	186.745	189.051	188.866	187.875
Max	190.183	191.759	194.371	195.632	194.960
UL	375.000	375.000	375.000	375.000	375.000



# TID LDR Report (3 - 50krad) TMP461-H

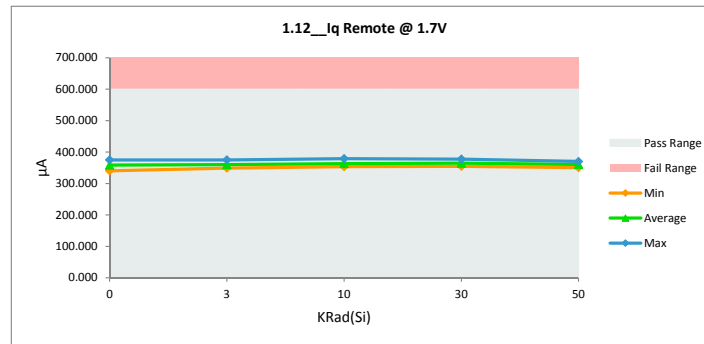
		1.12_Iq Remote @ 1.7V	
Test Site		Junkins	Junkins
Tester		ETS36401	ETS36401
Test Number		EF901400	EF901400
Unit		µA	µA
Max Limit		600	600
Min Limit		0	0

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	357.059	357.059	0.000
0	2	349.862	349.862	0.000
0	3	357.339	357.339	0.000
0	4	340.352	340.352	0.000
0	5	363.068	363.068	0.000
0	6	354.888	375.051	-20.163
0	7	359.014	367.534	-8.520
0	8	360.296	360.735	-0.439
0	9	353.951	362.150	-8.199
0	10	354.008	351.777	2.231
3	1	357.059	350.792	6.267
3	2	349.862	362.515	-12.653
3	3	357.339	348.957	8.382
3	4	340.352	362.188	-21.836
3	5	363.068	358.849	4.219
3	6	354.888	375.051	-20.163
3	7	359.014	367.534	-8.520
3	8	360.296	360.735	-0.439
3	9	353.951	362.150	-8.199
3	10	354.008	351.777	2.231
10	11	357.059	354.187	2.872
10	12	349.862	367.512	-17.650
10	13	357.339	353.560	3.779
10	14	340.352	367.379	-27.027
10	15	363.068	355.950	7.118
10	16	354.888	378.909	-24.021
10	17	359.014	368.526	-9.512
10	18	360.296	365.226	-4.930
10	19	353.951	365.960	-12.009
10	20	354.008	355.728	-1.720
30	21	354.008	361.462	-7.454
30	22	357.059	369.653	-12.594
30	23	349.862	361.157	-11.295
30	24	357.339	377.416	-20.077
30	25	340.352	362.257	-21.905
30	26	363.068	374.726	-11.658
30	27	354.888	359.567	-4.679
30	28	359.014	364.824	-5.810
30	29	360.296	358.650	1.646
30	30	353.951	354.616	-0.665
50	31	354.008	358.589	-4.581
50	32	357.059	364.946	-7.887
50	33	349.862	354.311	-4.449
50	34	357.339	370.203	-12.864
50	35	340.352	362.623	-22.271
50	36	363.068	367.574	-4.506
50	37	354.888	358.650	-3.762
50	38	359.014	361.340	-2.326
50	39	360.296	358.222	2.074
50	40	353.951	350.521	3.430
	Max	363.068	378.909	8.382
	Average	354.984	361.394	-6.411
	Min	340.352	340.352	-27.027
	Std Dev	6.078	7.905	9.042



		1.12_Iq Remote @ 1.7V	
Test Site		Junkins	
Tester		ETS36401	
Test Number		EF901400	
Max Limit		600	µA
Min Limit		0	µA

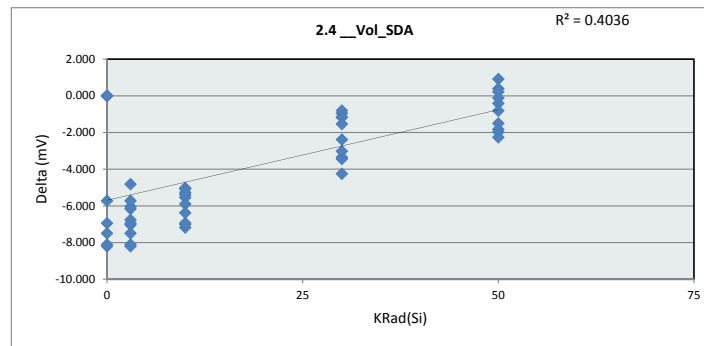
KRad(Si)	0	3	10	30	50
LL	0.000	0.000	0.000	0.000	0.000
Min	340.352	348.957	353.560	354.616	350.521
Average	358.493	360.055	363.294	364.433	360.698
Max	375.051	375.051	378.909	377.416	370.203
UL	600.000	600.000	600.000	600.000	600.000



# TID LDR Report (3 - 50krad) TMP461-H

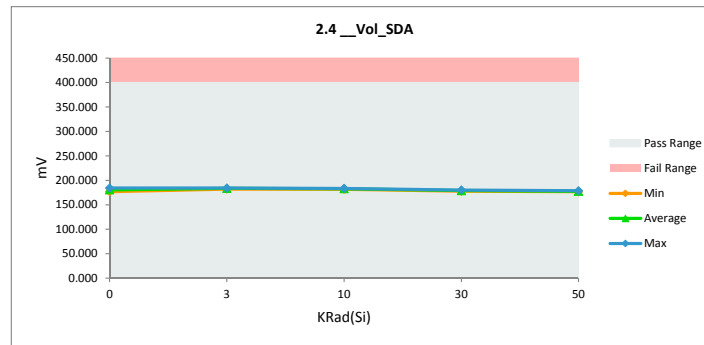
2.4 __Vol_SDA		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	mV	mV
Max Limit	400	400
Min Limit	0	0

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	178.410	178.410	0.000
0	2	177.725	177.725	0.000
0	3	176.890	176.890	0.000
0	4	177.015	177.015	0.000
0	5	176.977	176.977	0.000
0	6	176.492	182.220	-5.728
0	7	176.330	183.279	-6.949
0	8	176.118	184.225	-8.107
0	9	176.392	183.889	-7.497
0	10	175.907	184.113	-8.206
3	1	178.410	183.229	-4.819
3	2	177.725	183.889	-6.164
3	3	176.890	183.653	-6.763
3	4	177.015	184.051	-7.036
3	5	176.977	183.017	-6.040
3	6	176.492	182.220	-5.728
3	7	176.330	183.279	-6.949
3	8	176.118	184.225	-8.107
3	9	176.392	183.889	-7.497
3	10	175.907	184.113	-8.206
10	11	178.410	183.441	-5.031
10	12	177.725	183.266	-5.541
10	13	176.890	181.959	-5.069
10	14	177.015	182.918	-5.903
10	15	176.977	182.370	-5.393
10	16	176.492	181.760	-5.268
10	17	176.330	182.706	-6.376
10	18	176.118	183.304	-7.186
10	19	176.392	183.403	-7.011
10	20	175.907	182.843	-6.936
30	21	175.907	180.156	-4.249
30	22	178.410	179.359	-0.949
30	23	177.725	178.886	-1.161
30	24	176.890	179.272	-2.382
30	25	177.015	177.816	-0.801
30	26	176.977	178.152	-1.175
30	27	176.492	178.027	-1.535
30	28	176.330	179.683	-3.353
30	29	176.118	179.559	-3.441
30	30	176.392	179.409	-3.017
50	31	175.907	177.728	-1.821
50	32	178.410	177.492	0.918
50	33	177.725	177.330	0.395
50	34	176.890	177.305	-0.415
50	35	177.015	177.131	-0.116
50	36	176.977	176.757	0.220
50	37	176.492	177.305	-0.813
50	38	176.330	178.301	-1.971
50	39	176.118	177.616	-1.498
50	40	176.392	178.650	-2.258
	Max	178.410	184.225	0.918
	Average	176.826	180.684	-3.859
	Min	175.907	176.757	-8.206
	Std Dev	0.733	2.734	2.966



2.4 __Vol_SDA		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	400	mV
Min Limit	0	mV

KRad(Si)	0	3	10	30	50
LL	0.000	0.000	0.000	0.000	0.000
Min	176.890	182.220	181.760	177.816	176.757
Average	180.474	183.557	182.797	179.032	177.562
Max	184.225	184.225	183.441	180.156	178.650
UL	400.000	400.000	400.000	400.000	400.000

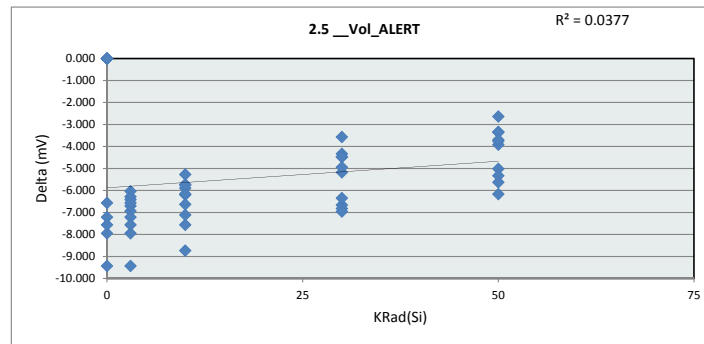




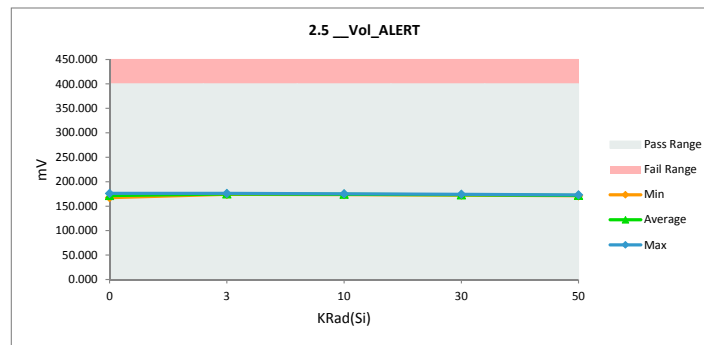
# TID LDR Report (3 - 50krad) TMP461-H

		2.5_Vol_ALERT	
Test Site		Junkins	Junkins
Tester		ETS36401	ETS36401
Test Number		EF901400	EF901400
Unit		mV	mV
Max Limit		400	400
Min Limit		0	0

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	168.931	168.931	0.000
0	2	169.156	169.156	0.000
0	3	168.159	168.159	0.000
0	4	168.122	168.122	0.000
0	5	167.474	167.474	0.000
0	6	168.009	174.576	-6.567
0	7	167.000	174.214	-7.214
0	8	166.925	174.875	-7.950
0	9	167.399	174.962	-7.563
0	10	166.601	176.033	-9.432
3	1	168.931	174.962	-6.031
3	2	169.156	175.435	-6.279
3	3	168.159	175.099	-6.940
3	4	168.122	174.538	-6.416
3	5	167.474	174.177	-6.703
3	6	168.009	174.576	-6.567
3	7	167.000	174.214	-7.214
3	8	166.925	174.875	-7.950
3	9	167.399	174.962	-7.563
3	10	166.601	176.033	-9.432
10	11	168.931	174.825	-5.894
10	12	169.156	174.426	-5.270
10	13	168.159	173.878	-5.719
10	14	168.122	174.314	-6.192
10	15	167.474	173.629	-6.155
10	16	168.009	173.766	-5.757
10	17	167.000	173.629	-6.629
10	18	166.925	174.488	-7.563
10	19	167.399	174.513	-7.114
10	20	166.601	175.336	-8.735
30	21	166.601	173.263	-6.662
30	22	168.931	173.263	-4.332
30	23	169.156	172.727	-3.571
30	24	168.159	172.628	-4.469
30	25	168.122	172.603	-4.481
30	26	167.474	172.652	-5.178
30	27	168.009	172.951	-4.942
30	28	167.000	173.350	-6.350
30	29	166.925	173.748	-6.823
30	30	167.399	174.359	-6.960
50	31	166.601	172.765	-6.164
50	32	168.931	172.266	-3.335
50	33	169.156	171.793	-2.637
50	34	168.159	172.080	-3.921
50	35	168.122	171.482	-3.360
50	36	167.474	171.233	-3.759
50	37	168.009	171.706	-3.697
50	38	167.000	172.017	-5.017
50	39	166.925	172.254	-5.329
50	40	167.399	173.026	-5.627
	Max	169.156	176.033	0.000
	Average	167.778	173.207	-5.429
	Min	166.601	167.474	-9.432
	Std Dev	0.814	2.019	2.374



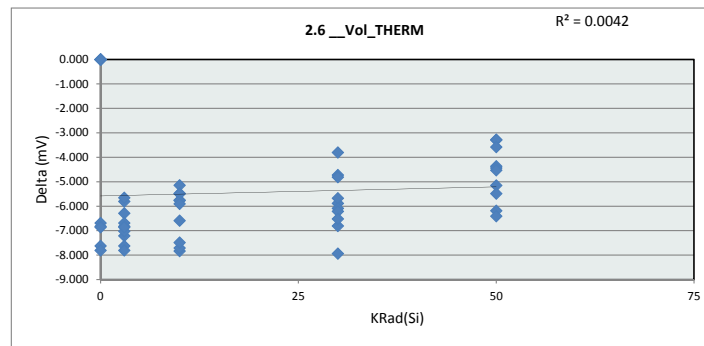
		2.5_Vol_ALERT			
Test Site		Junkins			
Tester		ETS36401			
Test Number		EF901400			
Max Limit		400	mV		
Min Limit		0	mV		
KRad(Si)	0	3	10	30	50
LL	0.000	0.000	0.000	0.000	0.000
Min	167.474	174.177	173.629	172.603	171.233
Average	171.650	174.887	174.280	173.154	172.062
Max	176.033	176.033	175.336	174.359	173.026
UL	400.000	400.000	400.000	400.000	400.000



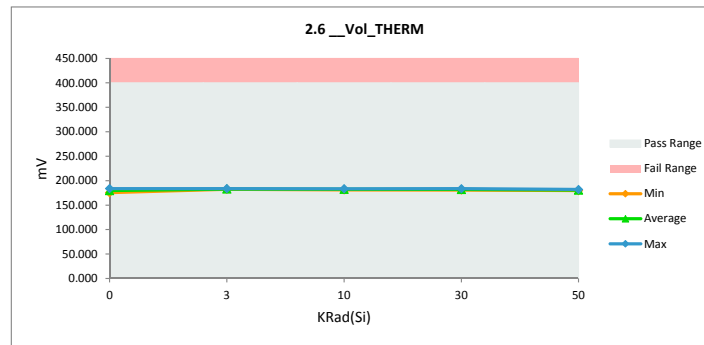
# TID LDR Report (3 - 50krad) TMP461-H

		2.6 __Vol_THERM	
Test Site		Junkins	Junkins
Tester		ETS36401	ETS36401
Test Number		EF901400	EF901400
Unit		mV	mV
Max Limit		400	400
Min Limit		0	0

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	176.862	176.862	0.000
0	2	177.498	177.498	0.000
0	3	176.053	176.053	0.000
0	4	176.127	176.127	0.000
0	5	175.405	175.405	0.000
0	6	176.028	182.717	-6.689
0	7	175.729	182.555	-6.826
0	8	175.368	182.991	-7.623
0	9	175.617	182.480	-6.863
0	10	176.003	183.813	-7.810
3	1	176.862	182.667	-5.805
3	2	177.498	183.153	-5.655
3	3	176.053	183.265	-7.212
3	4	176.127	182.418	-6.291
3	5	175.405	182.431	-7.026
3	6	176.028	182.717	-6.689
3	7	175.729	182.555	-6.826
3	8	175.368	182.991	-7.623
3	9	175.617	182.480	-6.863
3	10	176.003	183.813	-7.810
10	11	176.862	182.617	-5.755
10	12	177.498	182.642	-5.144
10	13	176.053	181.546	-5.493
10	14	176.127	181.608	-5.481
10	15	175.405	181.172	-5.767
10	16	176.028	181.932	-5.904
10	17	175.729	182.318	-6.589
10	18	175.368	183.203	-7.835
10	19	175.617	183.327	-7.710
10	20	176.003	183.489	-7.486
30	21	176.003	181.889	-5.886
30	22	176.862	181.590	-4.728
30	23	177.498	181.304	-3.806
30	24	176.053	180.868	-4.815
30	25	176.127	181.802	-5.675
30	26	175.405	181.491	-6.086
30	27	176.028	182.238	-6.210
30	28	175.729	182.537	-6.808
30	29	175.368	181.889	-6.521
30	30	175.617	183.558	-7.941
50	31	176.003	181.155	-5.152
50	32	176.862	180.159	-3.297
50	33	177.498	180.781	-3.283
50	34	176.053	180.420	-4.367
50	35	176.127	179.710	-3.583
50	36	175.405	179.847	-4.442
50	37	176.028	180.557	-4.529
50	38	175.729	181.914	-6.185
50	39	175.368	180.856	-5.488
50	40	175.617	182.026	-6.409
	Max	177.498	183.813	0.000
	Average	176.069	181.509	-5.440
	Min	175.368	175.405	-7.941
	Std Dev	0.633	2.000	2.188



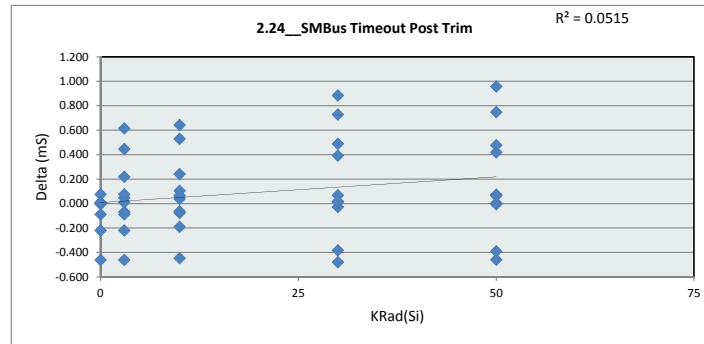
		2.6 __Vol_THERM			
Test Site		Junkins			
Tester		ETS36401			
Test Number		EF901400			
Max Limit		400	mV		
Min Limit		0	mV		
KRad(Si)	0	3	10	30	50
LL	0.000	0.000	0.000	0.000	0.000
Min	175.405	182.418	181.172	180.868	179.710
Average	179.650	182.849	182.385	181.917	180.743
Max	183.813	183.813	183.489	183.558	182.026
UL	400.000	400.000	400.000	400.000	400.000



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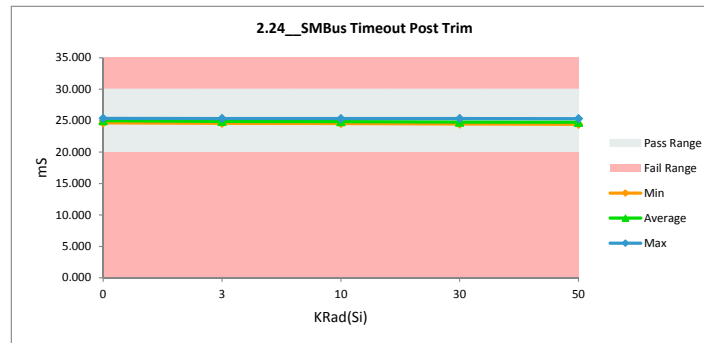
2.24_SMBus Timeout Post Trim		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	mS	mS
Max Limit	30	30
Min Limit	20	20

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	25.187	25.187	0.000
0	2	24.636	24.636	0.000
0	3	24.721	24.721	0.000
0	4	25.363	25.363	0.000
0	5	24.853	24.853	0.000
0	6	24.880	25.341	-0.461
0	7	25.107	25.328	-0.221
0	8	24.813	24.738	0.075
0	9	24.905	24.895	0.010
0	10	24.853	24.941	-0.088
3	1	25.187	24.573	0.614
3	2	24.636	24.590	0.046
3	3	24.721	24.789	-0.068
3	4	25.363	24.917	0.446
3	5	24.853	24.634	0.219
3	6	24.880	25.341	-0.461
3	7	25.107	25.328	-0.221
3	8	24.813	24.738	0.075
3	9	24.905	24.895	0.010
3	10	24.853	24.941	-0.088
10	11	25.187	24.545	0.642
10	12	24.636	24.597	0.039
10	13	24.721	24.797	-0.076
10	14	25.363	24.834	0.529
10	15	24.853	24.612	0.241
10	16	24.880	25.327	-0.447
10	17	25.107	25.298	-0.191
10	18	24.813	24.709	0.104
10	19	24.905	24.840	0.065
10	20	24.853	24.917	-0.064
30	21	24.853	24.461	0.392
30	22	25.187	24.459	0.728
30	23	24.636	24.664	-0.028
30	24	24.721	24.709	0.012
30	25	25.363	24.479	0.884
30	26	24.853	25.332	-0.479
30	27	24.880	25.263	-0.383
30	28	25.107	24.618	0.489
30	29	24.813	24.746	0.067
30	30	24.905	24.888	0.017
50	31	24.853	24.433	0.420
50	32	25.187	24.439	0.748
50	33	24.636	24.633	0.003
50	34	24.721	24.648	0.073
50	35	25.363	24.406	0.957
50	36	24.853	25.313	-0.460
50	37	24.880	25.270	-0.390
50	38	25.107	24.630	0.477
50	39	24.813	24.750	0.063
50	40	24.905	24.911	-0.006
Max		25.363	25.363	0.957
Average		24.932	24.846	0.086
Min		24.636	24.406	-0.479
Std Dev		0.213	0.298	0.355



2.24_SMBus Timeout Po		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	30	mS
Min Limit	20	mS

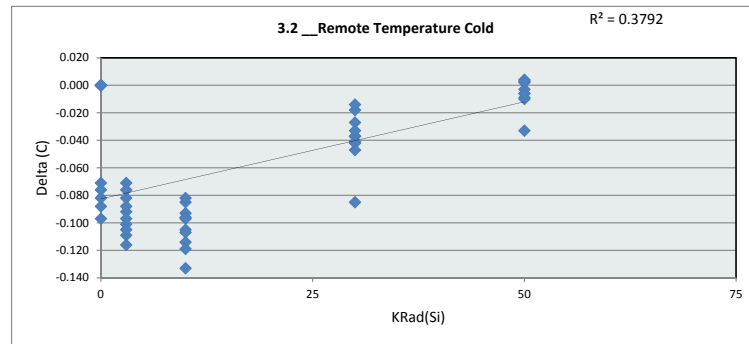
KRad(Si)	0	3	10	30	50
LL	20.000	20.000	20.000	20.000	20.000
Min	24.636	24.573	24.545	24.459	24.406
Average	25.000	24.875	24.848	24.762	24.743
Max	25.363	25.341	25.327	25.332	25.313
UL	30.000	30.000	30.000	30.000	30.000



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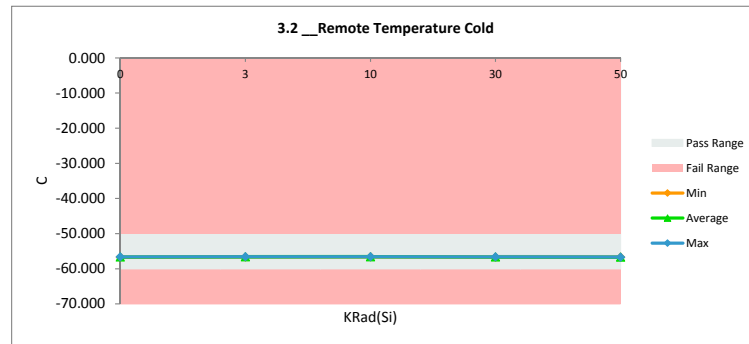
3.2 Remote Temperature Cold		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	-50	-50
Min Limit	-60	-60

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	-56.699	-56.699	0.000
0	2	-56.698	-56.698	0.000
0	3	-56.688	-56.688	0.000
0	4	-56.687	-56.687	0.000
0	5	-56.696	-56.696	0.000
0	6	-56.686	-56.615	-0.071
0	7	-56.701	-56.613	-0.088
0	8	-56.702	-56.620	-0.082
0	9	-56.702	-56.626	-0.076
0	10	-56.702	-56.605	-0.097
3	1	-56.699	-56.598	-0.101
3	2	-56.698	-56.589	-0.109
3	3	-56.688	-56.572	-0.116
3	4	-56.687	-56.582	-0.105
3	5	-56.696	-56.604	-0.092
3	6	-56.686	-56.615	-0.071
3	7	-56.701	-56.613	-0.088
3	8	-56.702	-56.620	-0.082
3	9	-56.702	-56.626	-0.076
3	10	-56.702	-56.605	-0.097
10	11	-56.699	-56.566	-0.133
10	12	-56.698	-56.593	-0.105
10	13	-56.688	-56.595	-0.093
10	14	-56.687	-56.602	-0.085
10	15	-56.696	-56.600	-0.096
10	16	-56.686	-56.604	-0.082
10	17	-56.701	-56.587	-0.114
10	18	-56.702	-56.605	-0.097
10	19	-56.702	-56.595	-0.107
10	20	-56.702	-56.583	-0.119
30	21	-56.702	-56.617	-0.085
30	22	-56.699	-56.681	-0.018
30	23	-56.698	-56.661	-0.037
30	24	-56.688	-56.651	-0.037
30	25	-56.687	-56.640	-0.047
30	26	-56.696	-56.655	-0.041
30	27	-56.686	-56.653	-0.033
30	28	-56.701	-56.674	-0.027
30	29	-56.702	-56.688	-0.014
30	30	-56.702	-56.660	-0.042
50	31	-56.702	-56.669	-0.033
50	32	-56.699	-56.693	-0.006
50	33	-56.698	-56.689	-0.009
50	34	-56.688	-56.678	-0.010
50	35	-56.687	-56.684	-0.003
50	36	-56.696	-56.698	0.002
50	37	-56.686	-56.680	-0.006
50	38	-56.701	-56.705	0.004
50	39	-56.702	-56.705	0.003
50	40	-56.702	-56.705	0.003
	Max	-56.686	-56.566	0.004
	Average	-56.696	-56.640	-0.056
	Min	-56.702	-56.705	-0.133
	Std Dev	0.006	0.043	0.044



3.2 Remote Temperature Cold		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	-50	C
Min Limit	-60	C

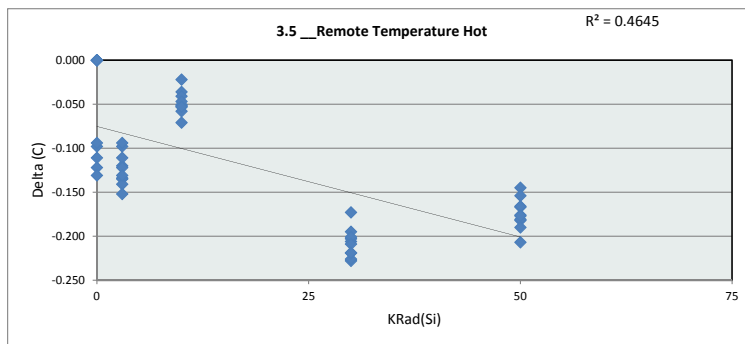
KRad(Si)	0	3	10	30	50
LL	-60.000	-60.000	-60.000	-60.000	-60.000
Min	-56.699	-56.626	-56.605	-56.688	-56.705
Average	-56.655	-56.602	-56.593	-56.658	-56.691
Max	-56.605	-56.572	-56.566	-56.617	-56.669
UL	-50.000	-50.000	-50.000	-50.000	-50.000



