

Radiation Report

TMP9R01-SP Total Ionizing Dose (TID) Report



ABSTRACT

This report covers the radiation characterization results of the TMP9R01-SP, high-accuracy, remote and local temperature sensor. The study was done to determine total ionizing dose (TID) effects under low dose rate (LDR) up to 100krad(Si) as a one time characterization. The results show that all samples passed within the specified limits up to 100krad(Si).

Radiation lot acceptance testing (RLAT) will be performed using five units at a dose level of 100krad(Si) for future wafer lots per MIL-STD-883 TM 1019. All future wafer lots will be tested under the same conditions. LDR TID response is the worst case. TID LDR characterization was performed per TM 1019.

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1 Device Information

The TMP9R01-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 (η -factor), programmable offset, programmable temperature limits, and a programmable digital filter are combined to provide a robust thermal monitoring design with improved accuracy and noise immunity.

The TMP9R01-SP is designed for 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 a simple way of measuring temperature gradients. The device is specified for operation over a supply voltage range of 1.7V to 3.6V, and a temperature range of –55°C to 125°C.

1.1 Device Details

[Table 1-1](#) lists the TMP9R01-SP device information used for TID LDR characterization and qualification.

Table 1-1. Device and Exposure Details

TID LDR Details: Up To 50krad(Si)	
TI Device Number	TMP9R01-SP
VID/SMD Number	V62/5962-17218
Package	10-Pin VSSOP (DGSL)
Technology	LBC8LV
Die Lot Number	7411803
A/T Lot Number	5081959
Lot Trace Code	51CLN0K
Quantity Tested	20 irradiated devices + 5 control
Lot Accept or Reject	Devices passed 100krad(Si)
LDR Radiation Facility	VPTRad, Chelmsford Massachusetts
LDR Dose Level	Up to 100krad(Si)
LDR Dose Rate	0.01rad(Si)/s
LDR Radiation Source	JLSA 81-22 Co-60
Irradiation Temperature	Ambient, room temperature

2 Total Dose Test Setup

2.1 Test Overview

The TMP9R01-SP samples were irradiated at a high dose rate of 0.01rad(Si)/s up to 100krad(Si) and then put through full electrical parametric testing on the production automated test equipment (ATE). The samples were functional and passed all electrical parametric tests with readings within datasheet electrical specification limits.

2.2 Test Description and Facilities

The TMP9R01-SP LDR exposure was performed on biased and unbiased devices in a Co-60 gamma cell at VPT Rad facility in Chelmsford, Massachusetts. A uniform radiation beam is emitted through a single divergent beam port on the irradiator. A range of dose rates from 0.01rad(Si)/sec to 0.1rad(Si)/sec is available by varying the distance to the beam port. Lead-aluminum test boxes provide energy spectrum hardening for the device under test (DUT). The DUT is positioned using a precise and versatile positioning system. An adjacent laboratory area provides a location for bias power supplies, monitoring, and test instrumentation. 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 ATE. ATE guard band test limits are set within SMD electrical limits to verify 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 Bias Diagram

The TMP9R01-SP was tested in both biased and unbiased conditions. [Figure 2-1](#) shows the bias condition for each pin during irradiation.