# TID LDR Report (3 - 50krad) TMP461-H

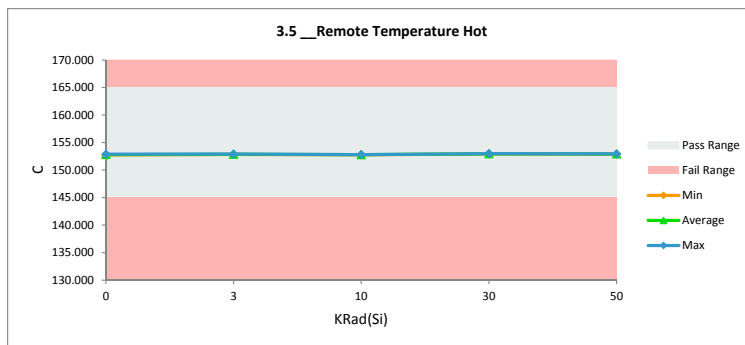
3.5 Remote Temperature Hot		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	165	165
Min Limit	145	145

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	152.754	152.754	0.000
0	2	152.744	152.744	0.000
0	3	152.767	152.767	0.000
0	4	152.764	152.764	0.000
0	5	152.765	152.765	0.000
0	6	152.775	152.886	-0.111
0	7	152.768	152.866	-0.098
0	8	152.763	152.857	-0.094
0	9	152.763	152.885	-0.122
0	10	152.763	152.894	-0.131
3	1	152.754	152.888	-0.134
3	2	152.744	152.864	-0.120
3	3	152.767	152.902	-0.135
3	4	152.764	152.905	-0.141
3	5	152.765	152.917	-0.152
3	6	152.775	152.886	-0.111
3	7	152.768	152.866	-0.098
3	8	152.763	152.857	-0.094
3	9	152.763	152.885	-0.122
3	10	152.763	152.894	-0.131
10	11	152.754	152.790	-0.036
10	12	152.744	152.815	-0.071
10	13	152.767	152.808	-0.041
10	14	152.764	152.817	-0.053
10	15	152.765	152.823	-0.058
10	16	152.775	152.797	-0.022
10	17	152.768	152.819	-0.051
10	18	152.763	152.814	-0.051
10	19	152.763	152.810	-0.047
10	20	152.763	152.816	-0.053
30	21	152.763	152.936	-0.173
30	22	152.754	152.957	-0.203
30	23	152.744	152.939	-0.195
30	24	152.767	152.995	-0.228
30	25	152.764	152.970	-0.206
30	26	152.765	152.991	-0.226
30	27	152.775	152.994	-0.219
30	28	152.768	152.969	-0.201
30	29	152.763	152.972	-0.209
30	30	152.763	152.982	-0.219
50	31	152.763	152.908	-0.145
50	32	152.754	152.930	-0.176
50	33	152.744	152.951	-0.207
50	34	152.767	152.949	-0.182
50	35	152.764	152.931	-0.167
50	36	152.765	152.946	-0.181
50	37	152.775	152.941	-0.166
50	38	152.768	152.922	-0.154
50	39	152.763	152.940	-0.177
50	40	152.763	152.953	-0.190
	Max	152.775	152.995	0.000
	Average	152.763	152.885	-0.122
	Min	152.744	152.744	-0.228
	Std Dev	0.008	0.071	0.070



3.5 Remote Temperature		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	165	C
Min Limit	145	C

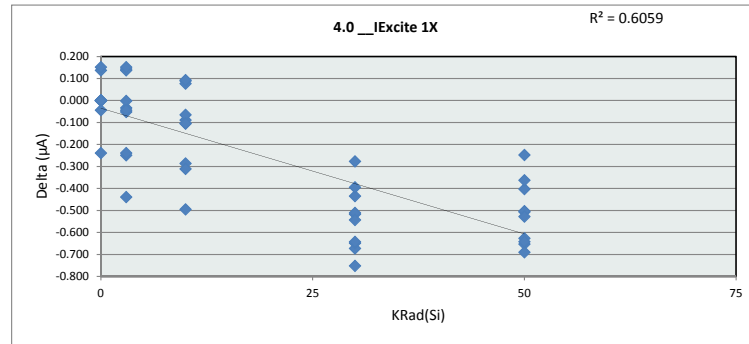
KRad(Si)	0	3	10	30	50
LL	145.000	145.000	145.000	145.000	145.000
Min	152.744	152.857	152.790	152.936	152.908
Average	152.818	152.886	152.811	152.971	152.937
Max	152.894	152.917	152.823	152.995	152.953
UL	165.000	165.000	165.000	165.000	165.000



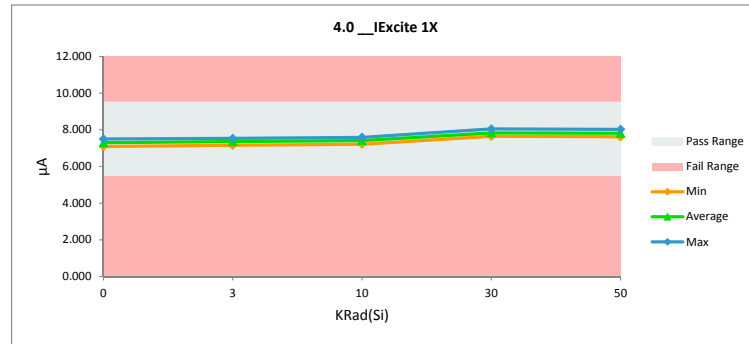
# TID LDR Report (3 - 50krad) TMP461-H

4.0 __IExcite 1X		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	9.5	9.5
Min Limit	5.5	5.5

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	7.120	7.120	0.000
0	2	7.295	7.295	0.000
0	3	7.399	7.399	0.000
0	4	7.092	7.092	0.000
0	5	7.168	7.168	0.000
0	6	7.456	7.458	-0.002
0	7	7.257	7.496	-0.239
0	8	7.479	7.342	0.137
0	9	7.370	7.414	-0.044
0	10	7.308	7.156	0.152
3	1	7.120	7.369	-0.249
3	2	7.295	7.329	-0.034
3	3	7.399	7.256	0.143
3	4	7.092	7.531	-0.439
3	5	7.168	7.220	-0.052
3	6	7.456	7.458	-0.002
3	7	7.257	7.496	-0.239
3	8	7.479	7.342	0.137
3	9	7.370	7.414	-0.044
3	10	7.308	7.156	0.152
10	11	7.120	7.406	-0.286
10	12	7.295	7.384	-0.089
10	13	7.399	7.310	0.089
10	14	7.092	7.587	-0.495
10	15	7.168	7.273	-0.105
10	16	7.456	7.521	-0.065
10	17	7.257	7.568	-0.311
10	18	7.479	7.402	0.077
10	19	7.370	7.474	-0.104
10	20	7.308	7.215	0.093
30	21	7.308	7.825	-0.517
30	22	7.120	7.793	-0.673
30	23	7.295	7.730	-0.435
30	24	7.399	8.048	-0.649
30	25	7.092	7.735	-0.643
30	26	7.168	7.920	-0.752
30	27	7.456	7.967	-0.511
30	28	7.257	7.800	-0.543
30	29	7.479	7.874	-0.395
30	30	7.370	7.647	-0.277
50	31	7.308	7.815	-0.507
50	32	7.120	7.773	-0.653
50	33	7.295	7.698	-0.403
50	34	7.399	8.026	-0.627
50	35	7.092	7.734	-0.642
50	36	7.168	7.858	-0.690
50	37	7.456	7.959	-0.503
50	38	7.257	7.785	-0.528
50	39	7.479	7.842	-0.363
50	40	7.370	7.618	-0.248
	Max	7.479	8.048	0.152
	Average	7.294	7.542	-0.248
	Min	7.092	7.092	-0.752
	Std Dev	0.130	0.265	0.280



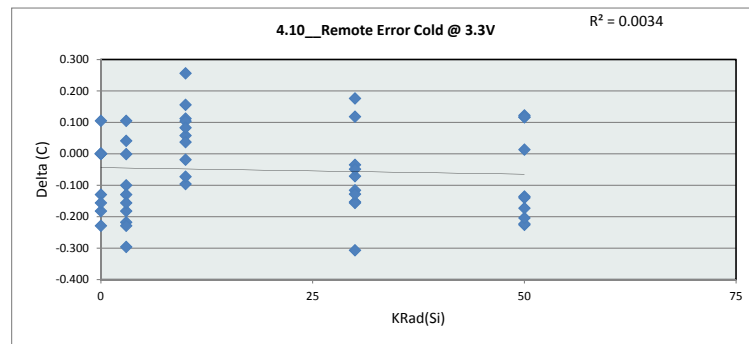
4.0 __IExcite 1X					
Test Site	Junkins				
Tester	ETS36401				
Test Number	EF901400				
Max Limit	9.5 µA				
Min Limit	5.5 µA				
KRad(Si)	0	3	10	30	50
LL	5.500	5.500	5.500	5.500	5.500
Min	7.092	7.156	7.215	7.647	7.618
Average	7.294	7.357	7.414	7.834	7.811
Max	7.496	7.531	7.587	8.048	8.026
UL	9.500	9.500	9.500	9.500	9.500



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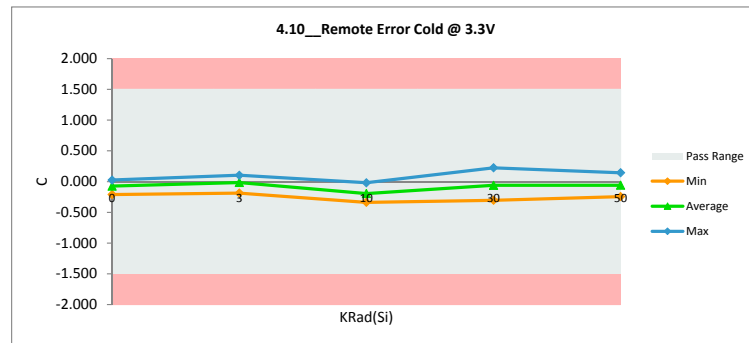
4.10 Remote Error Cold @ 3.3V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	-0.082	-0.082	0.000
0	2	-0.115	-0.115	0.000
0	3	0.001	0.001	0.000
0	4	-0.125	-0.125	0.000
0	5	-0.210	-0.210	0.000
0	6	-0.127	0.003	-0.130
0	7	-0.081	-0.186	0.105
0	8	-0.236	-0.054	-0.182
0	9	-0.142	0.014	-0.156
0	10	-0.204	0.025	-0.229
3	1	-0.082	0.018	-0.100
3	2	-0.115	0.103	-0.218
3	3	0.001	-0.040	0.041
3	4	-0.125	-0.124	-0.001
3	5	-0.210	0.086	-0.296
3	6	-0.127	0.003	-0.130
3	7	-0.081	-0.186	0.105
3	8	-0.236	-0.054	-0.182
3	9	-0.142	0.014	-0.156
3	10	-0.204	0.025	-0.229
10	11	-0.082	-0.140	0.058
10	12	-0.115	-0.019	-0.096
10	13	0.001	-0.111	0.112
10	14	-0.125	-0.229	0.104
10	15	-0.210	-0.137	-0.073
10	16	-0.127	-0.164	0.037
10	17	-0.081	-0.337	0.256
10	18	-0.236	-0.319	0.083
10	19	-0.142	-0.298	0.156
10	20	-0.204	-0.185	-0.019
30	21	-0.204	-0.088	-0.116
30	22	-0.082	0.225	-0.307
30	23	-0.115	-0.044	-0.071
30	24	0.001	-0.117	0.118
30	25	-0.125	0.028	-0.153
30	26	-0.210	-0.175	-0.035
30	27	-0.127	-0.303	0.176
30	28	-0.081	-0.032	-0.049
30	29	-0.236	-0.080	-0.156
30	30	-0.142	-0.014	-0.128
50	31	-0.204	-0.068	-0.136
50	32	-0.082	0.144	-0.226
50	33	-0.115	0.108	-0.223
50	34	0.001	-0.121	0.122
50	35	-0.125	-0.241	0.116
50	36	-0.210	-0.070	-0.140
50	37	-0.127	-0.244	0.117
50	38	-0.081	-0.094	0.013
50	39	-0.236	-0.032	-0.204
50	40	-0.142	0.031	-0.173
Max		0.001	0.225	0.256
Average		-0.132	-0.080	-0.052
Min		-0.236	-0.337	-0.307
Std Dev		0.068	0.122	0.136



4.10 Remote Error Cold		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C

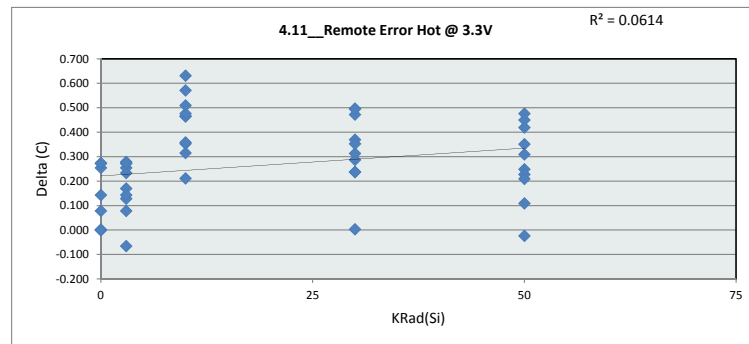
KRad(Si)	0	3	10	30	50
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.210	-0.186	-0.337	-0.303	-0.244
Average	-0.073	-0.016	-0.194	-0.060	-0.059
Max	0.025	0.103	-0.019	0.225	0.144
UL	1.500	1.500	1.500	1.500	1.500



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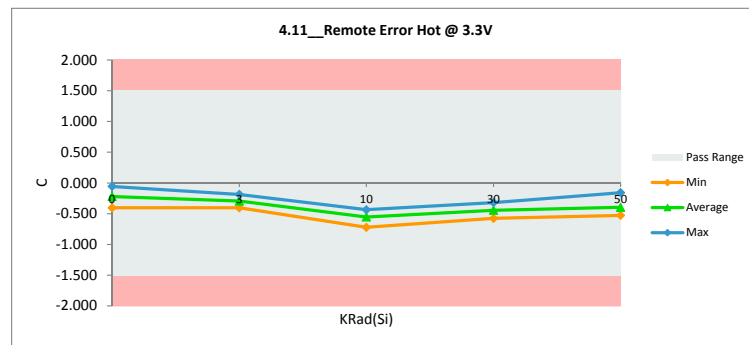
4.11 Remote Error Hot @ 3.3V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	-0.316	-0.316	0.000
0	2	-0.056	-0.056	0.000
0	3	-0.079	-0.079	0.000
0	4	-0.201	-0.201	0.000
0	5	-0.077	-0.077	0.000
0	6	-0.150	-0.404	0.254
0	7	-0.049	-0.321	0.272
0	8	-0.044	-0.187	0.143
0	9	-0.200	-0.278	0.078
0	10	-0.013	-0.287	0.274
3	1	-0.316	-0.250	-0.066
3	2	-0.056	-0.226	0.170
3	3	-0.079	-0.357	0.278
3	4	-0.201	-0.329	0.128
3	5	-0.077	-0.310	0.233
3	6	-0.150	-0.404	0.254
3	7	-0.049	-0.321	0.272
3	8	-0.044	-0.187	0.143
3	9	-0.200	-0.278	0.078
3	10	-0.013	-0.287	0.274
10	11	-0.316	-0.527	0.211
10	12	-0.056	-0.520	0.464
10	13	-0.079	-0.545	0.466
10	14	-0.201	-0.554	0.353
10	15	-0.077	-0.435	0.358
10	16	-0.150	-0.721	0.571
10	17	-0.049	-0.680	0.631
10	18	-0.044	-0.520	0.476
10	19	-0.200	-0.515	0.315
10	20	-0.013	-0.522	0.509
30	21	-0.013	-0.485	0.472
30	22	-0.316	-0.319	0.003
30	23	-0.056	-0.425	0.369
30	24	-0.079	-0.575	0.496
30	25	-0.201	-0.488	0.287
30	26	-0.077	-0.572	0.495
30	27	-0.150	-0.387	0.237
30	28	-0.049	-0.362	0.313
30	29	-0.044	-0.396	0.352
30	30	-0.200	-0.437	0.237
50	31	-0.013	-0.489	0.476
50	32	-0.316	-0.292	-0.024
50	33	-0.056	-0.407	0.351
50	34	-0.079	-0.498	0.419
50	35	-0.201	-0.449	0.248
50	36	-0.077	-0.527	0.450
50	37	-0.150	-0.459	0.309
50	38	-0.049	-0.158	0.109
50	39	-0.044	-0.271	0.227
50	40	-0.200	-0.409	0.209
	Max	-0.013	-0.056	0.631
	Average	-0.119	-0.382	0.263
	Min	-0.316	-0.721	-0.066
	Std Dev	0.092	0.149	0.174



4.11 Remote Error Hot @ 3.3V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C

KRad(Si)	0	3	10	30	50
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.404	-0.404	-0.721	-0.575	-0.527
Average	-0.221	-0.295	-0.554	-0.445	-0.396
Max	-0.056	-0.187	-0.435	-0.319	-0.158
UL	1.500	1.500	1.500	1.500	1.500

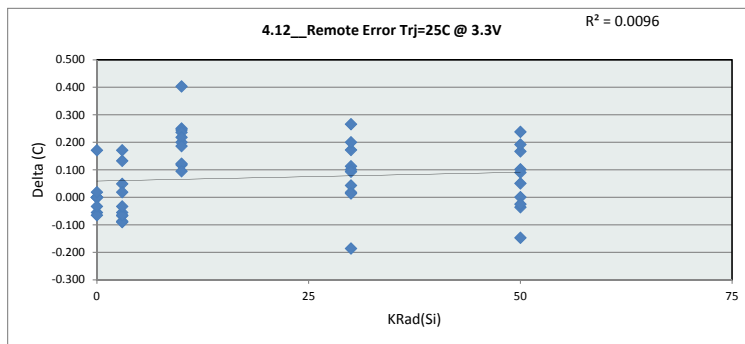




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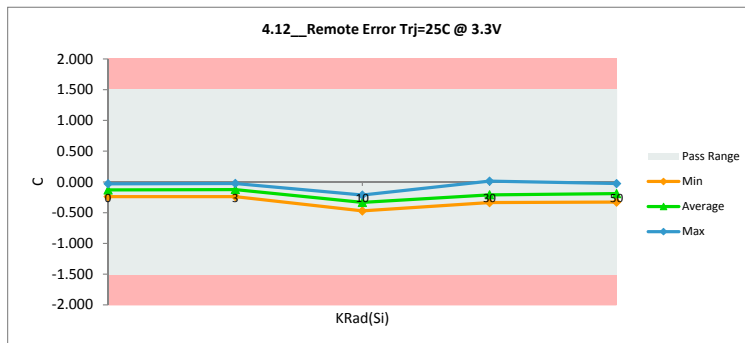
4.12 Remote Error Trj=25C @ 3.3V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	-0.173	-0.173	0.000
0	2	-0.092	-0.092	0.000
0	3	-0.030	-0.030	0.000
0	4	-0.155	-0.155	0.000
0	5	-0.158	-0.158	0.000
0	6	-0.136	-0.155	0.019
0	7	-0.068	-0.239	0.171
0	8	-0.161	-0.106	-0.055
0	9	-0.165	-0.100	-0.065
0	10	-0.130	-0.097	-0.033
3	1	-0.173	-0.086	-0.087
3	2	-0.092	-0.025	-0.067
3	3	-0.030	-0.163	0.133
3	4	-0.155	-0.204	0.049
3	5	-0.158	-0.068	-0.090
3	6	-0.136	-0.155	0.019
3	7	-0.068	-0.239	0.171
3	8	-0.161	-0.106	-0.055
3	9	-0.165	-0.100	-0.065
3	10	-0.130	-0.097	-0.033
10	11	-0.173	-0.291	0.118
10	12	-0.092	-0.214	0.122
10	13	-0.030	-0.280	0.250
10	14	-0.155	-0.355	0.200
10	15	-0.158	-0.253	0.095
10	16	-0.136	-0.381	0.245
10	17	-0.068	-0.471	0.403
10	18	-0.161	-0.397	0.236
10	19	-0.165	-0.383	0.218
10	20	-0.130	-0.316	0.186
30	21	-0.130	-0.243	0.113
30	22	-0.173	0.013	-0.186
30	23	-0.092	-0.193	0.101
30	24	-0.030	-0.296	0.266
30	25	-0.155	-0.173	0.018
30	26	-0.158	-0.330	0.172
30	27	-0.136	-0.336	0.200
30	28	-0.068	-0.161	0.093
30	29	-0.161	-0.204	0.043
30	30	-0.165	-0.179	0.014
50	31	-0.130	-0.232	0.102
50	32	-0.173	-0.026	-0.147
50	33	-0.092	-0.093	0.001
50	34	-0.030	-0.268	0.238
50	35	-0.155	-0.322	0.167
50	36	-0.158	-0.248	0.090
50	37	-0.136	-0.328	0.192
50	38	-0.068	-0.119	0.051
50	39	-0.161	-0.125	-0.036
50	40	-0.165	-0.140	-0.025
	Max	-0.030	0.013	0.403
	Average	-0.127	-0.198	0.071
	Min	-0.173	-0.471	-0.186
	Std Dev	0.046	0.110	0.123



4.12 Remote Error Trj=		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C

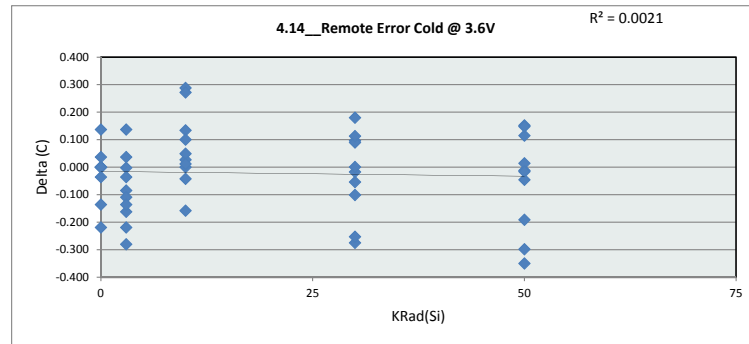
KRad(Si)	0	3	10	30	50
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.239	-0.239	-0.471	-0.336	-0.328
Average	-0.131	-0.124	-0.334	-0.210	-0.190
Max	-0.030	-0.025	-0.214	0.013	-0.026
UL	1.500	1.500	1.500	1.500	1.500



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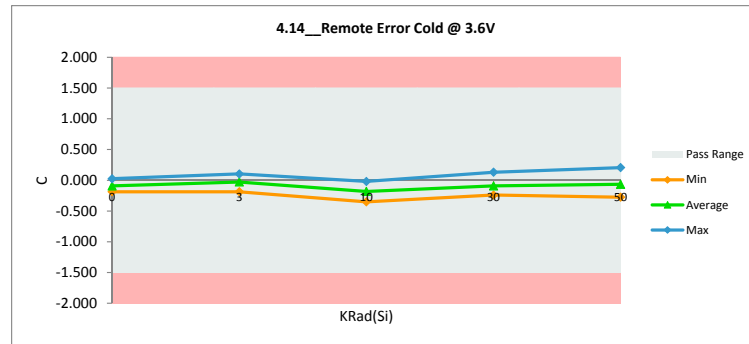
4.14 Remote Error Cold @ 3.6V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	-0.144	-0.144	0.000
0	2	-0.177	-0.177	0.000
0	3	-0.031	-0.031	0.000
0	4	-0.032	-0.032	0.000
0	5	-0.148	-0.148	0.000
0	6	-0.127	-0.091	-0.036
0	7	-0.049	-0.186	0.137
0	8	-0.079	-0.116	0.037
0	9	-0.236	-0.017	-0.219
0	10	-0.111	0.025	-0.136
3	1	-0.144	0.018	-0.162
3	2	-0.177	0.103	-0.280
3	3	-0.031	0.054	-0.085
3	4	-0.032	-0.030	-0.002
3	5	-0.148	-0.039	-0.109
3	6	-0.127	-0.091	-0.036
3	7	-0.049	-0.186	0.137
3	8	-0.079	-0.116	0.037
3	9	-0.236	-0.017	-0.219
3	10	-0.111	0.025	-0.136
10	11	-0.144	-0.171	0.027
10	12	-0.177	-0.019	-0.158
10	13	-0.031	-0.080	0.049
10	14	-0.032	-0.166	0.134
10	15	-0.148	-0.106	-0.042
10	16	-0.127	-0.227	0.100
10	17	-0.049	-0.337	0.288
10	18	-0.079	-0.351	0.272
10	19	-0.236	-0.236	0.000
10	20	-0.111	-0.123	0.012
30	21	-0.111	-0.057	-0.054
30	22	-0.144	0.131	-0.275
30	23	-0.177	-0.076	-0.101
30	24	-0.031	-0.211	0.180
30	25	-0.032	-0.128	0.096
30	26	-0.148	-0.238	0.090
30	27	-0.127	-0.240	0.113
30	28	-0.049	-0.032	-0.017
30	29	-0.079	-0.080	0.001
30	30	-0.236	0.017	-0.253
50	31	-0.111	-0.099	-0.012
50	32	-0.144	0.206	-0.350
50	33	-0.177	0.014	-0.191
50	34	-0.031	-0.183	0.152
50	35	-0.032	-0.147	0.115
50	36	-0.148	-0.102	-0.046
50	37	-0.127	-0.275	0.148
50	38	-0.049	-0.063	0.014
50	39	-0.079	-0.063	-0.016
50	40	-0.236	0.062	-0.298
	Max	-0.031	0.206	0.288
	Average	-0.113	-0.092	-0.022
	Min	-0.236	-0.351	-0.350
	Std Dev	0.064	0.114	0.144



4.14 Remote Error Cold		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C

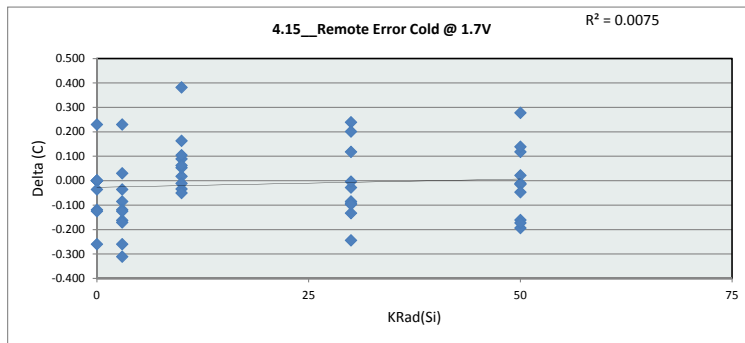
KRad(Si)	0	3	10	30	50
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.186	-0.186	-0.351	-0.240	-0.275
Average	-0.092	-0.028	-0.182	-0.091	-0.065
Max	0.025	0.103	-0.019	0.131	0.206
UL	1.500	1.500	1.500	1.500	1.500



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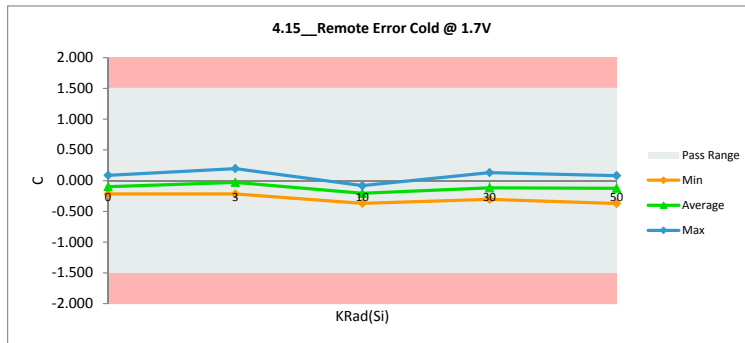
4.15 Remote Error Cold @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	-0.113	-0.113	0.000
0	2	-0.115	-0.115	0.000
0	3	-0.093	-0.093	0.000
0	4	-0.125	-0.125	0.000
0	5	-0.179	-0.179	0.000
0	6	-0.064	-0.028	-0.036
0	7	0.013	-0.217	0.230
0	8	-0.204	-0.085	-0.119
0	9	-0.236	-0.111	-0.125
0	10	-0.173	0.087	-0.260
3	1	-0.113	0.049	-0.162
3	2	-0.115	0.196	-0.311
3	3	-0.093	-0.008	-0.085
3	4	-0.125	-0.155	0.030
3	5	-0.179	-0.008	-0.171
3	6	-0.064	-0.028	-0.036
3	7	0.013	-0.217	0.230
3	8	-0.204	-0.085	-0.119
3	9	-0.236	-0.111	-0.125
3	10	-0.173	0.087	-0.260
10	11	-0.113	-0.202	0.089
10	12	-0.115	-0.081	-0.034
10	13	-0.093	-0.111	0.018
10	14	-0.125	-0.229	0.104
10	15	-0.179	-0.168	-0.011
10	16	-0.064	-0.227	0.163
10	17	0.013	-0.369	0.382
10	18	-0.204	-0.257	0.053
10	19	-0.236	-0.298	0.062
10	20	-0.173	-0.123	-0.050
30	21	-0.173	-0.088	-0.085
30	22	-0.113	0.131	-0.244
30	23	-0.115	0.018	-0.133
30	24	-0.093	-0.211	0.118
30	25	-0.125	-0.097	-0.028
30	26	-0.179	-0.175	-0.004
30	27	-0.064	-0.303	0.239
30	28	0.013	-0.188	0.201
30	29	-0.204	-0.112	-0.092
30	30	-0.236	-0.139	-0.097
50	31	-0.173	-0.162	-0.011
50	32	-0.113	0.081	-0.194
50	33	-0.115	0.046	-0.161
50	34	-0.093	-0.371	0.278
50	35	-0.125	-0.147	0.022
50	36	-0.179	-0.164	-0.015
50	37	-0.064	-0.182	0.118
50	38	0.013	-0.126	0.139
50	39	-0.204	-0.157	-0.047
50	40	-0.236	-0.063	-0.173
Max		0.013	0.196	0.382
Average		-0.129	-0.115	-0.014
Min		-0.236	-0.371	-0.311
Std Dev		0.070	0.120	0.148



4.15 Remote Error Cold	
Test Site	Junkins
Tester	ETS36401
Test Number	EF901400
Max Limit	1.5 C
Min Limit	-1.5 C

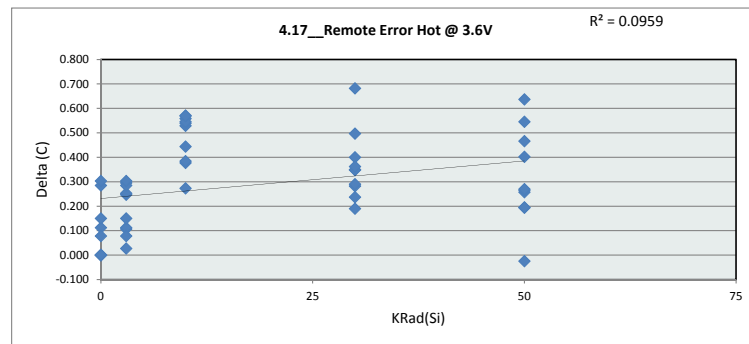
KRad(Si)	0	3	10	30	50
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.217	-0.217	-0.369	-0.303	-0.371
Average	-0.098	-0.028	-0.207	-0.116	-0.125
Max	0.087	0.196	-0.081	0.131	0.081
UL	1.500	1.500	1.500	1.500	1.500



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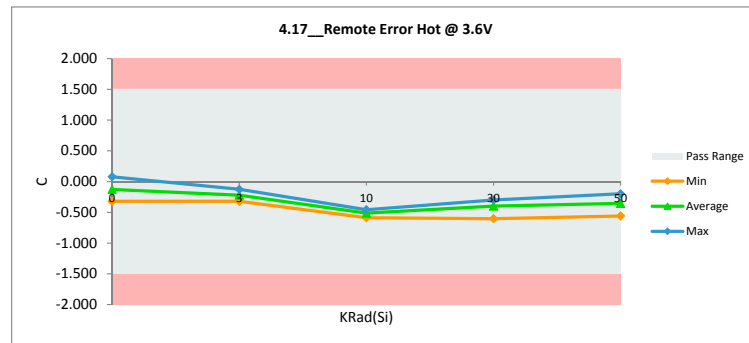
4.17 Remote Error Hot @ 3.6V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	-0.223	-0.223	0.000
0	2	-0.025	-0.025	0.000
0	3	0.015	0.015	0.000
0	4	0.017	0.017	0.000
0	5	0.079	0.079	0.000
0	6	0.006	-0.279	0.285
0	7	-0.018	-0.321	0.303
0	8	-0.013	-0.125	0.112
0	9	-0.107	-0.185	0.078
0	10	-0.075	-0.225	0.150
3	1	-0.223	-0.250	0.027
3	2	-0.025	-0.132	0.107
3	3	0.015	-0.232	0.247
3	4	0.017	-0.236	0.253
3	5	0.079	-0.216	0.295
3	6	0.006	-0.279	0.285
3	7	-0.018	-0.321	0.303
3	8	-0.013	-0.125	0.112
3	9	-0.107	-0.185	0.078
3	10	-0.075	-0.225	0.150
10	11	-0.223	-0.496	0.273
10	12	-0.025	-0.583	0.558
10	13	0.015	-0.514	0.529
10	14	0.017	-0.522	0.539
10	15	0.079	-0.466	0.545
10	16	0.006	-0.565	0.571
10	17	-0.018	-0.587	0.569
10	18	-0.013	-0.457	0.444
10	19	-0.107	-0.484	0.377
10	20	-0.075	-0.459	0.384
30	21	-0.075	-0.423	0.348
30	22	-0.223	-0.413	0.190
30	23	-0.025	-0.425	0.400
30	24	0.015	-0.482	0.497
30	25	0.017	-0.332	0.349
30	26	0.079	-0.603	0.682
30	27	0.006	-0.356	0.362
30	28	-0.018	-0.300	0.282
30	29	-0.013	-0.303	0.290
30	30	-0.107	-0.344	0.237
50	31	-0.075	-0.332	0.257
50	32	-0.223	-0.198	-0.025
50	33	-0.025	-0.219	0.194
50	34	0.015	-0.530	0.545
50	35	0.017	-0.449	0.466
50	36	0.079	-0.558	0.637
50	37	0.006	-0.396	0.402
50	38	-0.018	-0.283	0.265
50	39	-0.013	-0.208	0.195
50	40	-0.107	-0.377	0.270
	Max	0.079	0.079	0.682
	Average	-0.034	-0.323	0.288
	Min	-0.223	-0.603	-0.025
	Std Dev	0.080	0.168	0.189



4.17 Remote Error Hot @ 3.6V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C

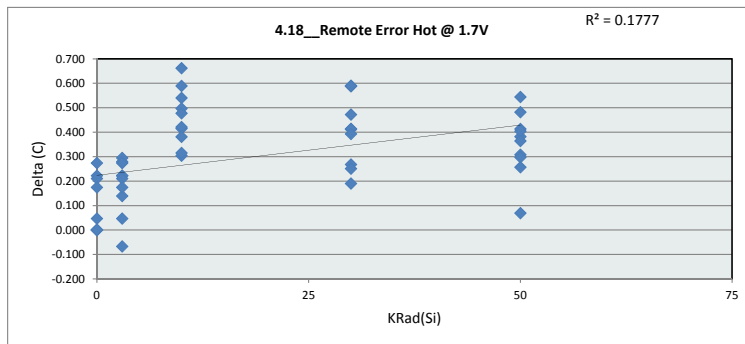
KRad(Si)	0	3	10	30	50
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.321	-0.321	-0.587	-0.603	-0.558
Average	-0.127	-0.220	-0.513	-0.398	-0.355
Max	0.079	-0.125	-0.457	-0.300	-0.198
UL	1.500	1.500	1.500	1.500	1.500



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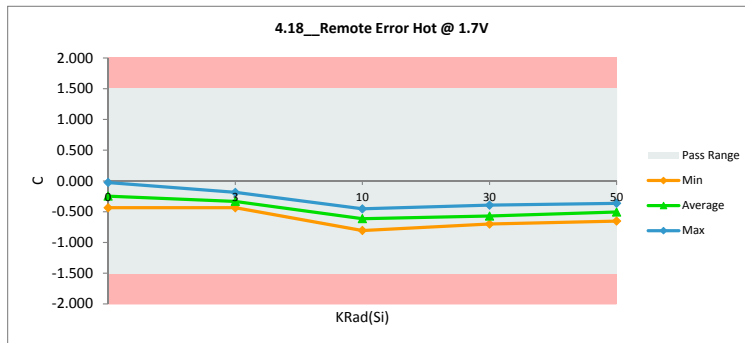
4.18 Remote Error Hot @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	-0.410	-0.410	0.000
0	2	-0.025	-0.025	0.000
0	3	-0.110	-0.110	0.000
0	4	-0.139	-0.139	0.000
0	5	-0.108	-0.108	0.000
0	6	-0.213	-0.435	0.222
0	7	-0.143	-0.353	0.210
0	8	-0.107	-0.281	0.174
0	9	-0.138	-0.185	0.047
0	10	-0.138	-0.412	0.274
3	1	-0.410	-0.343	-0.067
3	2	-0.025	-0.320	0.295
3	3	-0.110	-0.389	0.279
3	4	-0.139	-0.361	0.222
3	5	-0.108	-0.247	0.139
3	6	-0.213	-0.435	0.222
3	7	-0.143	-0.353	0.210
3	8	-0.107	-0.281	0.174
3	9	-0.138	-0.185	0.047
3	10	-0.138	-0.412	0.274
10	11	-0.410	-0.714	0.304
10	12	-0.025	-0.614	0.589
10	13	-0.110	-0.607	0.497
10	14	-0.139	-0.554	0.415
10	15	-0.108	-0.529	0.421
10	16	-0.213	-0.753	0.540
10	17	-0.143	-0.805	0.662
10	18	-0.107	-0.488	0.381
10	19	-0.138	-0.453	0.315
10	20	-0.138	-0.615	0.477
30	21	-0.138	-0.610	0.472
30	22	-0.410	-0.600	0.190
30	23	-0.025	-0.613	0.588
30	24	-0.110	-0.700	0.590
30	25	-0.139	-0.551	0.412
30	26	-0.108	-0.697	0.589
30	27	-0.213	-0.481	0.268
30	28	-0.143	-0.394	0.251
30	29	-0.107	-0.521	0.414
30	30	-0.138	-0.531	0.393
50	31	-0.138	-0.551	0.413
50	32	-0.410	-0.479	0.069
50	33	-0.025	-0.407	0.382
50	34	-0.110	-0.592	0.482
50	35	-0.139	-0.543	0.404
50	36	-0.108	-0.652	0.544
50	37	-0.213	-0.521	0.308
50	38	-0.143	-0.440	0.297
50	39	-0.107	-0.364	0.257
50	40	-0.138	-0.502	0.364
	Max	-0.025	-0.025	0.662
	Average	-0.153	-0.453	0.300
	Min	-0.410	-0.805	-0.067
	Std Dev	0.097	0.176	0.186



4.18 Remote Error Hot @ 1.7V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C

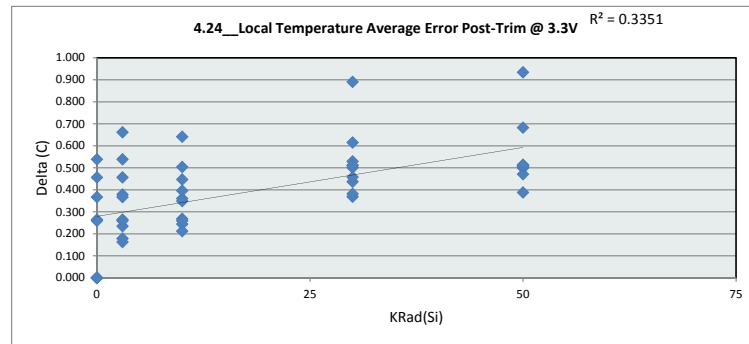
KRad(Si)	0	3	10	30	50
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.435	-0.435	-0.805	-0.700	-0.652
Average	-0.246	-0.333	-0.613	-0.570	-0.505
Max	-0.025	-0.185	-0.453	-0.394	-0.364
UL	1.500	1.500	1.500	1.500	1.500



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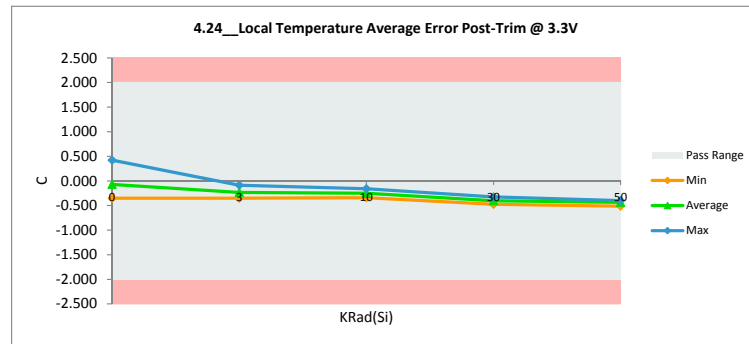
4.24 Local Temperature Average		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	2	2
Min Limit	-2	-2

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	0.075	0.075	0.000
0	2	-0.010	-0.010	0.000
0	3	0.421	0.421	0.000
0	4	0.076	0.076	0.000
0	5	0.054	0.054	0.000
0	6	0.056	-0.311	0.367
0	7	0.088	-0.177	0.265
0	8	0.029	-0.230	0.259
0	9	0.105	-0.352	0.457
0	10	0.281	-0.257	0.539
3	1	0.075	-0.088	0.163
3	2	-0.010	-0.245	0.235
3	3	0.421	-0.241	0.662
3	4	0.076	-0.303	0.378
3	5	0.054	-0.125	0.179
3	6	0.056	-0.311	0.367
3	7	0.088	-0.177	0.265
3	8	0.029	-0.230	0.259
3	9	0.105	-0.352	0.457
3	10	0.281	-0.257	0.539
10	11	0.075	-0.193	0.268
10	12	-0.010	-0.255	0.244
10	13	0.421	-0.220	0.641
10	14	0.076	-0.285	0.361
10	15	0.054	-0.159	0.212
10	16	0.056	-0.340	0.396
10	17	0.088	-0.262	0.349
10	18	0.029	-0.230	0.259
10	19	0.105	-0.343	0.447
10	20	0.281	-0.222	0.504
30	21	0.281	-0.334	0.615
30	22	0.075	-0.436	0.512
30	23	-0.010	-0.379	0.369
30	24	0.421	-0.469	0.891
30	25	0.076	-0.361	0.437
30	26	0.054	-0.475	0.529
30	27	0.056	-0.325	0.381
30	28	0.088	-0.413	0.501
30	29	0.029	-0.429	0.458
30	30	0.105	-0.406	0.510
50	31	0.281	-0.401	0.683
50	32	0.075	-0.432	0.507
50	33	-0.010	-0.398	0.388
50	34	0.421	-0.513	0.934
50	35	0.076	-0.435	0.510
50	36	0.054	-0.446	0.500
50	37	0.056	-0.415	0.471
50	38	0.088	-0.418	0.506
50	39	0.029	-0.484	0.513
50	40	0.105	-0.409	0.513
	Max	0.421	0.421	0.934
	Average	0.117	-0.279	0.396
	Min	-0.010	-0.513	0.000
	Std Dev	0.126	0.175	0.206



4.24 Local Temperature		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	2	C
Min Limit	-2	C

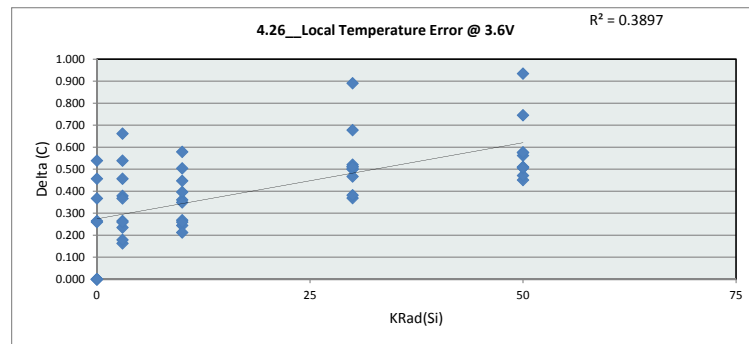
KRad(Si)	0	3	10	30	50
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-0.352	-0.352	-0.343	-0.475	-0.513
Average	-0.071	-0.233	-0.251	-0.403	-0.435
Max	0.421	-0.088	-0.159	-0.325	-0.399
UL	2.000	2.000	2.000	2.000	2.000



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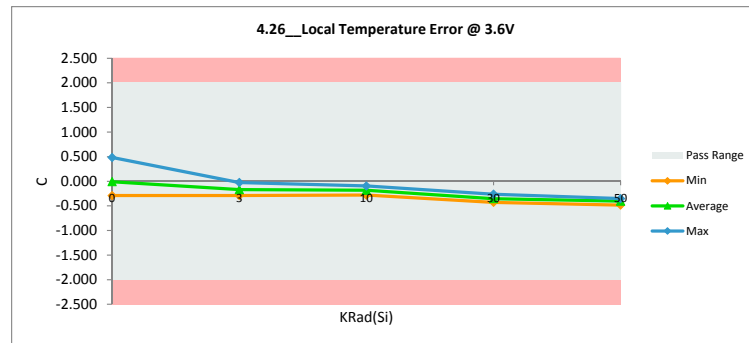
4.26 Local Temperature Error @		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	2	2
Min Limit	-2	-2

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	0.138	0.138	0.000
0	2	0.052	0.052	0.000
0	3	0.484	0.484	0.000
0	4	0.138	0.138	0.000
0	5	0.116	0.116	0.000
0	6	0.119	-0.248	0.367
0	7	0.150	-0.115	0.265
0	8	0.091	-0.168	0.259
0	9	0.167	-0.290	0.457
0	10	0.344	-0.195	0.539
3	1	0.138	-0.025	0.163
3	2	0.052	-0.182	0.235
3	3	0.484	-0.178	0.662
3	4	0.138	-0.240	0.378
3	5	0.116	-0.063	0.179
3	6	0.119	-0.248	0.367
3	7	0.150	-0.115	0.265
3	8	0.091	-0.168	0.259
3	9	0.167	-0.290	0.457
3	10	0.344	-0.195	0.539
10	11	0.138	-0.130	0.268
10	12	0.052	-0.192	0.244
10	13	0.484	-0.094	0.578
10	14	0.138	-0.223	0.361
10	15	0.116	-0.096	0.212
10	16	0.119	-0.278	0.396
10	17	0.150	-0.199	0.349
10	18	0.091	-0.168	0.259
10	19	0.167	-0.280	0.447
10	20	0.344	-0.160	0.504
30	21	0.344	-0.334	0.678
30	22	0.138	-0.374	0.512
30	23	0.052	-0.316	0.369
30	24	0.484	-0.407	0.891
30	25	0.138	-0.361	0.499
30	26	0.116	-0.350	0.467
30	27	0.119	-0.263	0.381
30	28	0.150	-0.351	0.501
30	29	0.091	-0.429	0.520
30	30	0.167	-0.343	0.510
50	31	0.344	-0.401	0.745
50	32	0.138	-0.369	0.507
50	33	0.052	-0.398	0.451
50	34	0.484	-0.450	0.934
50	35	0.138	-0.372	0.510
50	36	0.116	-0.446	0.562
50	37	0.119	-0.353	0.471
50	38	0.150	-0.355	0.506
50	39	0.091	-0.484	0.576
50	40	0.167	-0.409	0.576
	Max	0.484	0.484	0.934
	Average	0.180	-0.224	0.404
	Min	0.052	-0.484	0.000
	Std Dev	0.126	0.183	0.211



4.26 Local Temperature		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	2	C
Min Limit	-2	C

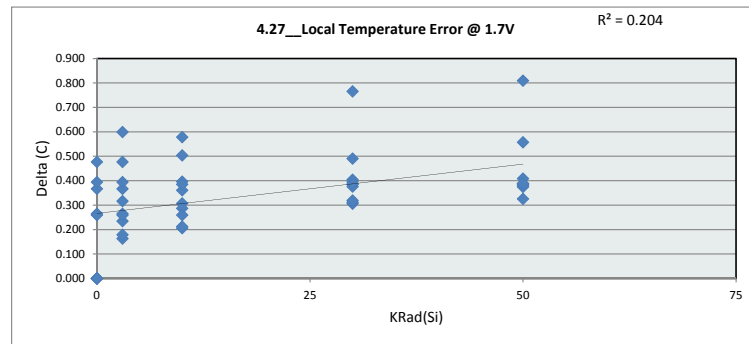
KRad(Si)	0	3	10	30	50
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-0.290	-0.290	-0.280	-0.429	-0.484
Average	-0.009	-0.170	-0.182	-0.353	-0.404
Max	0.484	-0.025	-0.095	-0.263	-0.353
UL	2.000	2.000	2.000	2.000	2.000



# TID LDR Report (3 - 50krad) TMP461-H

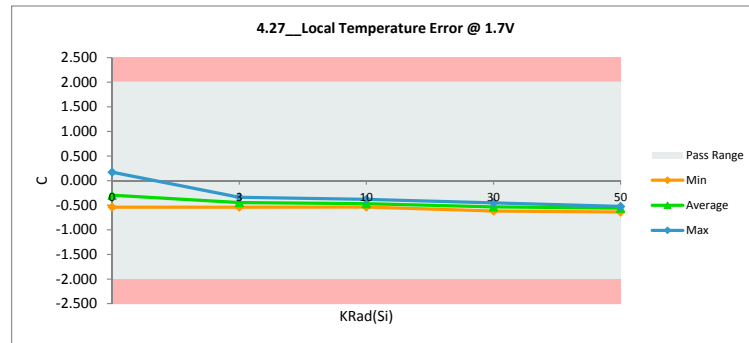
4.27 Local Temperature Error @		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	2	2
Min Limit	-2	-2

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	-0.175	-0.175	0.000
0	2	-0.198	-0.198	0.000
0	3	0.171	0.171	0.000
0	4	-0.174	-0.174	0.000
0	5	-0.196	-0.196	0.000
0	6	-0.132	-0.498	0.367
0	7	-0.162	-0.427	0.265
0	8	-0.221	-0.481	0.259
0	9	-0.145	-0.540	0.394
0	10	0.031	-0.445	0.476
3	1	-0.175	-0.338	0.163
3	2	-0.198	-0.432	0.235
3	3	0.171	-0.428	0.599
3	4	-0.174	-0.490	0.316
3	5	-0.196	-0.375	0.179
3	6	-0.132	-0.498	0.367
3	7	-0.162	-0.427	0.265
3	8	-0.221	-0.481	0.259
3	9	-0.145	-0.540	0.394
3	10	0.031	-0.445	0.476
10	11	-0.175	-0.380	0.206
10	12	-0.198	-0.505	0.307
10	13	0.171	-0.407	0.578
10	14	-0.174	-0.535	0.361
10	15	-0.196	-0.409	0.212
10	16	-0.132	-0.527	0.396
10	17	-0.162	-0.449	0.287
10	18	-0.221	-0.481	0.259
10	19	-0.145	-0.530	0.385
10	20	0.031	-0.472	0.504
30	21	0.031	-0.459	0.490
30	22	-0.175	-0.561	0.386
30	23	-0.198	-0.504	0.306
30	24	0.171	-0.594	0.766
30	25	-0.174	-0.486	0.312
30	26	-0.196	-0.600	0.404
30	27	-0.132	-0.450	0.319
30	28	-0.162	-0.538	0.376
30	29	-0.221	-0.616	0.395
30	30	-0.145	-0.531	0.385
50	31	0.031	-0.526	0.557
50	32	-0.175	-0.557	0.382
50	33	-0.198	-0.524	0.326
50	34	0.171	-0.638	0.809
50	35	-0.174	-0.560	0.386
50	36	-0.196	-0.571	0.375
50	37	-0.132	-0.540	0.409
50	38	-0.162	-0.543	0.381
50	39	-0.221	-0.609	0.388
50	40	-0.145	-0.534	0.388
	Max	0.171	0.171	0.809
	Average	-0.120	-0.461	0.341
	Min	-0.221	-0.638	0.000
	Std Dev	0.119	0.141	0.170



4.27 Local Temperature		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	2	C
Min Limit	-2	C

KRad(Si)	0	3	10	30	50
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-0.540	-0.540	-0.535	-0.616	-0.638
Average	-0.296	-0.445	-0.470	-0.534	-0.560
Max	0.171	-0.338	-0.380	-0.450	-0.524
UL	2.000	2.000	2.000	2.000	2.000

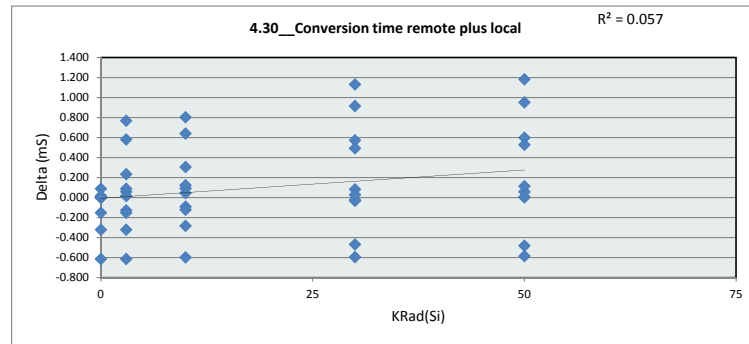




TID LDR Report (3 - 50krad)  
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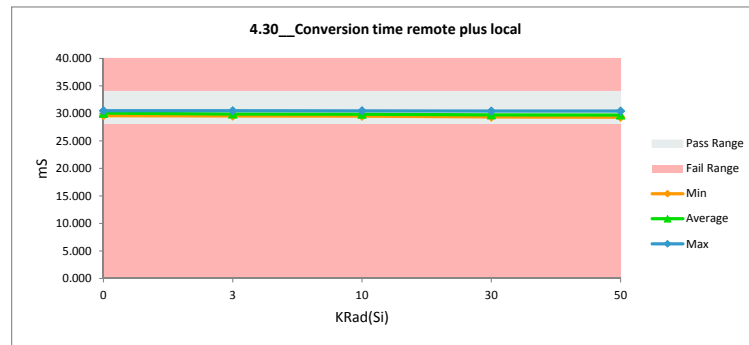
4.30_Conversion time remote plus local		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	mS	mS
Max Limit	34	34
Min Limit	28	28

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	30.294	30.294	0.000
0	2	29.603	29.603	0.000
0	3	29.669	29.669	0.000
0	4	30.492	30.492	0.000
0	5	29.836	29.836	0.000
0	6	29.872	30.487	-0.615
0	7	30.150	30.471	-0.321
0	8	29.818	29.730	0.088
0	9	29.904	29.888	0.016
0	10	29.836	29.988	-0.152
3	1	30.294	29.526	0.768
3	2	29.603	29.546	0.057
3	3	29.669	29.797	-0.128
3	4	30.492	29.911	0.581
3	5	29.836	29.603	0.233
3	6	29.872	30.487	-0.615
3	7	30.150	30.471	-0.321
3	8	29.818	29.730	0.088
3	9	29.904	29.888	0.016
3	10	29.836	29.988	-0.152
10	11	30.294	29.491	0.803
10	12	29.603	29.512	0.091
10	13	29.669	29.760	-0.091
10	14	30.492	29.853	0.639
10	15	29.836	29.531	0.305
10	16	29.872	30.471	-0.599
10	17	30.150	30.433	-0.283
10	18	29.818	29.695	0.123
10	19	29.904	29.860	0.044
10	20	29.836	29.957	-0.121
30	21	29.836	29.344	0.492
30	22	30.294	29.380	0.914
30	23	29.603	29.635	-0.032
30	24	29.669	29.693	-0.024
30	25	30.492	29.361	1.131
30	26	29.836	30.432	-0.596
30	27	29.872	30.341	-0.469
30	28	30.150	29.578	0.572
30	29	29.818	29.737	0.081
30	30	29.904	29.877	0.027
50	31	29.836	29.308	0.528
50	32	30.294	29.342	0.952
50	33	29.603	29.597	0.006
50	34	29.669	29.611	0.058
50	35	30.492	29.311	1.181
50	36	29.836	30.422	-0.586
50	37	29.872	30.353	-0.481
50	38	30.150	29.552	0.598
50	39	29.818	29.704	0.114
50	40	29.904	29.903	0.001
	Max	30.492	30.492	1.181
	Average	29.947	29.849	0.098
	Min	29.603	29.308	-0.615
	Std Dev	0.268	0.374	0.451



4.30_Conversion time re		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	34	mS
Min Limit	28	mS

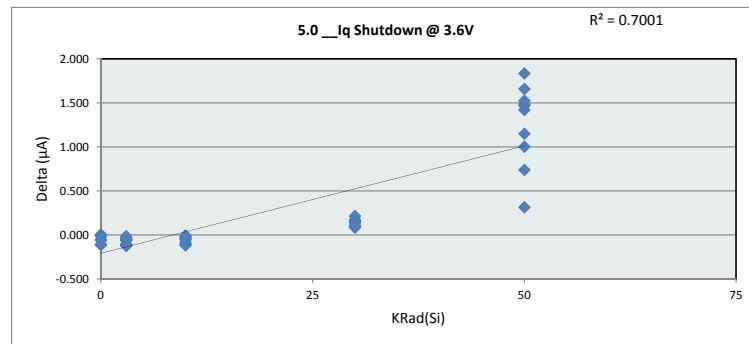
KRad(Si)	0	3	10	30	50
LL	28.000	28.000	28.000	28.000	28.000
Min	29.603	29.526	29.491	29.344	29.308
Average	30.046	29.895	29.856	29.738	29.710
Max	30.492	30.487	30.471	30.432	30.422
UL	34.000	34.000	34.000	34.000	34.000



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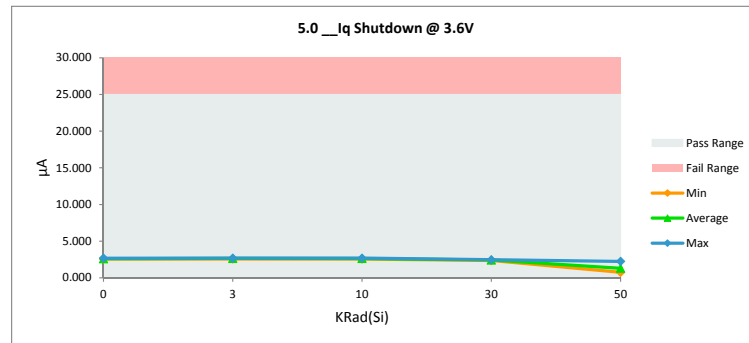
5.0 __Iq Shutdown @ 3.6V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	25	25
Min Limit		

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	2.554	2.554	0.000
0	2	2.578	2.578	0.000
0	3	2.576	2.576	0.000
0	4	2.559	2.559	0.000
0	5	2.586	2.586	0.000
0	6	2.561	2.623	-0.062
0	7	2.559	2.675	-0.116
0	8	2.567	2.618	-0.051
0	9	2.577	2.681	-0.104
0	10	2.556	2.570	-0.014
3	1	2.554	2.599	-0.045
3	2	2.578	2.691	-0.113
3	3	2.576	2.638	-0.062
3	4	2.559	2.685	-0.126
3	5	2.586	2.623	-0.037
3	6	2.561	2.623	-0.062
3	7	2.559	2.675	-0.116
3	8	2.567	2.618	-0.051
3	9	2.577	2.681	-0.104
3	10	2.556	2.570	-0.014
10	11	2.554	2.578	-0.024
10	12	2.578	2.665	-0.087
10	13	2.576	2.628	-0.052
10	14	2.559	2.666	-0.107
10	15	2.586	2.619	-0.033
10	16	2.561	2.616	-0.055
10	17	2.559	2.678	-0.119
10	18	2.567	2.592	-0.025
10	19	2.577	2.689	-0.112
10	20	2.556	2.561	-0.005
30	21	2.556	2.384	0.172
30	22	2.554	2.468	0.086
30	23	2.578	2.440	0.138
30	24	2.576	2.471	0.105
30	25	2.559	2.418	0.141
30	26	2.586	2.423	0.163
30	27	2.561	2.476	0.085
30	28	2.559	2.404	0.155
30	29	2.567	2.464	0.103
30	30	2.577	2.363	0.214
50	31	2.556	1.408	1.148
50	32	2.554	2.239	0.315
50	33	2.578	1.158	1.420
50	34	2.576	1.574	1.002
50	35	2.559	1.034	1.525
50	36	2.586	1.117	1.469
50	37	2.561	1.824	0.737
50	38	2.559	1.075	1.484
50	39	2.567	0.909	1.658
50	40	2.577	0.743	1.834
	Max	2.586	2.691	1.834
	Average	2.567	2.322	0.245
	Min	2.554	0.743	-0.126
	Std Dev	0.011	0.555	0.556



5.0 __Iq Shutdown @ 3.6V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	25	µA
Min Limit		µA

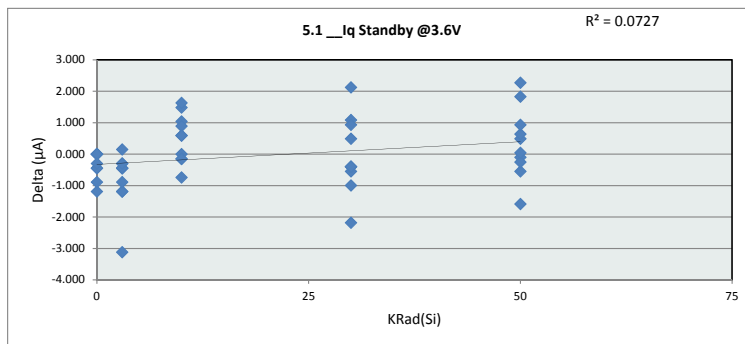
KRad(Si)	0	3	10	30	50
LL					
Min	2.554	2.570	2.561	2.363	0.743
Average	2.602	2.640	2.629	2.431	1.308
Max	2.681	2.691	2.689	2.476	2.239
UL	25.000	25.000	25.000	25.000	25.000



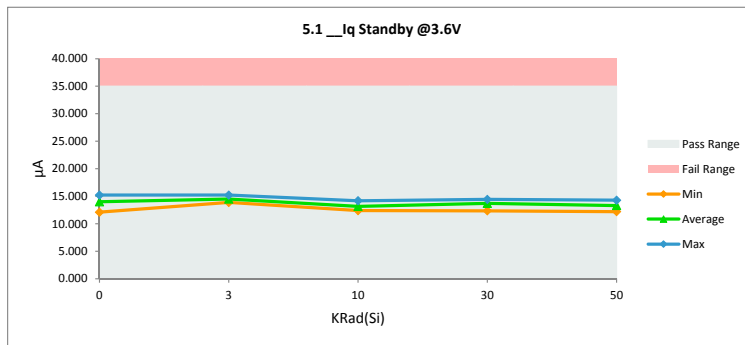
# TID LDR Report (3 - 50krad) TMP461-H

5.1 __Iq Standby @3.6V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	35	35
Min Limit	0	0

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	12.102	12.102	0.000
0	2	14.329	14.329	0.000
0	3	13.735	13.735	0.000
0	4	12.993	12.993	0.000
0	5	14.478	14.478	0.000
0	6	14.032	15.221	-1.189
0	7	13.735	14.182	-0.447
0	8	13.438	13.885	-0.447
0	9	14.032	14.924	-0.892
0	10	13.884	14.182	-0.298
3	1	12.102	15.221	-3.119
3	2	14.329	14.776	-0.447
3	3	13.735	14.033	-0.298
3	4	12.993	14.182	-1.189
3	5	14.478	14.330	0.148
3	6	14.032	15.221	-1.189
3	7	13.735	14.182	-0.447
3	8	13.438	13.885	-0.447
3	9	14.032	14.924	-0.892
3	10	13.884	14.182	-0.298
10	11	12.102	12.846	-0.744
10	12	14.329	13.291	1.038
10	13	13.735	13.143	0.592
10	14	12.993	12.995	-0.002
10	15	14.478	12.995	1.483
10	16	14.032	14.182	-0.150
10	17	13.735	13.885	-0.150
10	18	13.438	12.549	0.889
10	19	14.032	12.401	1.631
10	20	13.884	13.291	0.593
30	21	13.884	14.285	-0.401
30	22	12.102	14.285	-2.183
30	23	14.329	13.246	1.083
30	24	13.735	14.285	-0.550
30	25	12.993	13.988	-0.995
30	26	14.478	12.356	2.122
30	27	14.032	14.434	-0.402
30	28	13.735	12.801	0.934
30	29	13.438	13.840	-0.402
30	30	14.032	13.543	0.489
50	31	13.884	13.988	-0.104
50	32	12.102	13.691	-1.589
50	33	14.329	12.504	1.825
50	34	13.735	14.285	-0.550
50	35	12.993	13.246	-0.253
50	36	14.478	12.207	2.271
50	37	14.032	13.543	0.489
50	38	13.735	13.098	0.637
50	39	13.438	13.395	0.043
50	40	14.032	13.098	0.934
	Max	14.478	15.221	2.271
	Average	13.676	13.733	-0.057
	Min	12.102	12.102	-3.119
	Std Dev	0.668	0.810	1.020



5.1 __Iq Standby @3.6V					
Test Site	Junkins				
Tester	ETS36401				
Test Number	EF901400				
Max Limit	35	µA			
Min Limit	0	µA			
KRad(Si)	0	3	10	30	50
LL	0.000	0.000	0.000	0.000	0.000
Min	12.102	13.885	12.401	12.356	12.207
Average	14.003	14.494	13.158	13.706	13.306
Max	15.221	15.221	14.182	14.434	14.285
UL	35.000	35.000	35.000	35.000	35.000

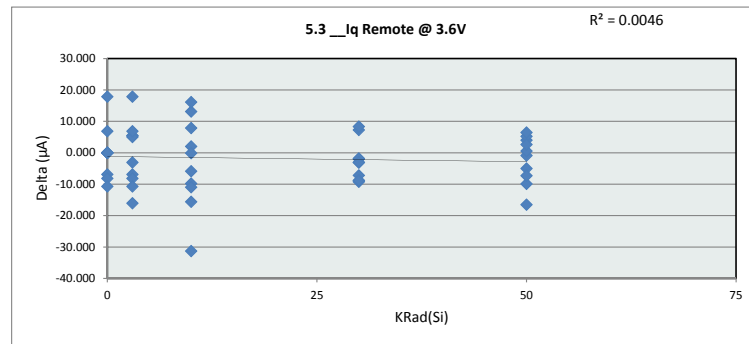




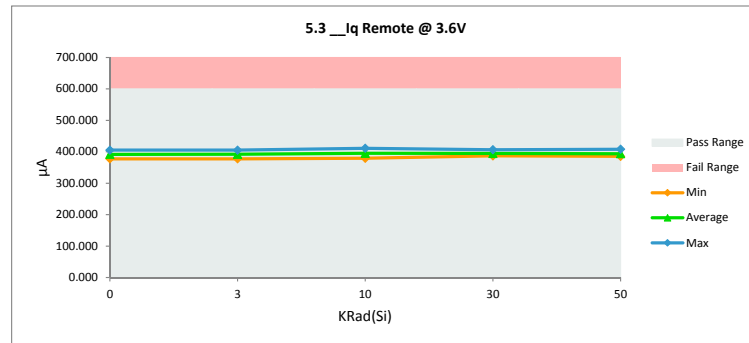
# TID LDR Report (3 - 50krad) TMP461-H

5.3 Iq Remote @ 3.6V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	600	600
Min Limit	0	0

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	390.627	390.627	0.000
0	2	390.565	390.565	0.000
0	3	391.482	391.482	0.000
0	4	379.746	379.746	0.000
0	5	397.473	397.473	0.000
0	6	398.267	405.176	-6.909
0	7	388.609	396.802	-8.193
0	8	395.272	388.427	6.845
0	9	389.160	399.858	-10.698
0	10	395.456	377.608	17.848
3	1	390.627	385.126	5.501
3	2	390.565	393.623	-3.058
3	3	391.482	386.104	5.378
3	4	379.746	395.824	-16.078
3	5	397.473	392.462	5.011
3	6	398.267	405.176	-6.909
3	7	388.609	396.802	-8.193
3	8	395.272	388.427	6.845
3	9	389.160	399.858	-10.698
3	10	395.456	377.608	17.848
10	11	390.627	388.611	2.016
10	12	390.565	396.435	-5.870
10	13	391.482	383.598	7.884
10	14	379.746	411.044	-31.298
10	15	397.473	384.332	13.141
10	16	398.267	408.049	-9.782
10	17	388.609	399.553	-10.944
10	18	395.272	395.396	-0.124
10	19	389.160	404.748	-15.588
10	20	395.456	379.320	16.136
30	21	395.456	388.173	7.283
30	22	390.627	397.831	-7.204
30	23	390.565	392.574	-2.009
30	24	391.482	400.704	-9.222
30	25	379.746	388.540	-8.794
30	26	397.473	406.388	-8.915
30	27	398.267	400.093	-1.826
30	28	388.609	391.658	-3.049
30	29	395.272	386.951	8.321
30	30	389.160	392.269	-3.109
50	31	395.456	391.474	3.982
50	32	390.627	395.631	-5.004
50	33	390.565	385.362	5.203
50	34	391.482	407.978	-16.496
50	35	379.746	389.640	-9.894
50	36	397.473	404.799	-7.326
50	37	398.267	399.176	-0.909
50	38	388.609	388.051	0.558
50	39	395.272	388.846	6.426
50	40	389.160	386.523	2.637
Max		398.267	411.044	17.848
Average		391.666	393.450	-1.785
Min		379.746	377.608	-31.298
Std Dev		5.197	8.246	9.408



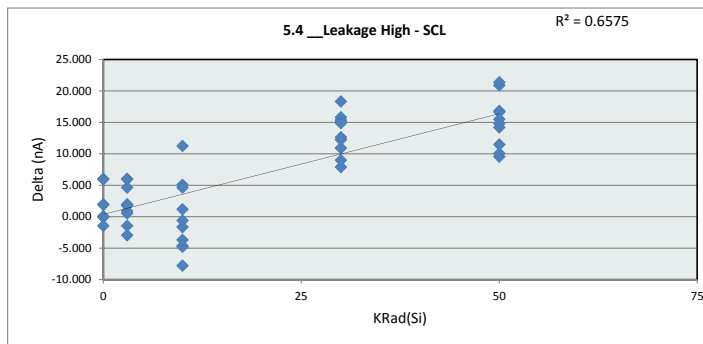
5.3 Iq Remote @ 3.6V					
Test Site	Junkins				
Tester	ETS36401				
Test Number	EF901400				
Max Limit	600	µA			
Min Limit	0	µA			
KRad(Si)	0	3	10	30	50
LL	0.000	0.000	0.000	0.000	0.000
Min	377.608	377.608	379.320	386.951	385.362
Average	391.776	392.101	395.109	394.518	393.748
Max	405.176	405.176	411.044	406.388	407.978
UL	600.000	600.000	600.000	600.000	600.000



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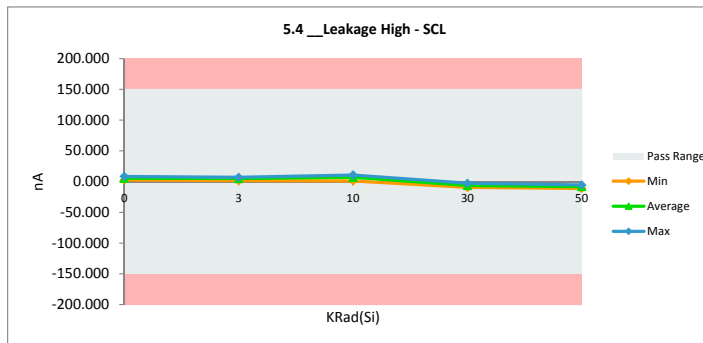
5.4 Leakage High - SCL		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	nA	nA
Max Limit	150	150
Min Limit	-150	-150

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	7.276	7.276	0.000
0	2	2.783	2.783	0.000
0	3	2.567	2.567	0.000
0	4	5.990	5.990	0.000
0	5	8.403	8.403	0.000
0	6	9.848	3.844	6.004
0	7	12.419	6.474	5.945
0	8	5.124	3.223	1.901
0	9	8.894	6.936	1.958
0	10	5.225	6.676	-1.451
3	1	7.276	2.645	4.631
3	2	2.783	5.737	-2.954
3	3	2.567	1.677	0.890
3	4	5.990	5.448	0.542
3	5	8.403	6.618	1.785
3	6	9.848	3.844	6.004
3	7	12.419	6.474	5.945
3	8	5.124	3.223	1.901
3	9	8.894	6.936	1.958
3	10	5.225	6.676	-1.451
10	11	7.276	8.932	-1.656
10	12	2.783	10.564	-7.781
10	13	2.567	7.212	-4.645
10	14	5.990	10.781	-4.791
10	15	8.403	3.341	5.062
10	16	9.848	8.672	1.176
10	17	12.419	1.173	11.246
10	18	5.124	8.802	-3.678
10	19	8.894	4.251	4.643
10	20	5.225	5.825	-0.600
30	21	5.225	-2.660	7.885
30	22	7.276	-8.523	15.799
30	23	2.783	-8.133	10.916
30	24	2.567	-6.409	8.976
30	25	5.990	-9.392	15.382
30	26	8.403	-6.708	15.111
30	27	9.848	-5.029	14.877
30	28	12.419	-5.914	18.333
30	29	5.124	-7.488	12.612
30	30	8.894	-3.335	12.229
50	31	5.225	-8.967	14.192
50	32	7.276	-9.551	16.827
50	33	2.783	-6.762	9.545
50	34	2.567	-7.497	10.064
50	35	5.990	-5.488	11.478
50	36	8.403	-8.232	16.635
50	37	9.848	-11.051	20.899
50	38	12.419	-8.952	21.371
50	39	5.124	-10.376	15.500
50	40	8.894	-5.923	14.817
	Max	12.419	10.781	21.371
	Average	6.853	0.532	6.321
	Min	2.567	-11.051	-7.781
	Std Dev	2.997	6.905	7.528



5.4 Leakage High - SCL		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	150	nA
Min Limit	-150	nA

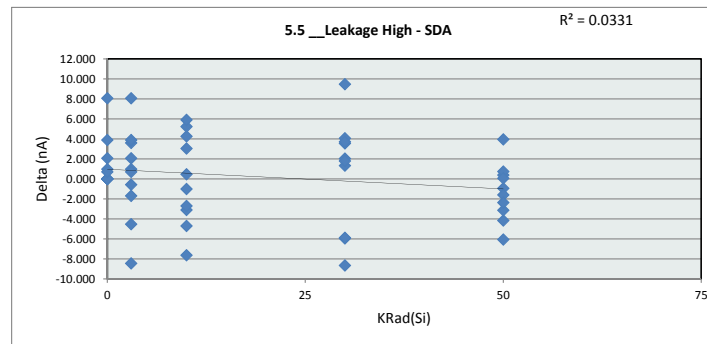
KRad(Si)	0	3	10	30	50
LL	-150.000	-150.000	-150.000	-150.000	-150.000
Min	2.567	1.677	1.173	-9.392	-11.051
Average	5.417	4.928	6.955	-6.359	-8.280
Max	8.403	6.936	10.781	-2.660	-5.488
UL	150.000	150.000	150.000	150.000	150.000



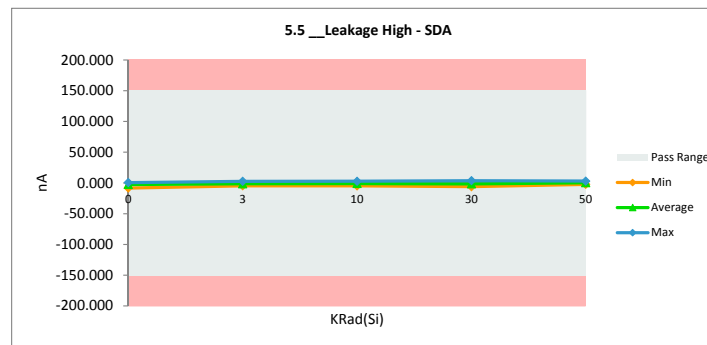
# TID LDR Report (3 - 50krad) TMP461-H

5.5 Leakage High - SDA		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	nA	nA
Max Limit	150	150
Min Limit	-150	-150

KRad(Si)	Serial #	PreLDR	PostLDR	Delta
0	1	-1.924	-1.924	0.000
0	2	-8.305	-8.305	0.000
0	3	-4.176	-4.176	0.000
0	4	-1.433	-1.433	0.000
0	5	0.645	0.645	0.000
0	6	1.584	-0.478	2.062
0	7	3.403	-4.650	8.053
0	8	1.382	-2.499	3.881
0	9	1.136	0.171	0.965
0	10	-2.300	-3.005	0.705
3	1	-1.924	2.611	-4.535
3	2	-8.305	0.143	-8.448
3	3	-4.176	-2.485	-1.691
3	4	-1.433	-0.854	-0.579
3	5	0.645	-2.947	3.592
3	6	1.584	-0.478	2.062
3	7	3.403	-4.650	8.053
3	8	1.382	-2.499	3.881
3	9	1.136	0.171	0.965
3	10	-2.300	-3.005	0.705
10	11	-1.924	2.786	-4.710
10	12	-8.305	-0.679	-7.626
10	13	-4.176	-1.069	-3.107
10	14	-1.433	1.270	-2.703
10	15	0.645	-3.609	4.254
10	16	1.584	-1.444	3.028
10	17	3.403	-1.819	5.222
10	18	1.382	2.396	-1.014
10	19	1.136	-4.764	5.900
10	20	-2.300	-2.758	0.458
30	21	-2.300	3.658	-5.958
30	22	-1.924	-3.947	2.023
30	23	-8.305	0.358	-8.663
30	24	-4.176	1.708	-5.884
30	25	-1.433	-2.762	1.329
30	26	0.645	-3.407	4.052
30	27	1.584	-1.967	3.551
30	28	3.403	-6.061	9.464
30	29	1.382	-2.327	3.709
30	30	1.136	-0.647	1.783
50	31	-2.300	1.867	-4.167
50	32	-1.924	-0.983	-0.941
50	33	-8.305	-2.242	-6.063
50	34	-4.176	-1.043	-3.133
50	35	-1.433	0.172	-1.605
50	36	0.645	3.022	-2.377
50	37	1.584	1.207	0.377
50	38	3.403	-0.548	3.951
50	39	1.382	0.652	0.730
50	40	1.136	1.072	0.064
Max		3.403	3.658	9.464
Average		-0.999	-1.231	0.232
Min		-8.305	-8.305	-8.663
Std Dev		3.276	2.473	4.141



5.5 Leakage High - SDA					
Test Site	Junkins				
Tester	ETS36401				
Test Number	EF901400				
Max Limit	150	nA			
Min Limit	-150	nA			
KRad(Si)	0	3	10	30	50
LL	-150.000	-150.000	-150.000	-150.000	-150.000
Min	-8.305	-4.650	-4.764	-6.061	-2.242
Average	-2.565	-1.399	-0.969	-1.539	0.318
Max	0.645	2.611	2.786	3.658	3.022
UL	150.000	150.000	150.000	150.000	150.000



Delta Threshold 10.00%

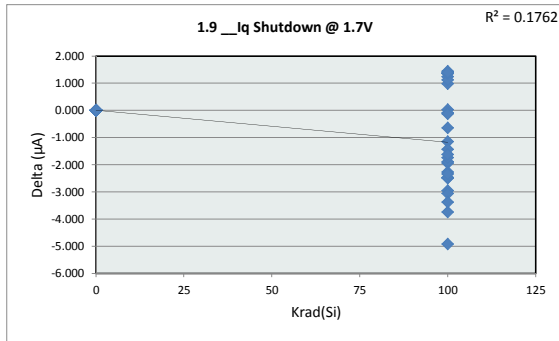
TID LDR Report (100Krad)  
TMP461-H



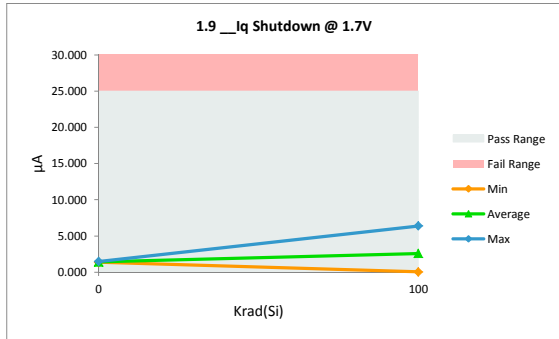
# TID LDR Report (100Krad) TMP461-H

1.9 __Iq Shutdown @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	2.5	25
Min Limit	0.5	0

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	1.363	1.363	0.000
0	2	1.380	1.380	0.000
0	3	1.470	1.470	0.000
0	4	1.376	1.376	0.000
0	5	1.456	1.456	0.000
0	6	1.489	1.489	0.000
0	7	1.416	1.416	0.000
0	8	1.413	1.413	0.000
0	9	1.406	1.406	0.000
0	10	1.421	1.421	0.000
0	11	1.359	1.359	0.000
0	12	1.397	1.397	0.000
0	13	1.385	1.385	0.000
0	14	1.414	1.414	0.000
0	15	1.423	1.423	0.000
0	16	1.425	1.425	0.000
0	17	1.427	1.427	0.000
0	18	1.430	1.430	0.000
0	19	1.419	1.419	0.000
0	20	1.452	1.452	0.000
0	21	1.398	1.398	0.000
0	22	1.389	1.389	0.000
0	23	1.363	1.363	0.000
0	24	1.443	1.443	0.000
0	25	1.366	1.366	0.000
0	26	1.393	1.393	0.000
0	27	1.394	1.394	0.000
100	1	1.363	3.858	-2.495
100	2	1.380	3.858	-2.478
100	3	1.470	1.445	0.025
100	4	1.376	0.137	1.239
100	5	1.456	1.545	-0.089
100	6	1.489	3.959	-2.470
100	7	1.416	3.356	-1.940
100	8	1.413	4.361	-2.948
100	9	1.406	2.048	-0.642
100	10	1.421	1.545	-0.124
100	11	1.359	3.255	-1.896
100	12	1.397	2.551	-1.154
100	13	1.385	3.657	-2.272
100	14	1.414	3.154	-1.740
100	15	1.423	3.758	-2.335
100	16	1.425	2.853	-1.428
100	17	1.427	3.054	-1.627
100	18	1.430	5.166	-3.736
100	19	1.419	0.439	0.980
100	20	1.452	6.373	-4.921
100	21	1.398	4.462	-3.064
100	22	1.389	4.764	-3.375
100	23	1.363	0.000	1.363
100	24	1.443	0.000	1.443
100	25	1.366	0.238	1.128
100	26	1.393	0.037	1.356
100	27	1.394	0.000	1.394
Max		1.489	6.373	1.443
Average		1.410	1.999	-0.589
Min		1.359	0.000	-4.921
Std Dev		0.033	1.420	1.416



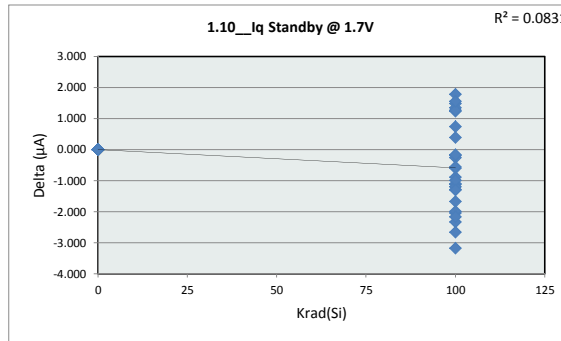
1.9 __Iq Shutdown @ 1.7V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	25	µA
Min Limit	0	µA
Krad(Si)	0	100
LL	0.000	0.000
Min	1.359	0.037
Average	1.410	2.588
Max	1.489	6.373
UL	25.000	25.000



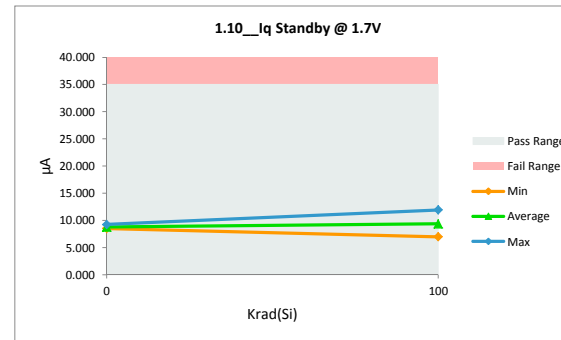
# TID LDR Report (100Krad) TMP461-H

1.10_Iq Standby @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	15	35
Min Limit	5	0

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	8.614	8.614	0.000
0	2	8.867	8.867	0.000
0	3	9.004	9.004	0.000
0	4	8.527	8.527	0.000
0	5	8.808	8.808	0.000
0	6	8.861	8.861	0.000
0	7	8.663	8.663	0.000
0	8	8.872	8.872	0.000
0	9	8.702	8.702	0.000
0	10	8.859	8.859	0.000
0	11	8.718	8.718	0.000
0	12	8.801	8.801	0.000
0	13	8.911	8.911	0.000
0	14	8.850	8.850	0.000
0	15	8.742	8.742	0.000
0	16	8.856	8.856	0.000
0	17	8.705	8.705	0.000
0	18	8.657	8.657	0.000
0	19	8.942	8.942	0.000
0	20	8.750	8.750	0.000
0	21	8.654	8.654	0.000
0	22	8.720	8.720	0.000
0	23	9.253	9.253	0.000
0	24	8.756	8.756	0.000
0	25	8.506	8.506	0.000
0	26	8.795	8.795	0.000
0	27	8.716	8.716	0.000
100	1	8.614	9.731	-1.117
100	2	8.867	9.975	-1.108
100	3	9.004	8.264	0.740
100	4	8.527	8.142	0.385
100	5	8.808	8.997	-0.189
100	6	8.861	11.198	-2.337
100	7	8.663	9.548	-0.885
100	8	8.872	10.159	-1.287
100	9	8.702	9.303	-0.601
100	10	8.859	9.120	-0.261
100	11	8.718	9.914	-1.196
100	12	8.801	9.364	-0.563
100	13	8.911	10.587	-1.676
100	14	8.850	10.892	-2.042
100	15	8.742	9.731	-0.989
100	16	8.856	10.159	-1.303
100	17	8.705	8.875	-0.170
100	18	8.657	11.320	-2.663
100	19	8.942	7.714	1.228
100	20	8.750	11.932	-3.182
100	21	8.654	10.648	-1.994
100	22	8.720	10.892	-2.172
100	23	9.253	7.775	1.478
100	24	8.756	6.980	1.776
100	25	8.506	7.163	1.343
100	26	8.795	7.530	1.265
100	27	8.716	7.163	1.553
Max		9.253	11.932	1.776
Average		8.782	9.078	-0.296
Min		8.506	6.980	-3.182
Std Dev		0.150	1.030	1.035



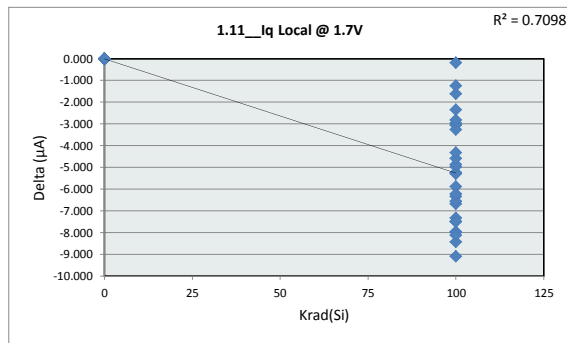
1.10_Iq Standby @ 1.7V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	35	µA
Min Limit	0	µA
Krad(Si)	0	100
LL	0.000	0.000
Min	8.506	6.980
Average	8.782	9.373
Max	9.253	11.932
UL	35.000	35.000



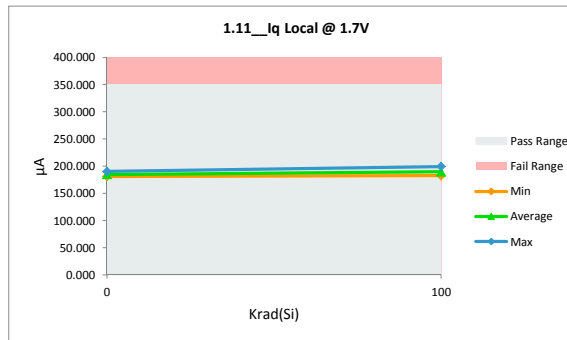
# TID LDR Report (100Krad) TMP461-H

1.11_Iq Local @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	250	350
Min Limit	150	0

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	183.858	183.858	0.000
0	2	186.577	186.577	0.000
0	3	188.874	188.874	0.000
0	4	180.987	180.987	0.000
0	5	186.606	186.606	0.000
0	6	186.271	186.271	0.000
0	7	184.823	184.823	0.000
0	8	189.279	189.279	0.000
0	9	184.686	184.686	0.000
0	10	186.447	186.447	0.000
0	11	183.572	183.572	0.000
0	12	182.143	182.143	0.000
0	13	186.214	186.214	0.000
0	14	190.261	190.261	0.000
0	15	183.979	183.979	0.000
0	16	182.324	182.324	0.000
0	17	185.505	185.505	0.000
0	18	182.933	182.933	0.000
0	19	184.370	184.370	0.000
0	20	182.037	182.037	0.000
0	21	182.570	182.570	0.000
0	22	182.159	182.159	0.000
0	23	182.242	182.242	0.000
0	24	183.204	183.204	0.000
0	25	182.398	182.398	0.000
0	26	184.353	184.353	0.000
0	27	183.080	183.080	0.000
100	1	183.858	190.189	-6.331
100	2	186.577	192.451	-5.874
100	3	188.874	191.839	-2.965
100	4	180.987	186.277	-5.290
100	5	186.606	191.839	-5.233
100	6	186.271	192.940	-6.669
100	7	184.823	192.145	-7.322
100	8	189.279	197.708	-8.429
100	9	184.686	187.744	-3.058
100	10	186.447	191.411	-4.964
100	11	183.572	191.534	-7.962
100	12	182.143	187.010	-4.867
100	13	186.214	190.800	-4.586
100	14	190.261	199.358	-9.097
100	15	183.979	191.962	-7.983
100	16	182.324	189.822	-7.498
100	17	185.505	189.822	-4.317
100	18	182.933	191.045	-8.112
100	19	184.370	187.193	-2.823
100	20	182.037	188.599	-6.562
100	21	182.570	188.783	-6.213
100	22	182.159	189.639	-7.480
100	23	182.242	182.425	-0.183
100	24	183.204	184.809	-1.605
100	25	182.398	185.665	-3.267
100	26	184.353	185.604	-1.251
100	27	183.080	185.421	-2.341
Max		190.261	199.358	0.000
Average		184.509	187.144	-2.635
Min		180.987	180.987	-9.097
Std Dev		2.380	4.097	3.157



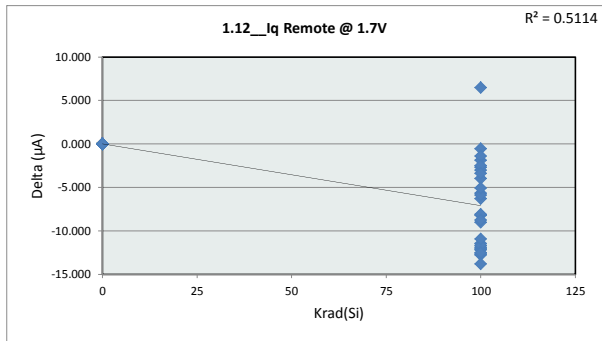
1.11_Iq Local @ 1.7V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	350	µA
Min Limit	0	µA
Krad(Si)	0	100
LL	0.000	0.000
Min	180.987	182.425
Average	184.509	189.779
Max	190.261	199.358
UL	350.000	350.000



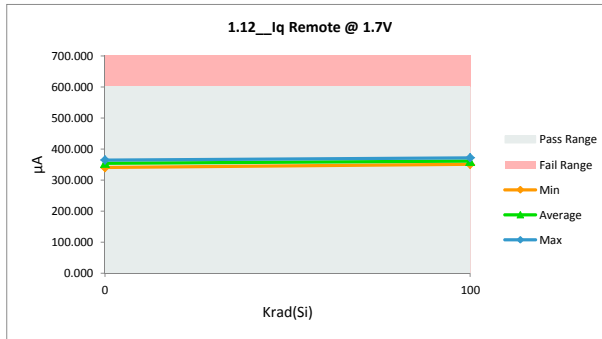
# TID LDR Report (100Krad) TMP461-H

1.12_Iq Remote @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	500	600
Min Limit	250	0

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	357.059	357.059	0.000
0	2	349.862	349.862	0.000
0	3	357.339	357.339	0.000
0	4	340.352	340.352	0.000
0	5	363.068	363.068	0.000
0	6	354.888	354.888	0.000
0	7	359.014	359.014	0.000
0	8	360.296	360.296	0.000
0	9	353.951	353.951	0.000
0	10	354.008	354.008	0.000
0	11	350.706	350.706	0.000
0	12	355.271	355.271	0.000
0	13	356.366	356.366	0.000
0	14	364.142	364.142	0.000
0	15	357.964	357.964	0.000
0	16	353.538	353.538	0.000
0	17	353.340	353.340	0.000
0	18	355.428	355.428	0.000
0	19	357.933	357.933	0.000
0	20	343.702	343.702	0.000
0	21	348.185	348.185	0.000
0	22	351.609	351.609	0.000
0	23	351.119	351.119	0.000
0	24	347.661	347.661	0.000
0	25	353.527	353.527	0.000
0	26	348.380	348.380	0.000
0	27	353.587	353.587	0.000
100	1	357.059	358.910	-1.851
100	2	349.862	362.027	-12.165
100	3	357.339	360.010	-2.671
100	4	340.352	353.102	-12.750
100	5	363.068	369.363	-6.295
100	6	354.888	367.529	-12.641
100	7	359.014	371.075	-12.061
100	8	360.296	371.747	-11.451
100	9	353.951	354.508	-0.557
100	10	354.008	362.211	-8.203
100	11	350.706	358.787	-8.081
100	12	355.271	356.648	-1.377
100	13	356.366	365.390	-9.024
100	14	364.142	369.791	-5.649
100	15	357.964	369.852	-11.888
100	16	353.538	365.206	-11.668
100	17	353.340	359.215	-5.875
100	18	355.428	359.399	-3.971
100	19	357.933	351.452	6.481
100	20	343.702	356.220	-12.518
100	21	348.185	361.966	-13.781
100	22	351.609	362.516	-10.907
100	23	351.119	354.142	-3.023
100	24	347.661	350.168	-2.507
100	25	353.527	358.604	-5.077
100	26	348.380	357.137	-8.757
100	27	353.587	356.954	-3.367
Max		364.142	371.747	6.481
Average		353.789	357.337	-3.549
Min		340.352	340.352	-13.781
Std Dev		5.325	6.749	5.009



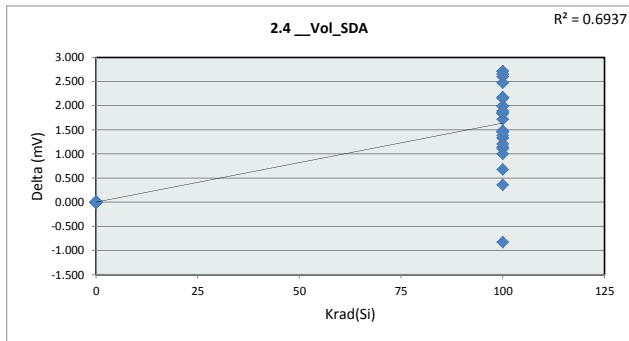
1.12_Iq Remote @ 1.7V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	600	µA
Min Limit	0	µA
Krad(Si)	0	100
LL	0.000	0.000
Min	340.352	350.168
Average	353.789	360.886
Max	364.142	371.747
UL	600.000	600.000



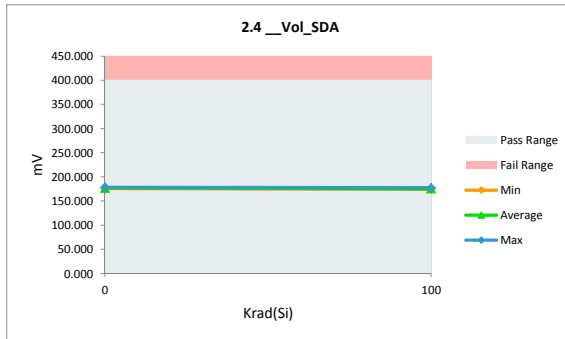
# TID LDR Report (100Krad) TMP461-H

2.4 __Vol_SDA		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	mV	mV
Max Limit	250	400
Min Limit	115	0

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	178.410	178.410	0.000
0	2	177.725	177.725	0.000
0	3	176.890	176.890	0.000
0	4	177.015	177.015	0.000
0	5	176.977	176.977	0.000
0	6	176.492	176.492	0.000
0	7	176.330	176.330	0.000
0	8	176.118	176.118	0.000
0	9	176.392	176.392	0.000
0	10	175.907	175.907	0.000
0	11	176.654	176.654	0.000
0	12	177.911	177.911	0.000
0	13	176.380	176.380	0.000
0	14	176.529	176.529	0.000
0	15	176.679	176.679	0.000
0	16	176.928	176.928	0.000
0	17	176.380	176.380	0.000
0	18	176.890	176.890	0.000
0	19	177.152	177.152	0.000
0	20	177.301	177.301	0.000
0	21	177.413	177.413	0.000
0	22	177.177	177.177	0.000
0	23	178.484	178.484	0.000
0	24	176.704	176.704	0.000
0	25	177.438	177.438	0.000
0	26	177.227	177.227	0.000
0	27	177.563	177.563	0.000
100	1	178.410	175.934	2.476
100	2	177.725	175.013	2.712
100	3	176.890	175.424	1.466
100	4	177.015	175.025	1.990
100	5	176.977	175.125	1.852
100	6	176.492	175.013	1.479
100	7	176.330	175.224	1.106
100	8	176.118	175.112	1.006
100	9	176.392	175.063	1.329
100	10	175.907	174.527	1.380
100	11	176.654	175.200	1.454
100	12	177.911	175.312	2.599
100	13	176.380	175.237	1.143
100	14	176.529	174.689	1.840
100	15	176.679	177.504	-0.825
100	16	176.928	175.087	1.841
100	17	176.380	176.022	0.358
100	18	176.890	175.175	1.715
100	19	177.152	175.947	1.205
100	20	177.301	175.312	1.989
100	21	177.413	176.732	0.681
100	22	177.177	175.000	2.177
100	23	178.484	176.644	1.840
100	24	176.704	174.552	2.152
100	25	177.438	174.726	2.712
100	26	177.227	174.577	2.650
100	27	177.563	175.673	1.890
Max		178.484	178.484	2.712
Average		177.002	176.184	0.819
Min		175.907	174.527	-0.825
Std Dev		0.638	1.064	0.992



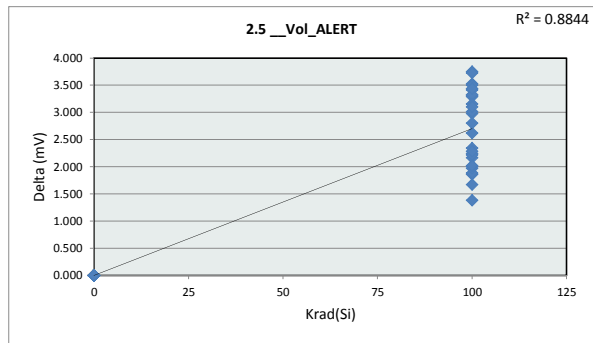
2.4 __Vol_SDA		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	400	mV
Min Limit	0	mV
Krad(Si)	0	100
LL	0.000	0.000
Min	175.907	174.527
Average	177.002	175.365
Max	178.484	177.504
UL	400.000	400.000



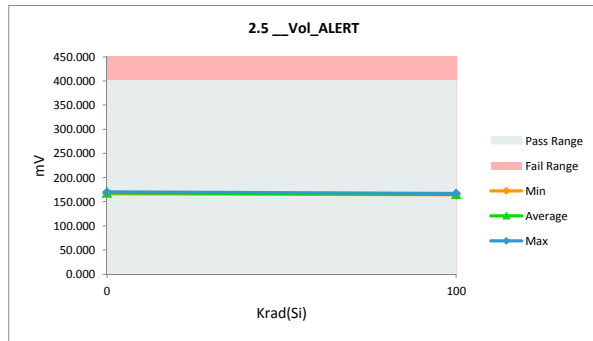
# TID LDR Report (100Krad) TMP461-H

2.5_Vol_ALERT		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	mV	mV
Max Limit	250	400
Min Limit	115	0

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	168.931	168.931	0.000
0	2	169.156	169.156	0.000
0	3	168.159	168.159	0.000
0	4	168.122	168.122	0.000
0	5	167.474	167.474	0.000
0	6	168.009	168.009	0.000
0	7	167.000	167.000	0.000
0	8	166.925	166.925	0.000
0	9	167.399	167.399	0.000
0	10	166.601	166.601	0.000
0	11	167.798	167.798	0.000
0	12	168.583	168.583	0.000
0	13	167.822	167.822	0.000
0	14	167.860	167.860	0.000
0	15	168.396	168.396	0.000
0	16	167.935	167.935	0.000
0	17	167.984	167.984	0.000
0	18	168.109	168.109	0.000
0	19	168.458	168.458	0.000
0	20	168.346	168.346	0.000
0	21	167.872	167.872	0.000
0	22	168.595	168.595	0.000
0	23	170.190	170.190	0.000
0	24	168.109	168.109	0.000
0	25	169.019	169.019	0.000
0	26	168.371	168.371	0.000
0	27	169.280	169.280	0.000
100	1	168.931	165.617	3.314
100	2	169.156	165.866	3.290
100	3	168.159	164.744	3.415
100	4	168.122	164.794	3.328
100	5	167.474	165.617	1.857
100	6	168.009	165.841	2.168
100	7	167.000	164.757	2.243
100	8	166.925	165.255	1.670
100	9	167.399	165.392	2.007
100	10	166.601	164.259	2.342
100	11	167.798	165.579	2.219
100	12	168.583	165.965	2.618
100	13	167.822	164.844	2.978
100	14	167.860	164.707	3.153
100	15	168.396	166.514	1.882
100	16	167.935	165.965	1.970
100	17	167.984	166.601	1.383
100	18	168.109	165.828	2.281
100	19	168.458	165.442	3.016
100	20	168.346	164.819	3.527
100	21	167.872	165.853	2.019
100	22	168.595	165.093	3.502
100	23	170.190	167.386	2.804
100	24	168.109	164.358	3.751
100	25	169.019	165.579	3.440
100	26	168.371	164.645	3.726
100	27	169.280	166.177	3.103
Max		170.190	170.190	3.751
Average		168.167	166.815	1.352
Min		166.601	164.259	0.000
Std Dev		0.757	1.554	1.451



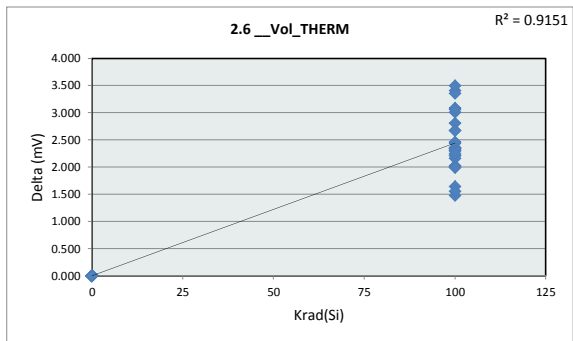
2.5_Vol_ALERT		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	400	mV
Min Limit	0	mV
Krad(Si)	0	100
LL	0.000	0.000
Min	166.601	164.259
Average	168.167	165.463
Max	170.190	167.386
UL	400.000	400.000



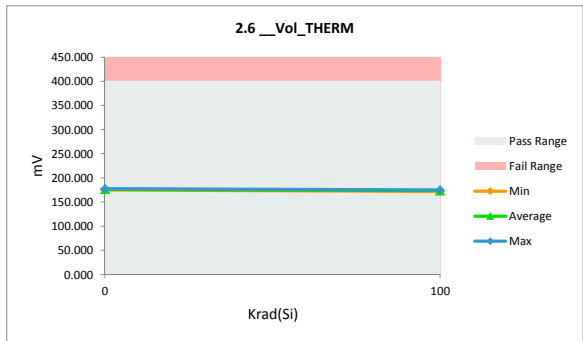
TID LDR Report (100Krad)  
TMP461-H

2.6 __Vol_THERM		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	mV	mV
Max Limit	250	400
Min Limit	115	0

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	176.862	176.862	0.000
0	2	177.498	177.498	0.000
0	3	176.053	176.053	0.000
0	4	176.127	176.127	0.000
0	5	175.405	175.405	0.000
0	6	176.028	176.028	0.000
0	7	175.729	175.729	0.000
0	8	175.368	175.368	0.000
0	9	175.617	175.617	0.000
0	10	176.003	176.003	0.000
0	11	175.766	175.766	0.000
0	12	177.012	177.012	0.000
0	13	177.012	177.012	0.000
0	14	175.716	175.716	0.000
0	15	176.576	176.576	0.000
0	16	175.941	175.941	0.000
0	17	175.878	175.878	0.000
0	18	175.903	175.903	0.000
0	19	176.289	176.289	0.000
0	20	176.040	176.040	0.000
0	21	175.853	175.853	0.000
0	22	176.352	176.352	0.000
0	23	176.675	176.675	0.000
0	24	175.567	175.567	0.000
0	25	175.941	175.941	0.000
0	26	175.579	175.579	0.000
0	27	177.249	177.249	0.000
100	1	176.862	173.455	3.407
100	2	177.498	174.824	2.674
100	3	176.053	174.027	2.026
100	4	176.127	173.318	2.809
100	5	175.405	173.193	2.212
100	6	176.028	174.550	1.478
100	7	175.729	173.056	2.673
100	8	175.368	173.380	1.988
100	9	175.617	173.455	2.162
100	10	176.003	173.704	2.299
100	11	175.766	174.127	1.639
100	12	177.012	174.712	2.300
100	13	177.012	173.654	3.358
100	14	175.716	173.504	2.212
100	15	176.576	174.214	2.362
100	16	175.941	173.940	2.001
100	17	175.878	174.326	1.552
100	18	175.903	173.567	2.336
100	19	176.289	173.940	2.349
100	20	176.040	173.604	2.436
100	21	175.853	172.770	3.083
100	22	176.352	173.343	3.009
100	23	176.675	174.339	2.336
100	24	175.567	172.072	3.495
100	25	175.941	173.691	2.250
100	26	175.579	173.118	2.461
100	27	177.249	174.189	3.060
	Max	177.498	177.498	3.495
	Average	176.150	174.928	1.222
	Min	175.368	172.072	0.000
	Std Dev	0.567	1.366	1.289



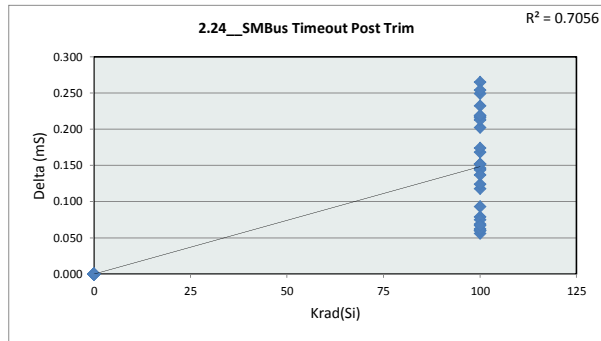
2.6 __Vol_THERM		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	400	mV
Min Limit	0	mV
Krad(Si)	0	100
LL	0.000	0.000
Min	175.368	172.072
Average	176.150	173.706
Max	177.498	174.824
UL	400.000	400.000



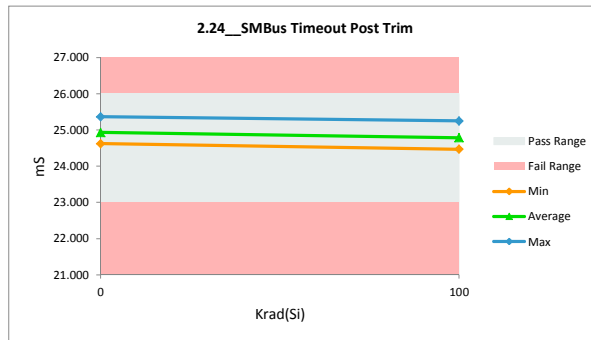
TID LDR Report (100Krad)  
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2.24_SMBus Timeout Post Trim		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	mS	mS
Max Limit	26	26
Min Limit	24	23

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	25.187	25.187	0.000
0	2	24.636	24.636	0.000
0	3	24.721	24.721	0.000
0	4	25.363	25.363	0.000
0	5	24.853	24.853	0.000
0	6	24.880	24.880	0.000
0	7	25.107	25.107	0.000
0	8	24.813	24.813	0.000
0	9	24.905	24.905	0.000
0	10	24.853	24.853	0.000
0	11	25.038	25.038	0.000
0	12	24.770	24.770	0.000
0	13	24.883	24.883	0.000
0	14	24.819	24.819	0.000
0	15	24.840	24.840	0.000
0	16	24.810	24.810	0.000
0	17	24.915	24.915	0.000
0	18	25.099	25.099	0.000
0	19	24.775	24.775	0.000
0	20	24.946	24.946	0.000
0	21	25.118	25.118	0.000
0	22	25.031	25.031	0.000
0	23	24.622	24.622	0.000
0	24	24.953	24.953	0.000
0	25	25.310	25.310	0.000
0	26	24.866	24.866	0.000
0	27	25.044	25.044	0.000
100	1	25.187	25.131	0.056
100	2	24.636	24.468	0.168
100	3	24.721	24.603	0.118
100	4	25.363	25.161	0.202
100	5	24.853	24.793	0.060
100	6	24.880	24.728	0.152
100	7	25.107	24.983	0.124
100	8	24.813	24.581	0.232
100	9	24.905	24.687	0.218
100	10	24.853	24.707	0.146
100	11	25.038	24.822	0.216
100	12	24.770	24.521	0.249
100	13	24.883	24.709	0.174
100	14	24.819	24.675	0.144
100	15	24.840	24.575	0.265
100	16	24.810	24.741	0.069
100	17	24.915	24.702	0.213
100	18	25.099	24.880	0.219
100	19	24.775	24.638	0.137
100	20	24.946	24.853	0.093
100	21	25.118	24.966	0.152
100	22	25.031	24.777	0.254
100	23	24.622	24.543	0.079
100	24	24.953	24.893	0.060
100	25	25.310	25.248	0.062
100	26	24.866	24.791	0.075
100	27	25.044	24.977	0.067
	Max	25.363	25.363	0.265
	Average	24.932	24.858	0.074
	Min	24.622	24.468	0.000
	Std Dev	0.182	0.204	0.089



2.24_SMBus Timeout Post Tri		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	26	mS
Min Limit	23	mS
Krad(Si)	0	100
LL	23.000	23.000
Min	24.622	24.468
Average	24.932	24.783
Max	25.363	25.248
UL	26.000	26.000

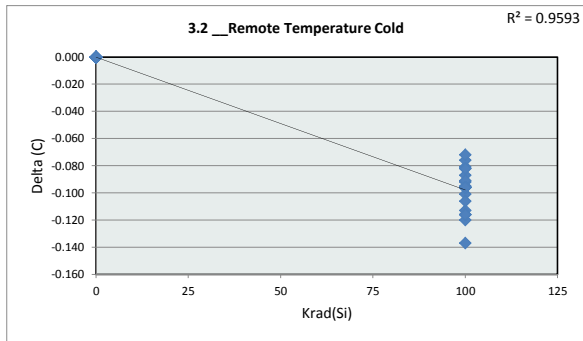




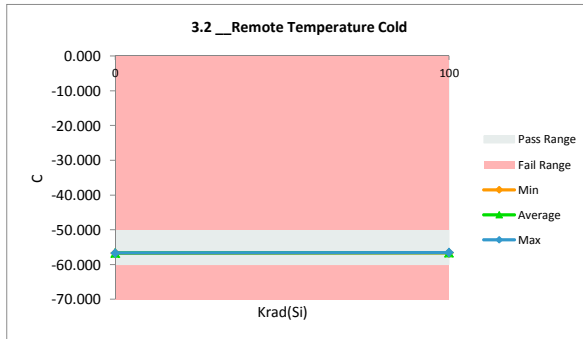
# TID LDR Report (100Krad) TMP461-H

3.2 Remote Temperature Cold		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	-50	-50
Min Limit	-60	-60

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	-56.699	-56.699	0.000
0	2	-56.698	-56.698	0.000
0	3	-56.688	-56.688	0.000
0	4	-56.687	-56.687	0.000
0	5	-56.696	-56.696	0.000
0	6	-56.686	-56.686	0.000
0	7	-56.701	-56.701	0.000
0	8	-56.702	-56.702	0.000
0	9	-56.702	-56.702	0.000
0	10	-56.702	-56.702	0.000
0	11	-56.702	-56.702	0.000
0	12	-56.702	-56.702	0.000
0	13	-56.702	-56.702	0.000
0	14	-56.702	-56.702	0.000
0	15	-56.702	-56.702	0.000
0	16	-56.702	-56.702	0.000
0	17	-56.702	-56.702	0.000
0	18	-56.702	-56.702	0.000
0	19	-56.702	-56.702	0.000
0	20	-56.702	-56.702	0.000
0	21	-56.702	-56.702	0.000
0	22	-56.702	-56.702	0.000
0	23	-56.702	-56.702	0.000
0	24	-56.702	-56.702	0.000
0	25	-56.702	-56.702	0.000
0	26	-56.702	-56.702	0.000
0	27	-56.702	-56.702	0.000
100	1	-56.699	-56.562	-0.137
100	2	-56.698	-56.585	-0.113
100	3	-56.688	-56.596	-0.092
100	4	-56.687	-56.567	-0.120
100	5	-56.696	-56.595	-0.101
100	6	-56.686	-56.591	-0.095
100	7	-56.701	-56.619	-0.082
100	8	-56.702	-56.621	-0.081
100	9	-56.702	-56.615	-0.087
100	10	-56.702	-56.611	-0.091
100	11	-56.702	-56.626	-0.076
100	12	-56.702	-56.596	-0.106
100	13	-56.702	-56.630	-0.072
100	14	-56.702	-56.620	-0.082
100	15	-56.702	-56.606	-0.096
100	16	-56.702	-56.606	-0.096
100	17	-56.702	-56.606	-0.096
100	18	-56.702	-56.606	-0.096
100	19	-56.702	-56.606	-0.096
100	20	-56.702	-56.606	-0.096
100	21	-56.702	-56.606	-0.096
100	22	-56.702	-56.606	-0.096
100	23	-56.702	-56.606	-0.096
100	24	-56.702	-56.606	-0.096
100	25	-56.702	-56.586	-0.116
100	26	-56.702	-56.586	-0.116
100	27	-56.702	-56.586	-0.116
Max		-56.686	-56.562	0.000
Average		-56.700	-56.651	-0.049
Min		-56.702	-56.702	-0.137
Std Dev		0.005	0.051	0.050



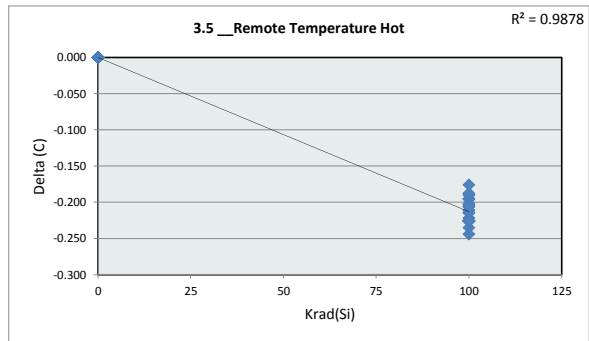
3.2 Remote Temperature Cold		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	-50	C
Min Limit	-60	C
Krad(Si)	0	100
LL	-60.000	-60.000
Min	-56.702	-56.630
Average	-56.700	-56.602
Max	-56.686	-56.562
UL	-50.000	-50.000



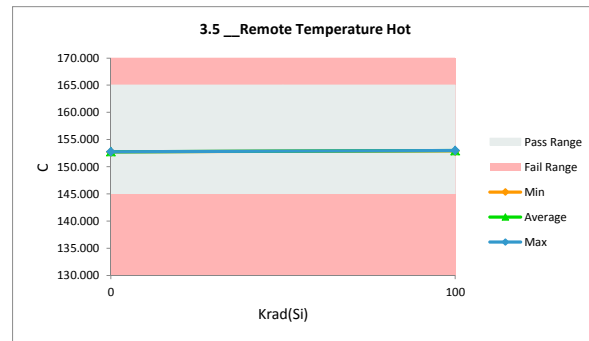
# TID LDR Report (100Krad) TMP461-H

3.5 Remote Temperature Hot		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	165	165
Min Limit	145	145

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	152.754	152.754	0.000
0	2	152.744	152.744	0.000
0	3	152.767	152.767	0.000
0	4	152.764	152.764	0.000
0	5	152.765	152.765	0.000
0	6	152.775	152.775	0.000
0	7	152.768	152.768	0.000
0	8	152.763	152.763	0.000
0	9	152.763	152.763	0.000
0	10	152.763	152.763	0.000
0	11	152.763	152.763	0.000
0	12	152.763	152.763	0.000
0	13	152.763	152.763	0.000
0	14	152.763	152.763	0.000
0	15	152.763	152.763	0.000
0	16	152.763	152.763	0.000
0	17	152.763	152.763	0.000
0	18	152.763	152.763	0.000
0	19	152.763	152.763	0.000
0	20	152.763	152.763	0.000
0	21	152.763	152.763	0.000
0	22	152.763	152.763	0.000
0	23	152.763	152.763	0.000
0	24	152.763	152.763	0.000
0	25	152.763	152.763	0.000
0	26	152.763	152.763	0.000
0	27	152.745	152.745	0.000
100	1	152.754	152.958	-0.204
100	2	152.744	152.920	-0.176
100	3	152.767	152.957	-0.190
100	4	152.764	152.960	-0.196
100	5	152.765	153.009	-0.244
100	6	152.775	152.971	-0.196
100	7	152.768	152.979	-0.211
100	8	152.763	152.969	-0.206
100	9	152.763	152.998	-0.235
100	10	152.763	152.965	-0.202
100	11	152.763	152.985	-0.222
100	12	152.763	152.977	-0.214
100	13	152.763	152.978	-0.215
100	14	152.763	152.958	-0.195
100	15	152.763	152.989	-0.226
100	16	152.763	152.989	-0.226
100	17	152.763	152.989	-0.226
100	18	152.763	152.989	-0.226
100	19	152.763	152.989	-0.226
100	20	152.763	152.989	-0.226
100	21	152.763	152.989	-0.226
100	22	152.763	152.989	-0.226
100	23	152.763	152.989	-0.226
100	24	152.763	152.989	-0.226
100	25	152.763	152.951	-0.188
100	26	152.763	152.951	-0.188
100	27	152.745	152.951	-0.206
Max		152.775	153.009	0.000
Average		152.762	152.869	-0.106
Min		152.744	152.744	-0.244
Std Dev		0.006	0.108	0.108



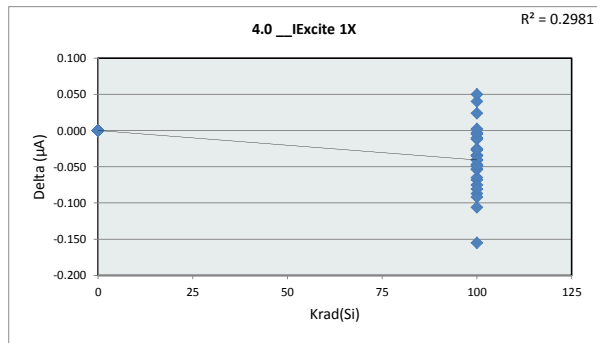
3.5 Remote Temperature Ho		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	165	C
Min Limit	145	C
Krad(Si)	0	100
LL	145.000	145.000
Min	152.744	152.920
Average	152.762	152.975
Max	152.775	153.009
UL	165.000	165.000



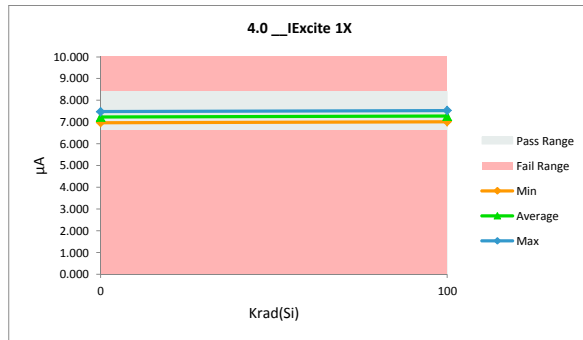
# TID LDR Report (100Krad) TMP461-H

4.0 __IExcite 1X		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	8.4	8.4
Min Limit	6.6	6.6

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	7.120	7.120	0.000
0	2	7.295	7.295	0.000
0	3	7.399	7.399	0.000
0	4	7.092	7.092	0.000
0	5	7.168	7.168	0.000
0	6	7.456	7.456	0.000
0	7	7.257	7.257	0.000
0	8	7.479	7.479	0.000
0	9	7.370	7.370	0.000
0	10	7.308	7.308	0.000
0	11	7.208	7.208	0.000
0	12	7.136	7.136	0.000
0	13	7.331	7.331	0.000
0	14	7.391	7.391	0.000
0	15	7.326	7.326	0.000
0	16	7.322	7.322	0.000
0	17	7.165	7.165	0.000
0	18	7.010	7.010	0.000
0	19	7.274	7.274	0.000
0	20	7.178	7.178	0.000
0	21	6.974	6.974	0.000
0	22	7.159	7.159	0.000
0	23	7.199	7.199	0.000
0	24	7.229	7.229	0.000
0	25	7.002	7.002	0.000
0	26	7.288	7.288	0.000
0	27	7.118	7.118	0.000
100	1	7.120	7.207	-0.087
100	2	7.295	7.363	-0.068
100	3	7.399	7.426	-0.027
100	4	7.092	7.157	-0.065
100	5	7.168	7.260	-0.092
100	6	7.456	7.497	-0.041
100	7	7.257	7.332	-0.075
100	8	7.479	7.533	-0.054
100	9	7.370	7.423	-0.053
100	10	7.308	7.342	-0.034
100	11	7.208	7.363	-0.155
100	12	7.136	7.141	-0.005
100	13	7.331	7.380	-0.049
100	14	7.391	7.403	-0.012
100	15	7.326	7.336	-0.010
100	16	7.322	7.369	-0.047
100	17	7.165	7.200	-0.035
100	18	7.010	7.059	-0.049
100	19	7.274	7.250	0.024
100	20	7.178	7.259	-0.081
100	21	6.974	7.014	-0.040
100	22	7.159	7.265	-0.106
100	23	7.199	7.159	0.040
100	24	7.229	7.232	-0.003
100	25	7.002	7.027	-0.025
100	26	7.288	7.238	0.050
100	27	7.118	7.116	0.002
Max		7.479	7.533	0.050
Average		7.232	7.252	-0.020
Min		6.974	6.974	-0.155
Std Dev		0.133	0.136	0.038



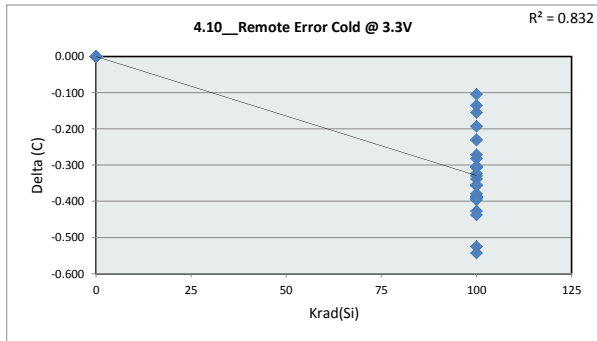
4.0 __IExcite 1X		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	8.4	µA
Min Limit	6.6	µA
Krad(Si)	0	100
LL	6.600	6.600
Min	6.974	7.014
Average	7.232	7.272
Max	7.479	7.533
UL	8.400	8.400



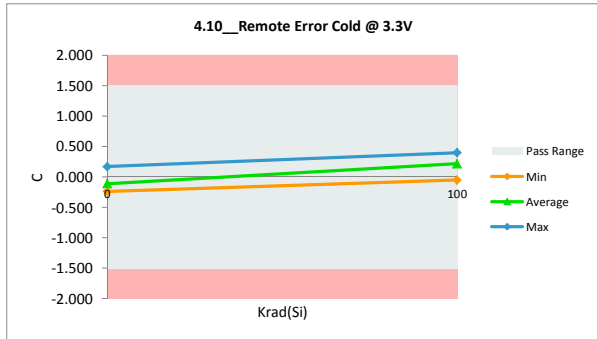
# TID LDR Report (100Krad) TMP461-H

4.10 Remote Error Cold @ 3.3V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	0.5	1.5
Min Limit	-0.5	-1.5

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	-0.082	-0.082	0.000
0	2	-0.115	-0.115	0.000
0	3	0.001	0.001	0.000
0	4	-0.125	-0.125	0.000
0	5	-0.210	-0.210	0.000
0	6	-0.127	-0.127	0.000
0	7	-0.081	-0.081	0.000
0	8	-0.236	-0.236	0.000
0	9	-0.142	-0.142	0.000
0	10	-0.204	-0.204	0.000
0	11	-0.204	-0.204	0.000
0	12	-0.173	-0.173	0.000
0	13	-0.048	-0.048	0.000
0	14	-0.142	-0.142	0.000
0	15	-0.173	-0.173	0.000
0	16	0.046	0.046	0.000
0	17	-0.236	-0.236	0.000
0	18	-0.173	-0.173	0.000
0	19	-0.142	-0.142	0.000
0	20	-0.048	-0.048	0.000
0	21	0.171	0.171	0.000
0	22	0.139	0.139	0.000
0	23	-0.111	-0.111	0.000
0	24	-0.142	-0.142	0.000
0	25	-0.079	-0.079	0.000
0	26	-0.204	-0.204	0.000
0	27	-0.110	-0.110	0.000
100	1	-0.082	0.200	-0.282
100	2	-0.115	0.192	-0.307
100	3	0.001	0.391	-0.390
100	4	-0.125	0.205	-0.330
100	5	-0.210	-0.017	-0.193
100	6	-0.127	0.230	-0.357
100	7	-0.081	0.226	-0.307
100	8	-0.236	0.103	-0.339
100	9	-0.142	0.285	-0.427
100	10	-0.204	0.187	-0.391
100	11	-0.204	-0.049	-0.155
100	12	-0.173	0.265	-0.438
100	13	-0.048	0.331	-0.379
100	14	-0.142	0.383	-0.525
100	15	-0.173	0.213	-0.386
100	16	0.046	0.182	-0.136
100	17	-0.236	0.307	-0.543
100	18	-0.173	0.182	-0.355
100	19	-0.142	0.245	-0.387
100	20	-0.048	0.338	-0.386
100	21	0.171	0.401	-0.230
100	22	0.139	0.370	-0.231
100	23	-0.111	0.213	-0.324
100	24	-0.142	-0.037	-0.105
100	25	-0.079	0.224	-0.303
100	26	-0.204	0.068	-0.272
100	27	-0.110	0.286	-0.396
Max		0.171	0.401	0.000
Average		-0.109	0.055	-0.164
Min		-0.236	-0.236	-0.543
Std Dev		0.101	0.200	0.182



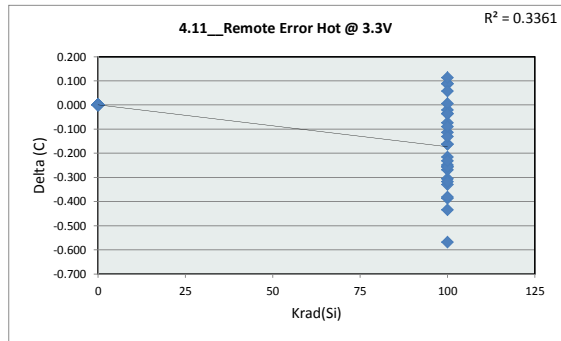
4.10 Remote Error Cold @ 3.3V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Max Limit	1.5	C
Min Limit	-1.5	C
Krad(Si)	0	100
LL	-1.500	-1.500
Min	-0.236	-0.049
Average	-0.109	0.219
Max	0.171	0.401
UL	1.500	1.500



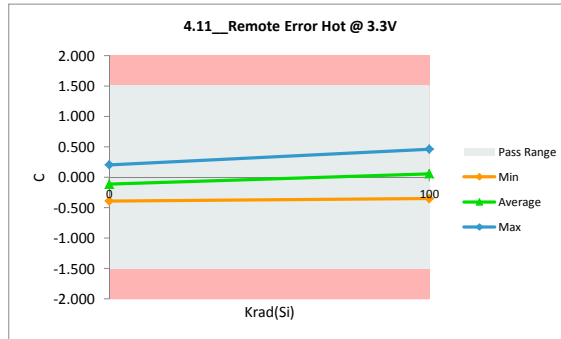
# TID LDR Report (100Krad) TMP461-H

4.11 Remote Error Hot @ 3.3V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	0.5	1.5
Min Limit	-0.5	-1.5

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	-0.316	-0.316	0.000
0	2	-0.056	-0.056	0.000
0	3	-0.079	-0.079	0.000
0	4	-0.201	-0.201	0.000
0	5	-0.077	-0.077	0.000
0	6	-0.150	-0.150	0.000
0	7	-0.049	-0.049	0.000
0	8	-0.044	-0.044	0.000
0	9	-0.200	-0.200	0.000
0	10	-0.013	-0.013	0.000
0	11	-0.263	-0.263	0.000
0	12	-0.013	-0.013	0.000
0	13	-0.044	-0.044	0.000
0	14	-0.138	-0.138	0.000
0	15	-0.169	-0.169	0.000
0	16	0.112	0.112	0.000
0	17	-0.138	-0.138	0.000
0	18	-0.388	-0.388	0.000
0	19	-0.075	-0.075	0.000
0	20	0.206	0.206	0.000
0	21	-0.013	-0.013	0.000
0	22	-0.075	-0.075	0.000
0	23	-0.075	-0.075	0.000
0	24	-0.294	-0.294	0.000
0	25	-0.169	-0.169	0.000
0	26	-0.075	-0.075	0.000
0	27	-0.277	-0.277	0.000
100	1	-0.316	-0.101	-0.215
100	2	-0.056	0.249	-0.305
100	3	-0.079	0.307	-0.386
100	4	-0.201	-0.166	-0.035
100	5	-0.077	0.036	-0.113
100	6	-0.150	0.105	-0.255
100	7	-0.049	-0.029	-0.020
100	8	-0.044	-0.050	0.006
100	9	-0.200	0.234	-0.434
100	10	-0.013	0.235	-0.248
100	11	-0.263	-0.190	-0.073
100	12	-0.013	0.255	-0.268
100	13	-0.044	0.285	-0.329
100	14	-0.138	0.430	-0.568
100	15	-0.169	0.212	-0.381
100	16	0.112	0.024	0.088
100	17	-0.138	0.180	-0.318
100	18	-0.388	-0.351	-0.037
100	19	-0.075	0.087	-0.162
100	20	0.206	0.462	-0.256
100	21	-0.013	-0.101	0.088
100	22	-0.075	-0.132	0.057
100	23	-0.075	0.087	-0.162
100	24	-0.294	-0.163	-0.131
100	25	-0.169	-0.282	0.113
100	26	-0.075	0.156	-0.231
100	27	-0.277	-0.188	-0.089
Max		0.206	0.462	0.113
Average		-0.114	-0.027	-0.086
Min		-0.388	-0.388	-0.568
Std Dev		0.127	0.197	0.150



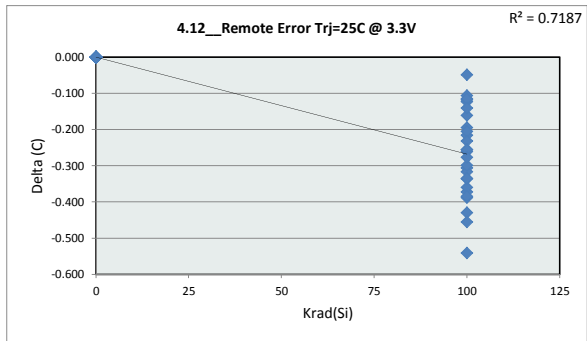
4.11 Remote Error Hot @ 3.3V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Max Limit	1.5	C
Min Limit	-1.5	C
Krad(Si)	0	100
LL	-1.500	-1.500
Min	-0.388	-0.351
Average	-0.114	0.059
Max	0.206	0.462
UL	1.500	1.500



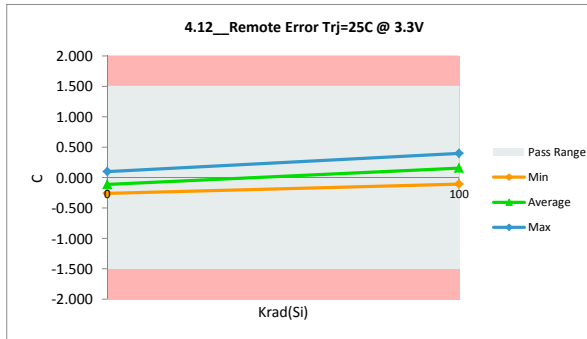
# TID LDR Report (100Krad) TMP461-H

4.12 Remote Error Trj=25C @ 3.3V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	0.5	1.5
Min Limit	-0.5	-1.5

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	-0.173	-0.173	0.000
0	2	-0.092	-0.092	0.000
0	3	-0.030	-0.030	0.000
0	4	-0.155	-0.155	0.000
0	5	-0.158	-0.158	0.000
0	6	-0.136	-0.136	0.000
0	7	-0.068	-0.068	0.000
0	8	-0.161	-0.161	0.000
0	9	-0.165	-0.165	0.000
0	10	-0.130	-0.130	0.000
0	11	-0.227	-0.227	0.000
0	12	-0.111	-0.111	0.000
0	13	-0.047	-0.047	0.000
0	14	-0.140	-0.140	0.000
0	15	-0.172	-0.172	0.000
0	16	0.072	0.072	0.000
0	17	-0.197	-0.197	0.000
0	18	-0.257	-0.257	0.000
0	19	-0.116	-0.116	0.000
0	20	0.051	0.051	0.000
0	21	0.099	0.099	0.000
0	22	0.056	0.056	0.000
0	23	-0.097	-0.097	0.000
0	24	-0.201	-0.201	0.000
0	25	-0.114	-0.114	0.000
0	26	-0.154	-0.154	0.000
0	27	-0.175	-0.175	0.000
100	1	-0.173	0.083	-0.256
100	2	-0.092	0.214	-0.306
100	3	-0.030	0.358	-0.388
100	4	-0.155	0.061	-0.216
100	5	-0.158	0.003	-0.161
100	6	-0.136	0.181	-0.317
100	7	-0.068	0.127	-0.195
100	8	-0.161	0.044	-0.205
100	9	-0.165	0.265	-0.430
100	10	-0.130	0.206	-0.336
100	11	-0.227	-0.104	-0.123
100	12	-0.111	0.261	-0.372
100	13	-0.047	0.313	-0.360
100	14	-0.140	0.401	-0.541
100	15	-0.172	0.213	-0.385
100	16	0.072	0.121	-0.049
100	17	-0.197	0.258	-0.455
100	18	-0.257	-0.025	-0.232
100	19	-0.116	0.183	-0.299
100	20	0.051	0.386	-0.335
100	21	0.099	0.205	-0.106
100	22	0.056	0.174	-0.118
100	23	-0.097	0.164	-0.261
100	24	-0.201	-0.086	-0.115
100	25	-0.114	0.027	-0.141
100	26	-0.154	0.102	-0.256
100	27	-0.175	0.102	-0.277
Max		0.099	0.401	0.000
Average		-0.111	0.023	-0.134
Min		-0.257	-0.257	-0.541
Std Dev		0.091	0.176	0.160



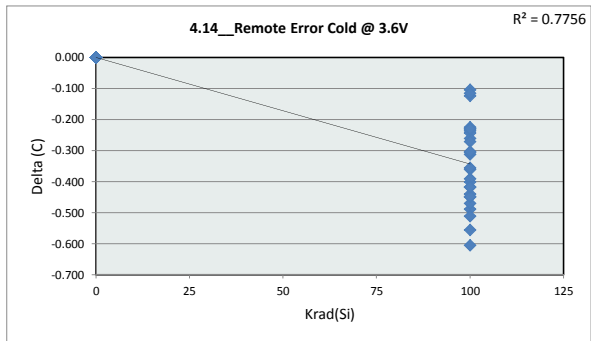
4.12 Remote Error Trj=25C @ 3.3V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C
Krad(Si)	0	100
LL	-1.500	-1.500
Min	-0.257	-0.104
Average	-0.111	0.157
Max	0.099	0.401
UL	1.500	1.500



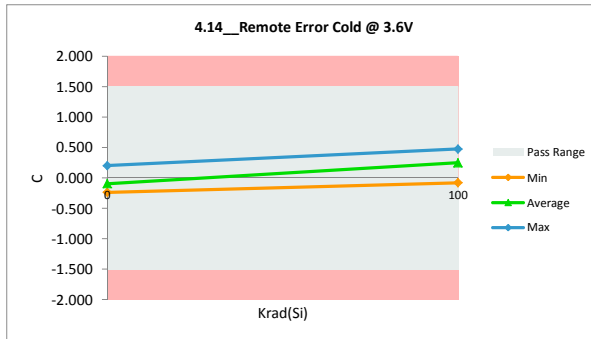
# TID LDR Report (100Krad) TMP461-H

4.14__Remote Error Cold @ 3.6V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	0.5	1.5
Min Limit	-0.5	-1.5

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	-0.144	-0.144	0.000
0	2	-0.177	-0.177	0.000
0	3	-0.031	-0.031	0.000
0	4	-0.032	-0.032	0.000
0	5	-0.148	-0.148	0.000
0	6	-0.127	-0.127	0.000
0	7	-0.049	-0.049	0.000
0	8	-0.079	-0.079	0.000
0	9	-0.236	-0.236	0.000
0	10	-0.111	-0.111	0.000
0	11	-0.204	-0.204	0.000
0	12	-0.017	-0.017	0.000
0	13	-0.079	-0.079	0.000
0	14	-0.079	-0.079	0.000
0	15	-0.173	-0.173	0.000
0	16	0.046	0.046	0.000
0	17	-0.236	-0.236	0.000
0	18	-0.079	-0.079	0.000
0	19	-0.111	-0.111	0.000
0	20	-0.142	-0.142	0.000
0	21	0.014	0.014	0.000
0	22	0.202	0.202	0.000
0	23	-0.079	-0.079	0.000
0	24	-0.236	-0.236	0.000
0	25	-0.048	-0.048	0.000
0	26	-0.173	-0.173	0.000
0	27	-0.017	-0.017	0.000
100	1	-0.144	0.169	-0.313
100	2	-0.177	0.224	-0.401
100	3	-0.031	0.360	-0.391
100	4	-0.032	0.205	-0.237
100	5	-0.148	0.077	-0.225
100	6	-0.127	0.323	-0.450
100	7	-0.049	0.195	-0.244
100	8	-0.079	0.228	-0.307
100	9	-0.236	0.253	-0.489
100	10	-0.111	0.250	-0.361
100	11	-0.204	-0.080	-0.124
100	12	-0.017	0.453	-0.470
100	13	-0.079	0.362	-0.441
100	14	-0.079	0.477	-0.556
100	15	-0.173	0.432	-0.605
100	16	0.046	0.276	-0.230
100	17	-0.236	0.213	-0.449
100	18	-0.079	0.182	-0.261
100	19	-0.111	0.307	-0.418
100	20	-0.142	0.370	-0.512
100	21	0.014	0.432	-0.418
100	22	0.202	0.307	-0.105
100	23	-0.079	0.151	-0.230
100	24	-0.236	0.120	-0.356
100	25	-0.048	0.068	-0.116
100	26	-0.173	0.099	-0.272
100	27	-0.017	0.286	-0.303
Max		0.202	0.477	0.000
Average		-0.094	0.078	-0.172
Min		-0.236	-0.236	-0.605
Std Dev		0.096	0.208	0.197



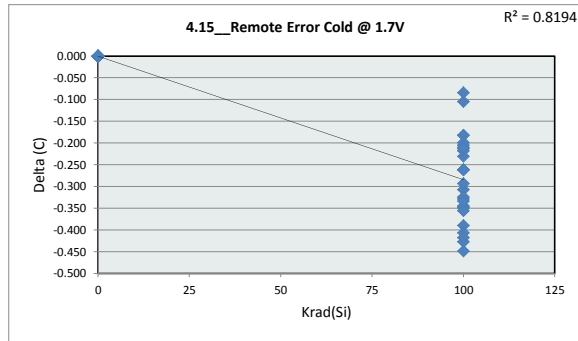
4.14__Remote Error Cold @ 3.6V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C
Krad(Si)	0	100
LL	-1.500	-1.500
Min	-0.236	-0.080
Average	-0.094	0.250
Max	0.202	0.477
UL	1.500	1.500



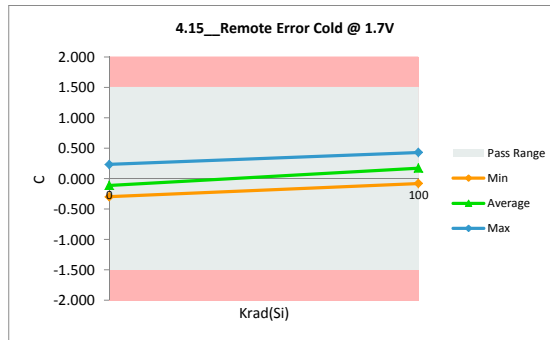
# TID LDR Report (100Krad) TMP461-H

4.15 Remote Error Cold @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	0.5	1.5
Min Limit	-0.5	-1.5

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	-0.113	-0.113	0.000
0	2	-0.115	-0.115	0.000
0	3	-0.093	-0.093	0.000
0	4	-0.125	-0.125	0.000
0	5	-0.179	-0.179	0.000
0	6	-0.064	-0.064	0.000
0	7	0.013	0.013	0.000
0	8	-0.204	-0.204	0.000
0	9	-0.236	-0.236	0.000
0	10	-0.173	-0.173	0.000
0	11	-0.298	-0.298	0.000
0	12	-0.142	-0.142	0.000
0	13	0.014	0.014	0.000
0	14	-0.111	-0.111	0.000
0	15	-0.079	-0.079	0.000
0	16	-0.048	-0.048	0.000
0	17	-0.267	-0.267	0.000
0	18	-0.236	-0.236	0.000
0	19	-0.111	-0.111	0.000
0	20	-0.142	-0.142	0.000
0	21	-0.017	-0.017	0.000
0	22	0.233	0.233	0.000
0	23	-0.111	-0.111	0.000
0	24	-0.173	-0.173	0.000
0	25	-0.017	-0.017	0.000
0	26	-0.204	-0.204	0.000
0	27	0.015	0.015	0.000
100	1	-0.113	0.232	-0.345
100	2	-0.115	0.192	-0.307
100	3	-0.093	0.297	-0.390
100	4	-0.125	0.080	-0.205
100	5	-0.179	0.170	-0.349
100	6	-0.064	0.167	-0.231
100	7	0.013	0.195	-0.182
100	8	-0.204	-0.022	-0.182
100	9	-0.236	0.191	-0.427
100	10	-0.173	0.156	-0.329
100	11	-0.298	-0.080	-0.218
100	12	-0.142	0.265	-0.407
100	13	0.014	0.362	-0.348
100	14	-0.111	0.102	-0.213
100	15	-0.079	0.026	-0.105
100	16	-0.048	0.276	-0.324
100	17	-0.267	0.182	-0.449
100	18	-0.236	0.120	-0.356
100	19	-0.111	0.151	-0.262
100	20	-0.142	0.151	-0.293
100	21	-0.017	0.245	-0.262
100	22	0.233	0.432	-0.199
100	23	-0.111	0.151	-0.262
100	24	-0.173	0.245	-0.418
100	25	-0.017	0.193	-0.210
100	26	-0.204	0.130	-0.334
100	27	0.015	0.099	-0.084
Max		0.233	0.432	0.000
Average		-0.110	0.032	-0.142
Min		-0.298	-0.298	-0.449
Std Dev		0.109	0.180	0.159



4.15 Remote Error Cold @ 1.7V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C
Krad(Si)	0	100
LL	-1.500	-1.500
Min	-0.298	-0.080
Average	-0.110	0.174
Max	0.233	0.432
UL	1.500	1.500

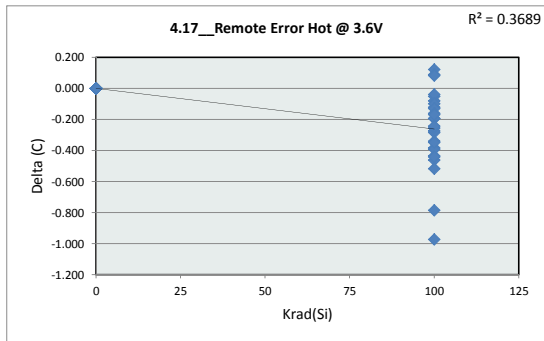




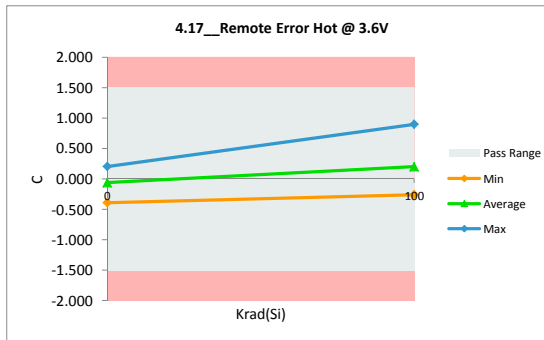
TID LDR Report (100Krad)  
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4.17__Remote Error Hot @ 3.6V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	0.5	1.5
Min Limit	-0.5	-1.5

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	-0.223	-0.223	0.000
0	2	-0.025	-0.025	0.000
0	3	0.015	0.015	0.000
0	4	0.017	0.017	0.000
0	5	0.079	0.079	0.000
0	6	0.006	0.006	0.000
0	7	-0.018	-0.018	0.000
0	8	-0.013	-0.013	0.000
0	9	-0.107	-0.107	0.000
0	10	-0.075	-0.075	0.000
0	11	-0.169	-0.169	0.000
0	12	-0.013	-0.013	0.000
0	13	0.018	0.018	0.000
0	14	-0.075	-0.075	0.000
0	15	-0.075	-0.075	0.000
0	16	0.081	0.081	0.000
0	17	-0.044	-0.044	0.000
0	18	-0.388	-0.388	0.000
0	19	0.018	0.018	0.000
0	20	0.206	0.206	0.000
0	21	-0.138	-0.138	0.000
0	22	-0.044	-0.044	0.000
0	23	-0.107	-0.107	0.000
0	24	-0.232	-0.232	0.000
0	25	-0.138	-0.138	0.000
0	26	0.018	0.018	0.000
0	27	-0.214	-0.214	0.000
100	1	-0.223	-0.101	-0.122
100	2	-0.025	0.437	-0.462
100	3	0.015	0.400	-0.385
100	4	0.017	-0.103	0.120
100	5	0.079	0.161	-0.082
100	6	0.006	0.292	-0.286
100	7	-0.018	0.034	-0.052
100	8	-0.013	0.263	-0.276
100	9	-0.107	0.234	-0.341
100	10	-0.075	0.360	-0.435
100	11	-0.169	-0.128	-0.041
100	12	-0.013	0.505	-0.518
100	13	0.018	0.410	-0.392
100	14	-0.075	0.899	-0.974
100	15	-0.075	0.712	-0.787
100	16	0.081	0.180	-0.099
100	17	-0.044	0.212	-0.256
100	18	-0.388	-0.257	-0.131
100	19	0.018	0.212	-0.194
100	20	0.206	0.649	-0.443
100	21	-0.138	0.024	-0.162
100	22	-0.044	-0.132	0.088
100	23	-0.107	0.243	-0.350
100	24	-0.232	-0.038	-0.194
100	25	-0.138	-0.219	0.081
100	26	0.018	0.187	-0.169
100	27	-0.214	0.031	-0.245
Max		0.206	0.899	0.120
Average		-0.061	0.071	-0.132
Min		-0.388	-0.388	-0.974
Std Dev		0.118	0.256	0.219



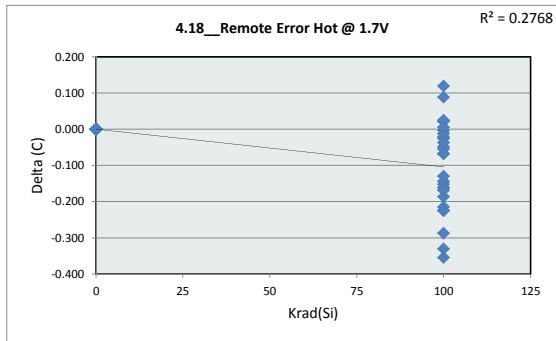
4.17__Remote Error Hot @ 3.6V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C
Krad(Si)	0	100
LL	-1.500	-1.500
Min	-0.388	-0.257
Average	-0.061	0.202
Max	0.206	0.899
UL	1.500	1.500



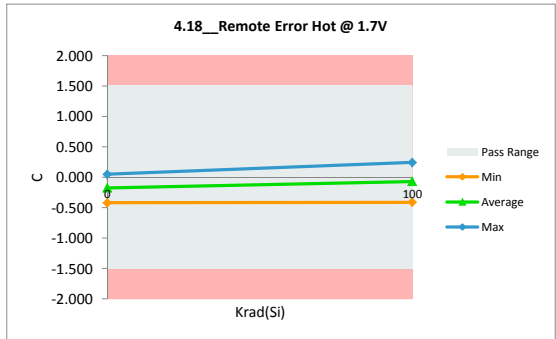
# TID LDR Report (100Krad) TMP461-H

4.18__Remote Error Hot @ 1.7V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	0.5	1.5
Min Limit	-0.5	-1.5

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	-0.410	-0.410	0.000
0	2	-0.025	-0.025	0.000
0	3	-0.110	-0.110	0.000
0	4	-0.139	-0.139	0.000
0	5	-0.108	-0.108	0.000
0	6	-0.213	-0.213	0.000
0	7	-0.143	-0.143	0.000
0	8	-0.107	-0.107	0.000
0	9	-0.138	-0.138	0.000
0	10	-0.138	-0.138	0.000
0	11	-0.388	-0.388	0.000
0	12	-0.044	-0.044	0.000
0	13	-0.107	-0.107	0.000
0	14	-0.232	-0.232	0.000
0	15	-0.232	-0.232	0.000
0	16	0.018	0.018	0.000
0	17	-0.107	-0.107	0.000
0	18	-0.419	-0.419	0.000
0	19	-0.075	-0.075	0.000
0	20	0.050	0.050	0.000
0	21	-0.169	-0.169	0.000
0	22	-0.232	-0.232	0.000
0	23	-0.138	-0.138	0.000
0	24	-0.325	-0.325	0.000
0	25	-0.325	-0.325	0.000
0	26	-0.107	-0.107	0.000
0	27	-0.308	-0.308	0.000
100	1	-0.410	-0.258	-0.152
100	2	-0.025	0.030	-0.055
100	3	-0.110	0.244	-0.354
100	4	-0.139	-0.135	-0.004
100	5	-0.108	0.036	-0.144
100	6	-0.213	-0.051	-0.162
100	7	-0.143	-0.122	-0.021
100	8	-0.107	-0.081	-0.026
100	9	-0.138	0.077	-0.215
100	10	-0.138	0.048	-0.186
100	11	-0.388	-0.409	0.021
100	12	-0.044	0.005	-0.049
100	13	-0.107	0.223	-0.330
100	14	-0.232	-0.008	-0.224
100	15	-0.232	-0.195	-0.037
100	16	0.018	-0.101	0.119
100	17	-0.107	0.180	-0.287
100	18	-0.419	-0.351	-0.068
100	19	-0.075	-0.007	-0.068
100	20	0.050	0.212	-0.162
100	21	-0.169	-0.257	0.088
100	22	-0.232	-0.257	0.025
100	23	-0.138	0.087	-0.225
100	24	-0.325	-0.195	-0.130
100	25	-0.325	-0.313	-0.012
100	26	-0.107	0.062	-0.169
100	27	-0.308	-0.313	0.005
Max		0.050	0.244	0.119
Average		-0.173	-0.121	-0.052
Min		-0.419	-0.419	-0.354
Std Dev		0.124	0.165	0.100



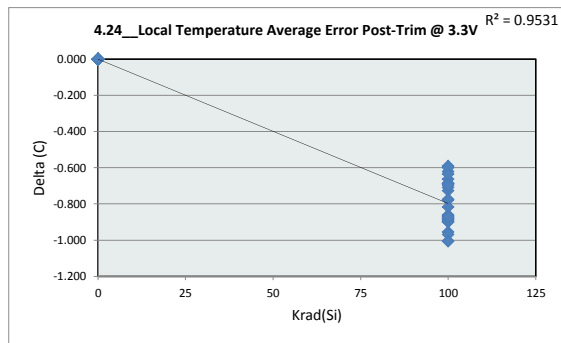
4.18__Remote Error Hot @ 1.7V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	1.5	C
Min Limit	-1.5	C
Krad(Si)	0	100
LL	-1.500	-1.500
Min	-0.419	-0.409
Average	-0.173	-0.068
Max	0.050	0.244
UL	1.500	1.500



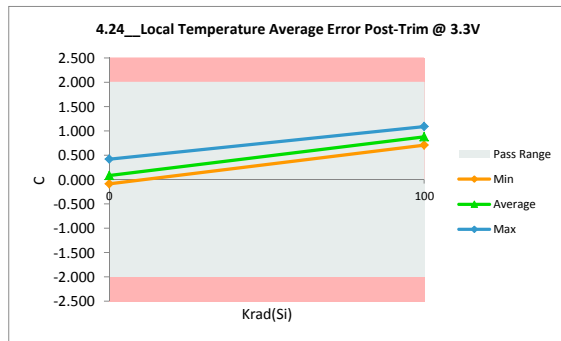
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4.24 Local Temperature Average		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	10	2
Min Limit	-10	-2

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	0.075	0.075	0.000
0	2	-0.010	-0.010	0.000
0	3	0.421	0.421	0.000
0	4	0.076	0.076	0.000
0	5	0.054	0.054	0.000
0	6	0.056	0.056	0.000
0	7	0.088	0.088	0.000
0	8	0.029	0.029	0.000
0	9	0.105	0.105	0.000
0	10	0.281	0.281	0.000
0	11	0.089	0.089	0.000
0	12	-0.083	-0.083	0.000
0	13	0.076	0.076	0.000
0	14	-0.026	-0.026	0.000
0	15	0.049	0.049	0.000
0	16	0.180	0.180	0.000
0	17	-0.058	-0.058	0.000
0	18	0.159	0.159	0.000
0	19	-0.006	-0.006	0.000
0	20	0.195	0.195	0.000
0	21	0.015	0.015	0.000
0	22	0.050	0.050	0.000
0	23	0.345	0.345	0.000
0	24	0.055	0.055	0.000
0	25	-0.046	-0.046	0.000
0	26	0.200	0.200	0.000
0	27	-0.085	-0.085	0.000
100	1	0.075	0.739	-0.664
100	2	-0.010	0.851	-0.862
100	3	0.421	1.012	-0.590
100	4	0.076	0.803	-0.727
100	5	0.054	0.921	-0.867
100	6	0.056	0.957	-0.901
100	7	0.088	0.774	-0.686
100	8	0.029	0.803	-0.774
100	9	0.105	0.989	-0.884
100	10	0.281	0.971	-0.690
100	11	0.089	0.710	-0.621
100	12	-0.083	0.873	-0.956
100	13	0.076	1.044	-0.969
100	14	-0.026	0.979	-1.005
100	15	0.049	0.826	-0.777
100	16	0.180	0.780	-0.600
100	17	-0.058	0.759	-0.816
100	18	0.159	0.845	-0.686
100	19	-0.006	1.000	-1.006
100	20	0.195	1.093	-0.898
100	21	0.015	0.905	-0.890
100	22	0.050	0.758	-0.708
100	23	0.345	0.981	-0.636
100	24	0.055	0.931	-0.875
100	25	-0.046	0.836	-0.882
100	26	0.200	0.897	-0.697
100	27	-0.085	0.787	-0.871
Max		0.421	1.093	0.000
Average		0.085	0.483	-0.399
Min		-0.085	-0.085	-1.006
Std Dev		0.122	0.418	0.412



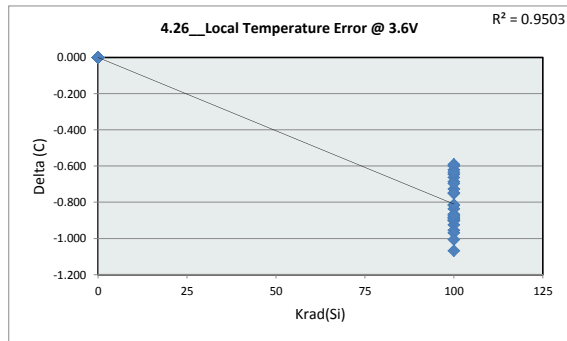
4.24 Local Temperature Average		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	2	C
Min Limit	-2	C
Krad(Si)	0	100
LL	-2.000	-2.000
Min	-0.085	0.710
Average	0.085	0.882
Max	0.421	1.093
UL	2.000	2.000



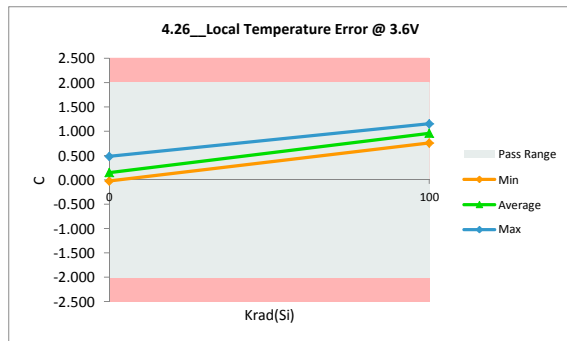
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4.26 Local Temperature Error @		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	10	2
Min Limit	-10	-2

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	0.138	0.138	0.000
0	2	0.052	0.052	0.000
0	3	0.484	0.484	0.000
0	4	0.138	0.138	0.000
0	5	0.116	0.116	0.000
0	6	0.119	0.119	0.000
0	7	0.150	0.150	0.000
0	8	0.091	0.091	0.000
0	9	0.167	0.167	0.000
0	10	0.344	0.344	0.000
0	11	0.151	0.151	0.000
0	12	0.043	0.043	0.000
0	13	0.138	0.138	0.000
0	14	0.036	0.036	0.000
0	15	0.111	0.111	0.000
0	16	0.242	0.242	0.000
0	17	0.005	0.005	0.000
0	18	0.221	0.221	0.000
0	19	0.056	0.056	0.000
0	20	0.258	0.258	0.000
0	21	0.077	0.077	0.000
0	22	0.112	0.112	0.000
0	23	0.408	0.408	0.000
0	24	0.180	0.180	0.000
0	25	0.016	0.016	0.000
0	26	0.263	0.263	0.000
0	27	-0.022	-0.022	0.000
100	1	0.138	0.802	-0.664
100	2	0.052	0.976	-0.924
100	3	0.484	1.074	-0.590
100	4	0.138	0.865	-0.727
100	5	0.116	0.983	-0.867
100	6	0.119	1.019	-0.901
100	7	0.150	0.837	-0.686
100	8	0.091	0.928	-0.836
100	9	0.167	1.051	-0.884
100	10	0.344	1.096	-0.752
100	11	0.151	0.772	-0.621
100	12	0.043	0.998	-0.956
100	13	0.138	1.107	-0.969
100	14	0.036	1.104	-1.067
100	15	0.111	1.014	-0.902
100	16	0.242	0.842	-0.600
100	17	0.005	0.821	-0.816
100	18	0.221	0.970	-0.748
100	19	0.056	1.062	-1.006
100	20	0.258	1.155	-0.898
100	21	0.077	0.967	-0.890
100	22	0.112	0.758	-0.646
100	23	0.408	1.044	-0.636
100	24	0.180	0.993	-0.813
100	25	0.016	0.899	-0.882
100	26	0.263	0.960	-0.697
100	27	-0.022	0.849	-0.871
Max		0.484	1.155	0.000
Average		0.152	0.556	-0.405
Min		-0.022	-0.022	-1.067
Std Dev		0.120	0.424	0.419



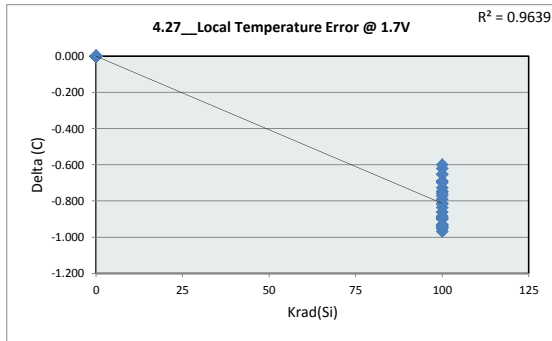
4.26 Local Temperature Error		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	2	C
Min Limit	-2	C
Krad(Si)	0	100
LL	-2.000	-2.000
Min	-0.022	0.758
Average	0.152	0.961
Max	0.484	1.155
UL	2.000	2.000



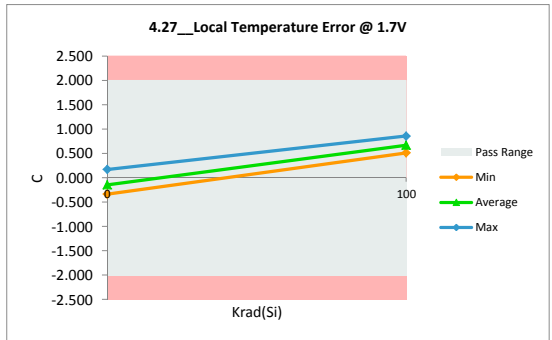
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4.27__Local Temperature Error @		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	C	C
Max Limit	10	2
Min Limit	-10	-2

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	-0.175	-0.175	0.000
0	2	-0.198	-0.198	0.000
0	3	0.171	0.171	0.000
0	4	-0.174	-0.174	0.000
0	5	-0.196	-0.196	0.000
0	6	-0.132	-0.132	0.000
0	7	-0.162	-0.162	0.000
0	8	-0.221	-0.221	0.000
0	9	-0.145	-0.145	0.000
0	10	0.031	0.031	0.000
0	11	-0.099	-0.099	0.000
0	12	-0.270	-0.270	0.000
0	13	-0.112	-0.112	0.000
0	14	-0.276	-0.276	0.000
0	15	-0.139	-0.139	0.000
0	16	-0.070	-0.070	0.000
0	17	-0.245	-0.245	0.000
0	18	-0.091	-0.091	0.000
0	19	-0.194	-0.194	0.000
0	20	-0.055	-0.055	0.000
0	21	-0.235	-0.235	0.000
0	22	-0.200	-0.200	0.000
0	23	0.095	0.095	0.000
0	24	-0.132	-0.132	0.000
0	25	-0.296	-0.296	0.000
0	26	-0.050	-0.050	0.000
0	27	-0.335	-0.335	0.000
100	1	-0.175	0.552	-0.727
100	2	-0.198	0.664	-0.862
100	3	0.171	0.824	-0.653
100	4	-0.174	0.615	-0.790
100	5	-0.196	0.733	-0.929
100	6	-0.132	0.769	-0.901
100	7	-0.162	0.587	-0.749
100	8	-0.221	0.615	-0.836
100	9	-0.145	0.739	-0.884
100	10	0.031	0.721	-0.690
100	11	-0.099	0.522	-0.621
100	12	-0.270	0.623	-0.893
100	13	-0.112	0.857	-0.969
100	14	-0.276	0.666	-0.942
100	15	-0.139	0.514	-0.652
100	16	-0.070	0.530	-0.600
100	17	-0.245	0.571	-0.816
100	18	-0.091	0.657	-0.748
100	19	-0.194	0.750	-0.944
100	20	-0.055	0.843	-0.898
100	21	-0.235	0.717	-0.952
100	22	-0.200	0.571	-0.771
100	23	0.095	0.794	-0.698
100	24	-0.132	0.681	-0.813
100	25	-0.296	0.649	-0.945
100	26	-0.050	0.710	-0.759
100	27	-0.335	0.599	-0.934
Max		0.171	0.857	0.000
Average		-0.145	0.262	-0.407
Min		-0.335	-0.335	-0.969
Std Dev		0.114	0.424	0.418



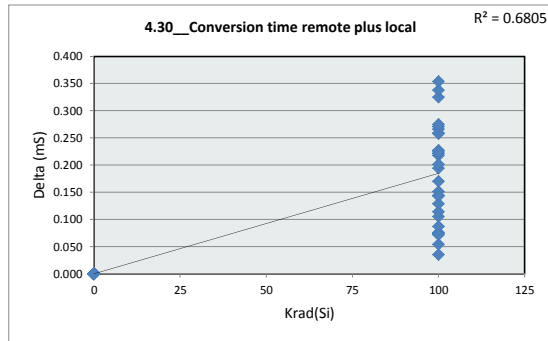
4.27__Local Temperature Error		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	2	C
Min Limit	-2	C
Krad(Si)	0	100
LL	-2.000	-2.000
Min	-0.335	0.514
Average	-0.145	0.669
Max	0.171	0.857
UL	2.000	2.000



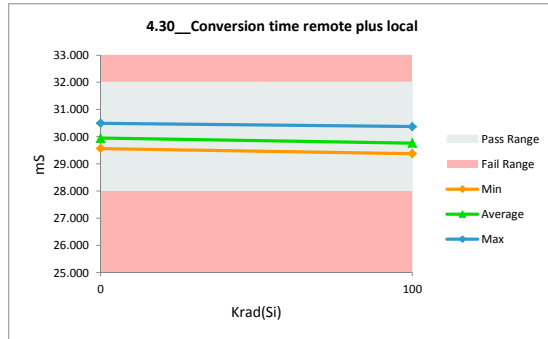
TID LDR Report (100Krad)  
TMP461-H

4.30_Conversion time remote plus local		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	mS	mS
Max Limit	31.5	32
Min Limit	28	28

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	30.294	30.294	0.000
0	2	29.603	29.603	0.000
0	3	29.669	29.669	0.000
0	4	30.492	30.492	0.000
0	5	29.836	29.836	0.000
0	6	29.872	29.872	0.000
0	7	30.150	30.150	0.000
0	8	29.818	29.818	0.000
0	9	29.904	29.904	0.000
0	10	29.836	29.836	0.000
0	11	30.061	30.061	0.000
0	12	29.729	29.729	0.000
0	13	29.873	29.873	0.000
0	14	29.835	29.835	0.000
0	15	29.825	29.825	0.000
0	16	29.822	29.822	0.000
0	17	29.911	29.911	0.000
0	18	30.150	30.150	0.000
0	19	29.735	29.735	0.000
0	20	29.950	29.950	0.000
0	21	30.179	30.179	0.000
0	22	30.094	30.094	0.000
0	23	29.563	29.563	0.000
0	24	29.958	29.958	0.000
0	25	30.407	30.407	0.000
0	26	29.897	29.897	0.000
0	27	30.083	30.083	0.000
100	1	30.294	30.180	0.114
100	2	29.603	29.376	0.227
100	3	29.669	29.564	0.105
100	4	30.492	30.233	0.259
100	5	29.836	29.760	0.076
100	6	29.872	29.678	0.194
100	7	30.150	29.999	0.151
100	8	29.818	29.493	0.325
100	9	29.904	29.646	0.258
100	10	29.836	29.692	0.144
100	11	30.061	29.795	0.266
100	12	29.729	29.458	0.271
100	13	29.873	29.655	0.218
100	14	29.835	29.614	0.221
100	15	29.825	29.487	0.338
100	16	29.822	29.693	0.129
100	17	29.911	29.687	0.224
100	18	30.150	29.875	0.275
100	19	29.735	29.565	0.170
100	20	29.950	29.876	0.074
100	21	30.179	29.978	0.201
100	22	30.094	29.740	0.354
100	23	29.563	29.476	0.087
100	24	29.958	29.886	0.072
100	25	30.407	30.372	0.035
100	26	29.897	29.754	0.143
100	27	30.083	30.029	0.054
Max		30.492	30.492	0.354
Average		29.946	29.854	0.092
Min		29.563	29.376	0.000
Std Dev		0.226	0.254	0.113



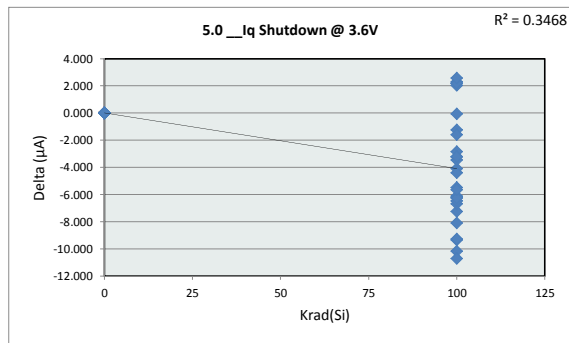
4.30_Conversion time remote plus local		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	32	mS
Min Limit	28	mS
Krad(Si)	0	100
LL	28.000	28.000
Min	29.563	29.376
Average	29.946	29.762
Max	30.492	30.372
UL	32.000	32.000



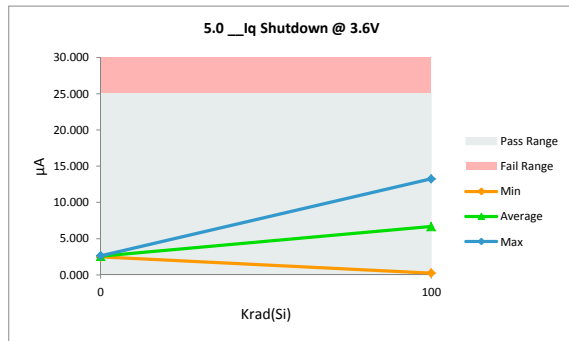
# TID LDR Report (100Krad) TMP461-H

5.0 __Iq Shutdown @ 3.6V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	5	25
Min Limit	0.5	0

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	2.554	2.554	0.000
0	2	2.578	2.578	0.000
0	3	2.576	2.576	0.000
0	4	2.559	2.559	0.000
0	5	2.586	2.586	0.000
0	6	2.561	2.561	0.000
0	7	2.559	2.559	0.000
0	8	2.567	2.567	0.000
0	9	2.577	2.577	0.000
0	10	2.556	2.556	0.000
0	11	2.572	2.572	0.000
0	12	2.606	2.606	0.000
0	13	2.628	2.628	0.000
0	14	2.578	2.578	0.000
0	15	2.568	2.568	0.000
0	16	2.601	2.601	0.000
0	17	2.592	2.592	0.000
0	18	2.531	2.531	0.000
0	19	2.622	2.622	0.000
0	20	2.542	2.542	0.000
0	21	2.539	2.539	0.000
0	22	2.522	2.522	0.000
0	23	2.485	2.485	0.000
0	24	2.534	2.534	0.000
0	25	2.507	2.507	0.000
0	26	2.588	2.588	0.000
0	27	2.565	2.565	0.000
100	1	2.554	9.794	-7.240
100	2	2.578	6.676	-4.098
100	3	2.576	5.429	-2.853
100	4	2.559	3.808	-1.249
100	5	2.586	5.803	-3.217
100	6	2.561	10.667	-8.106
100	7	2.559	8.671	-6.112
100	8	2.567	9.253	-6.686
100	9	2.577	6.967	-4.390
100	10	2.556	4.140	-1.584
100	11	2.572	8.048	-5.476
100	12	2.606	6.052	-3.446
100	13	2.628	8.837	-6.209
100	14	2.578	9.045	-6.467
100	15	2.568	8.837	-6.269
100	16	2.601	8.256	-5.655
100	17	2.592	5.803	-3.211
100	18	2.531	12.703	-10.172
100	19	2.622	2.685	-0.063
100	20	2.542	13.244	-10.702
100	21	2.539	11.872	-9.333
100	22	2.522	11.789	-9.267
100	23	2.485	0.316	2.169
100	24	2.534	0.233	2.301
100	25	2.507	0.482	2.025
100	26	2.588	0.399	2.189
100	27	2.565	0.000	2.565
Max		2.628	13.244	2.565
Average		2.565	4.612	-2.047
Min		2.485	0.000	-10.702
Std Dev		0.032	3.510	3.509



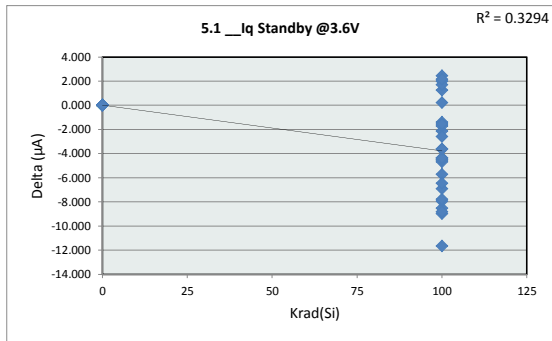
5.0 __Iq Shutdown @ 3.6V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	25	µA
Min Limit	0	µA
Krad(Si)	0	100
LL	0.000	0.000
Min	2.485	0.233
Average	2.565	6.660
Max	2.628	13.244
UL	25.000	25.000



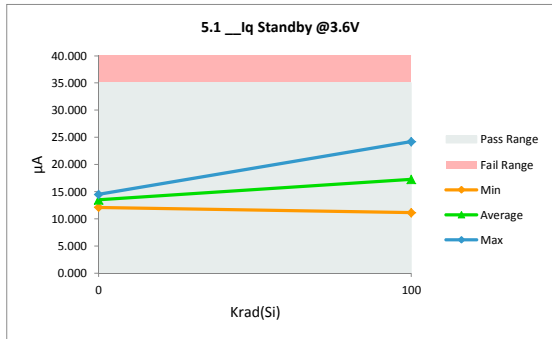
# TID LDR Report (100Krad) TMP461-H

5.1 __Iq Standby @3.6V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	18	35
Min Limit	6	0

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	12.102	12.102	0.000
0	2	14.329	14.329	0.000
0	3	13.735	13.735	0.000
0	4	12.993	12.993	0.000
0	5	14.478	14.478	0.000
0	6	14.032	14.032	0.000
0	7	13.735	13.735	0.000
0	8	13.438	13.438	0.000
0	9	14.032	14.032	0.000
0	10	13.884	13.884	0.000
0	11	12.696	12.696	0.000
0	12	13.438	13.438	0.000
0	13	12.845	12.845	0.000
0	14	13.735	13.735	0.000
0	15	13.290	13.290	0.000
0	16	13.587	13.587	0.000
0	17	13.142	13.142	0.000
0	18	12.696	12.696	0.000
0	19	13.290	13.290	0.000
0	20	12.548	12.548	0.000
0	21	14.181	14.181	0.000
0	22	13.884	13.884	0.000
0	23	14.032	14.032	0.000
0	24	13.587	13.587	0.000
0	25	13.587	13.587	0.000
0	26	13.142	13.142	0.000
0	27	13.884	13.884	0.000
100	1	12.102	20.630	-8.528
100	2	14.329	17.957	-3.628
100	3	13.735	15.879	-2.144
100	4	12.993	14.394	-1.401
100	5	14.478	16.176	-1.698
100	6	14.032	20.927	-6.895
100	7	13.735	19.442	-5.707
100	8	13.438	21.372	-7.934
100	9	14.032	18.551	-4.519
100	10	13.884	15.434	-1.550
100	11	12.696	17.364	-4.668
100	12	13.438	16.027	-2.589
100	13	12.845	19.294	-6.449
100	14	13.735	18.254	-4.519
100	15	13.290	17.660	-4.370
100	16	13.587	17.957	-4.370
100	17	13.142	16.770	-3.628
100	18	12.696	21.669	-8.973
100	19	13.290	13.058	0.232
100	20	12.548	24.193	-11.645
100	21	14.181	21.966	-7.785
100	22	13.884	22.708	-8.824
100	23	14.032	12.761	1.271
100	24	13.587	11.574	2.013
100	25	13.587	11.128	2.459
100	26	13.142	11.425	1.717
100	27	13.884	11.722	2.162
Max		14.478	24.193	2.459
Average		13.493	15.382	-1.888
Min		12.102	11.128	-11.645
Std Dev		0.576	3.262	3.321



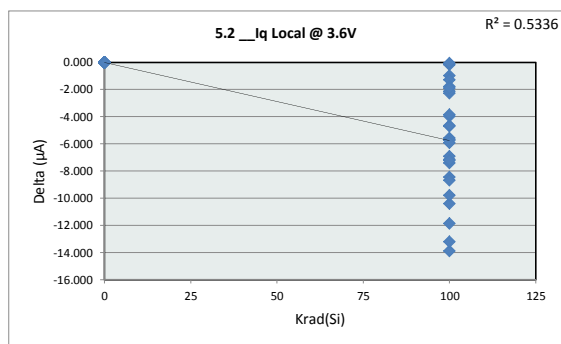
5.1 __Iq Standby @3.6V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	35	µA
Min Limit	0	µA
Krad(Si)	0	100
LL	0.000	0.000
Min	12.102	11.128
Average	13.493	17.270
Max	14.478	24.193
UL	35.000	35.000



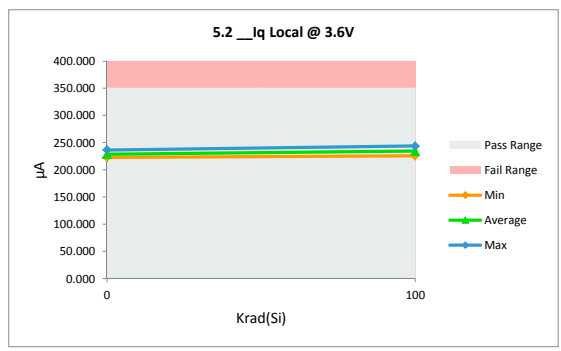


# TID LDR Report (100Krad) TMP461-H

5.2 __Iq Local @ 3.6V				
Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	227.601	227.601	0.000
0	2	228.640	228.640	0.000
0	3	234.081	234.081	0.000
0	4	222.955	222.955	0.000
0	5	231.269	231.269	0.000
0	6	231.635	231.635	0.000
0	7	227.295	227.295	0.000
0	8	235.364	235.364	0.000
0	9	230.902	230.902	0.000
0	10	231.269	231.269	0.000
0	11	227.357	227.357	0.000
0	12	226.806	226.806	0.000
0	13	231.085	231.085	0.000
0	14	236.464	236.464	0.000
0	15	228.701	228.701	0.000
0	16	227.662	227.662	0.000
0	17	231.635	231.635	0.000
0	18	224.789	224.789	0.000
0	19	228.029	228.029	0.000
0	20	227.662	227.662	0.000
0	21	225.890	225.890	0.000
0	22	224.912	224.912	0.000
0	23	225.706	225.706	0.000
0	24	228.518	228.518	0.000
0	25	223.933	223.933	0.000
0	26	229.557	229.557	0.000
0	27	224.728	224.728	0.000
100	1	227.601	233.286	-5.685
100	2	228.640	236.037	-7.397
100	3	234.081	236.343	-2.262
100	4	222.955	227.662	-4.707
100	5	231.269	236.832	-5.563
100	6	231.635	238.788	-7.153
100	7	227.295	237.687	-10.392
100	8	235.364	243.801	-8.437
100	9	230.902	231.880	-0.978
100	10	231.269	233.408	-2.139
100	11	227.357	237.137	-9.780
100	12	226.806	231.452	-4.646
100	13	231.085	236.832	-5.747
100	14	236.464	242.395	-5.931
100	15	228.701	237.382	-8.681
100	16	227.662	234.570	-6.908
100	17	231.635	232.919	-1.284
100	18	224.789	238.666	-13.877
100	19	228.029	229.802	-1.773
100	20	227.662	234.875	-7.213
100	21	225.890	237.749	-11.859
100	22	224.912	238.115	-13.203
100	23	225.706	225.889	-0.183
100	24	228.518	230.413	-1.895
100	25	223.933	227.907	-3.974
100	26	229.557	229.618	-0.061
100	27	224.728	228.579	-3.851
<b>Max</b>		236.464	243.801	0.000
<b>Average</b>		228.683	231.564	-2.881
<b>Min</b>		222.955	222.955	-13.877
<b>Std Dev</b>		3.390	4.927	3.981



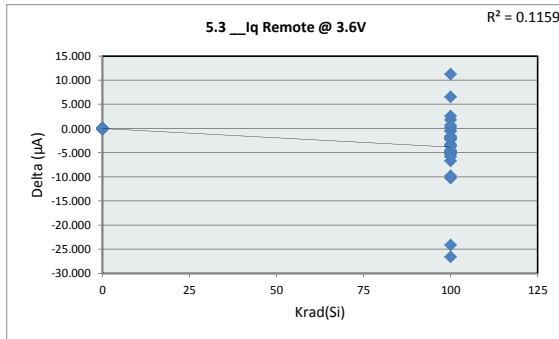
5.2 __Iq Local @ 3.6V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	350	µA
Min Limit	0	µA
Krad(Si)	0	100
LL	0.000	0.000
Min	222.955	225.889
Average	228.683	234.445
Max	236.464	243.801
UL	350.000	350.000



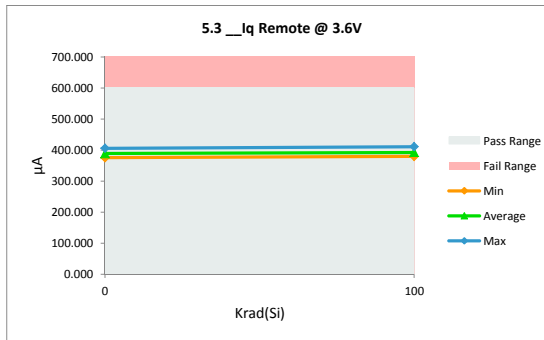
# TID LDR Report (100Krad) TMP461-H

5.3 __Iq Remote @ 3.6V		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	µA	µA
Max Limit	500	600
Min Limit	300	0

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	390.627	390.627	0.000
0	2	390.565	390.565	0.000
0	3	391.482	391.482	0.000
0	4	379.746	379.746	0.000
0	5	397.473	397.473	0.000
0	6	398.267	398.267	0.000
0	7	388.609	388.609	0.000
0	8	395.272	395.272	0.000
0	9	389.160	389.160	0.000
0	10	395.456	395.456	0.000
0	11	389.710	389.710	0.000
0	12	379.440	379.440	0.000
0	13	401.446	401.446	0.000
0	14	405.603	405.603	0.000
0	15	389.832	389.832	0.000
0	16	390.504	390.504	0.000
0	17	388.426	388.426	0.000
0	18	383.108	383.108	0.000
0	19	378.890	378.890	0.000
0	20	375.345	375.345	0.000
0	21	377.240	377.240	0.000
0	22	388.059	388.059	0.000
0	23	381.274	381.274	0.000
0	24	379.379	379.379	0.000
0	25	381.274	381.274	0.000
0	26	390.382	390.382	0.000
0	27	389.832	389.832	0.000
100	1	390.627	392.593	-1.966
100	2	390.565	395.099	-4.534
100	3	391.482	392.043	-0.561
100	4	379.746	379.572	0.174
100	5	397.473	395.710	1.763
100	6	398.267	399.928	-1.661
100	7	388.609	395.283	-6.674
100	8	395.272	400.051	-4.779
100	9	389.160	394.366	-5.206
100	10	395.456	392.898	2.558
100	11	389.710	391.981	-2.271
100	12	379.440	382.995	-3.555
100	13	401.446	403.046	-1.600
100	14	405.603	410.932	-5.329
100	15	389.832	395.649	-5.817
100	16	390.504	393.754	-3.250
100	17	388.426	392.165	-3.739
100	18	383.108	407.203	-24.095
100	19	378.890	381.100	-2.210
100	20	375.345	401.885	-26.540
100	21	377.240	387.519	-10.279
100	22	388.059	388.497	-0.438
100	23	381.274	380.611	0.663
100	24	379.379	389.169	-9.790
100	25	381.274	383.240	-1.966
100	26	390.382	379.144	11.238
100	27	389.832	383.301	6.531
Max		405.603	410.932	11.238
Average		388.385	390.299	-1.914
Min		375.345	375.345	-26.540
Std Dev		7.594	8.197	5.673



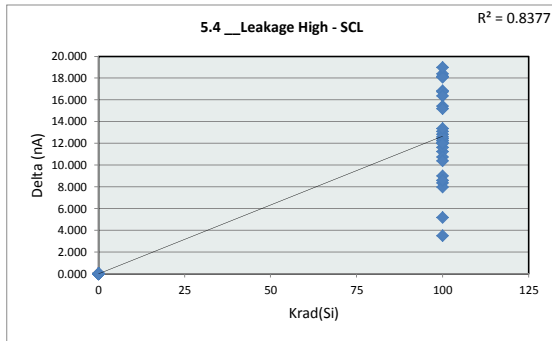
5.3 __Iq Remote @ 3.6V		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	600	µA
Min Limit	0	µA
Krad(Si)	0	100
LL	0.000	0.000
Min	375.345	379.144
Average	388.385	392.212
Max	405.603	410.932
UL	600.000	600.000



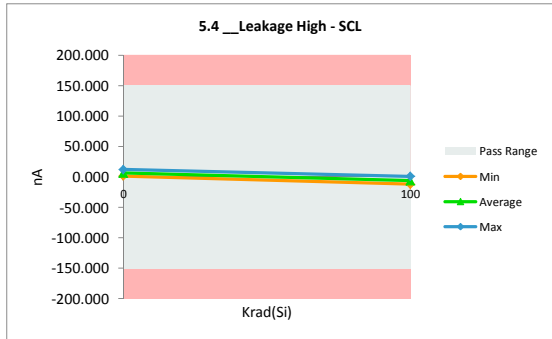
# TID LDR Report (100Krad) TMP461-H

5.4 Leakage High - SCL		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	nA	nA
Max Limit	150	150
Min Limit	-150	-150

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	7.276	7.276	0.000
0	2	2.783	2.783	0.000
0	3	2.567	2.567	0.000
0	4	5.990	5.990	0.000
0	5	8.403	8.403	0.000
0	6	9.848	9.848	0.000
0	7	12.419	12.419	0.000
0	8	5.124	5.124	0.000
0	9	8.894	8.894	0.000
0	10	5.225	5.225	0.000
0	11	8.519	8.519	0.000
0	12	10.397	10.397	0.000
0	13	4.445	4.445	0.000
0	14	7.276	7.276	0.000
0	15	9.140	9.140	0.000
0	16	3.751	3.751	0.000
0	17	9.342	9.342	0.000
0	18	5.933	5.933	0.000
0	19	8.533	8.533	0.000
0	20	5.268	5.268	0.000
0	21	11.336	11.336	0.000
0	22	5.759	5.759	0.000
0	23	2.769	2.769	0.000
0	24	1.584	1.584	0.000
0	25	4.445	4.445	0.000
0	26	4.791	4.791	0.000
0	27	2.913	2.913	0.000
100	1	7.276	-11.134	18.410
100	2	2.783	-10.036	12.819
100	3	2.567	-5.802	8.369
100	4	5.990	-10.831	16.821
100	5	8.403	-3.678	12.081
100	6	9.848	-5.571	15.419
100	7	12.419	1.177	11.242
100	8	5.124	-0.051	5.175
100	9	8.894	-7.854	16.748
100	10	5.225	-6.409	11.634
100	11	8.519	-3.924	12.443
100	12	10.397	-7.767	18.164
100	13	4.445	-3.519	7.964
100	14	7.276	-3.461	10.737
100	15	9.140	-8.923	18.063
100	16	3.751	0.252	3.499
100	17	9.342	-5.831	15.173
100	18	5.933	-6.351	12.284
100	19	8.533	-7.825	16.358
100	20	5.268	-5.123	10.391
100	21	11.336	-7.652	18.988
100	22	5.759	-7.334	13.093
100	23	2.769	-9.819	12.588
100	24	1.584	-11.770	13.354
100	25	4.445	-4.559	9.004
100	26	4.791	-7.175	11.966
100	27	2.913	-5.672	8.585
Max		12.419	12.419	18.988
Average		6.471	0.150	6.322
Min		1.584	-11.770	0.000
Std Dev		2.907	7.099	6.972



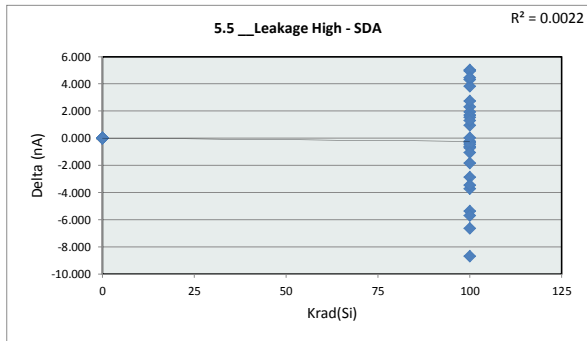
5.4 Leakage High - SCL		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	150	nA
Min Limit	-150	nA
Krad(Si)	0	100
LL	-150.000	-150.000
Min	1.584	-11.770
Average	6.471	-6.172
Max	12.419	1.177
UL	150.000	150.000



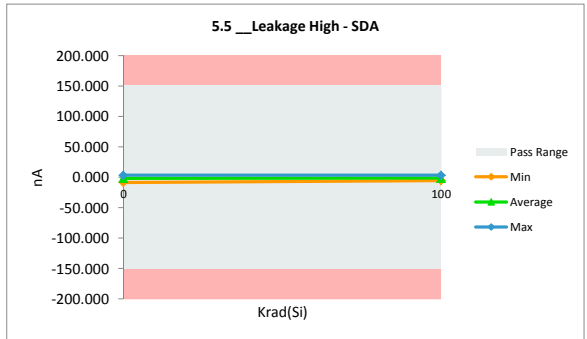
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5.5 __Leakage High - SDA		
Test Site	Junkins	Junkins
Tester	ETS36401	ETS36401
Test Number	EF901400	EF901400
Unit	nA	nA
Max Limit	150	150
Min Limit	-150	-150

Krad(Si)	Serial #	LDR_Pre	Post100K_LDR	Delta
0	1	-1.924	-1.924	0.000
0	2	-8.305	-8.305	0.000
0	3	-4.176	-4.176	0.000
0	4	-1.433	-1.433	0.000
0	5	0.645	0.645	0.000
0	6	1.584	1.584	0.000
0	7	3.403	3.403	0.000
0	8	1.382	1.382	0.000
0	9	1.136	1.136	0.000
0	10	-2.300	-2.300	0.000
0	11	-7.800	-7.800	0.000
0	12	1.266	1.266	0.000
0	13	-5.288	-5.288	0.000
0	14	1.930	1.930	0.000
0	15	0.602	0.602	0.000
0	16	-3.960	-3.960	0.000
0	17	0.256	0.256	0.000
0	18	-0.192	-0.192	0.000
0	19	1.281	1.281	0.000
0	20	-1.073	-1.073	0.000
0	21	1.873	1.873	0.000
0	22	-1.087	-1.087	0.000
0	23	-1.708	-1.708	0.000
0	24	-5.447	-5.447	0.000
0	25	-1.073	-1.073	0.000
0	26	-4.046	-4.046	0.000
0	27	-6.255	-6.255	0.000
100	1	-1.924	-1.329	-0.595
100	2	-8.305	-2.946	-5.359
100	3	-4.176	1.530	-5.706
100	4	-1.433	-0.722	-0.711
100	5	0.645	0.952	-0.307
100	6	1.584	-0.737	2.321
100	7	3.403	1.458	1.945
100	8	1.382	3.219	-1.837
100	9	1.136	-3.898	5.034
100	10	-2.300	-3.249	0.949
100	11	-7.800	-4.086	-3.714
100	12	1.266	-3.061	4.327
100	13	-5.288	3.407	-8.695
100	14	1.930	0.231	1.699
100	15	0.602	-0.924	1.526
100	16	-3.960	2.685	-6.645
100	17	0.256	0.476	-0.220
100	18	-0.192	-5.154	4.962
100	19	1.281	-2.541	3.822
100	20	-1.073	-3.812	2.739
100	21	1.873	-2.585	4.458
100	22	-1.087	1.790	-2.877
100	23	-1.708	-1.271	-0.437
100	24	-5.447	-1.993	-3.454
100	25	-1.073	-1.098	0.025
100	26	-4.046	-5.357	1.311
100	27	-6.255	-5.212	-1.043
Max		3.403	3.407	5.034
Average		-1.508	-1.388	-0.120
Min		-8.305	-8.305	-8.695
Std Dev		3.137	2.872	2.561



5.5 __Leakage High - SDA		
Test Site	Junkins	
Tester	ETS36401	
Test Number	EF901400	
Max Limit	150	nA
Min Limit	-150	nA
Krad(Si)	0	100
LL	-150.000	-150.000
Min	-8.305	-5.357
Average	-1.508	-1.268
Max	3.403	3.407
UL	150.000	150.000



## Revision History

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

<b>Changes from Revision B (October 2018) to Revision C (January 2021)</b>	<b>Page</b>
• Updated the numbering format for tables, figures and cross-references throughout the document.....	<a href="#">1</a>

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