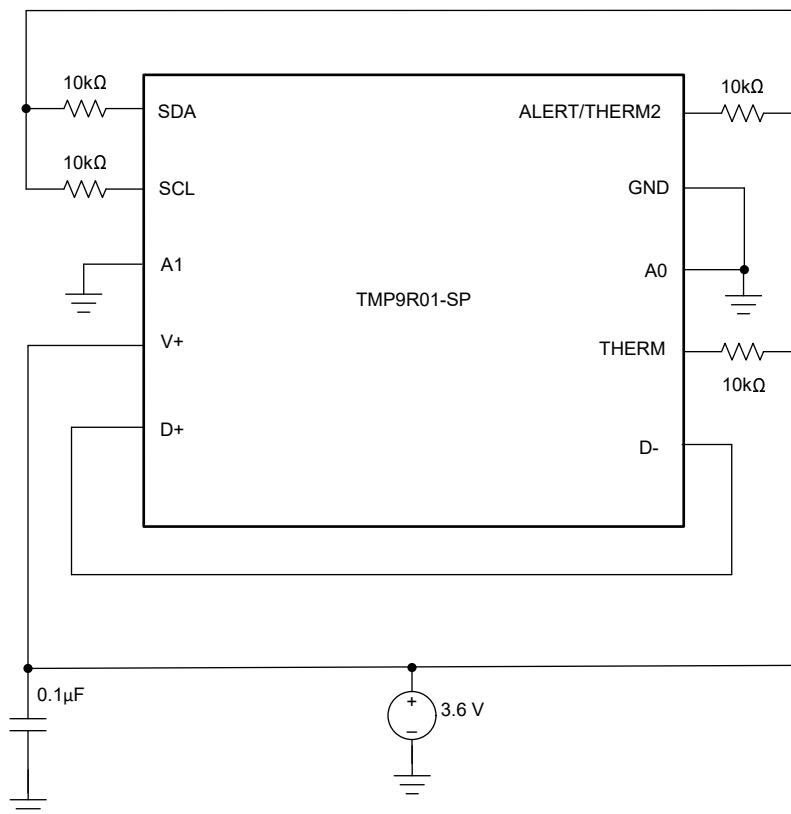


Figure 2-1. TMP9R01-SP Bias Diagram

2.4 Test Configuration and Condition

Devices at LDR were stressed at 3krad(Si), 10krad(Si), 30krad(Si), 50krad(Si), and 100krad(Si) for biased and unbiased conditions. End point electrical testing is performed on irradiated devices to verify the devices are within specified SMD electrical test limits. MIL-STD-883, Test Method 1019.9, Condition D was used in this case. For purposes of data analysis, units at each radiation level were assigned unique serial numbers. For testing at the radiation facility, five units biased and five units unbiased were submitted in one group from 3krad(Si) to 50krad(Si), and another group of five units biased and five units unbiased up to 100krad(Si).

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

Table 2-1. LDR Biased Device Information

LDR Dose Rate = 10mrad(Si)/s						
Exposure Levels		3krad(Si)	10krad(Si)	30krad(Si)	50krad(Si)	100krad(Si)
Device: TMP9R01-SP	Biased	1, 2, 3, 4, 5	11, 12, 13, 14, 15	21, 22, 23, 24, 25	31, 32, 33, 34, 35	41, 42, 43, 44, 45
	Unbiased	6, 7, 8, 9, 10	16, 17, 18, 19, 20	26, 27, 28, 29, 30	36, 37, 38, 39, 40	46, 47, 48, 49, 50
	Control	51, 52, 53, 54, 55				

3 TID Characterization Test Results

3.1 TID Characterization Summary Results

The parametric data for the TMP9R01-SP passes up to 100krad(Si) LDR TID irradiation. The drifts of the electrical parameters through LDR were within the datasheet limits.

Overall, the TMP9R01-SP showed a strong degree of hardness to LDR TID irradiation up to 100krad(Si). The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at the device's TID specification level. The parameters that did show a degree of change between pre- and post-irradiation were still within the electrical performance characteristics specified in the datasheet electrical parameters.

See [Appendix A](#) for LDR report up to 100krad(Si).

3.2 Specification Compliance Matrix

Table 3-1. Electrical Parameters Table

V+ = 1.7V to 3.6V, unless otherwise noted, TA = -55°C to 125°C, unless otherwise noted.

PARAMETER			CONDITIONS	SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBER	
TEMPERATURE MEASUREMENT										
T _{LOCAL}	Local temperature sensor accuracy			[1, 2, 3]	-2	±0.5	2	°C	4.24, 4.26, 4.27	
T _{REMOTE}	Remote temperature sensor accuracy			[1, 2, 3]	-1.5	±0.125	1.5	°C	4.10, 4.11, 4.12, 4.14, 4.15, 4.17, 4.18	
T _{ERROR_P S}	Temperature error supply sensitivity (local or remote)		V+ = 1.7V to 3.6V	[1, 2, 3]	-0.3	±0.1	0.3	°C/V	4.29	
T _{RES}	Temperature resolution (local and remote)				0.0625			°C		
	ADC resolution			[4, 5, 6]	12			Bits		
t _{CONV}	ADC conversion time		One-shot mode, per channel (local or remote)	[9, 10, 11]		15	17	ms	4.30	
R _{SERIES}	Remote sensor source current	High	Series resistance 1kΩ (max)	[1, 2, 3]	85	120	155	μA	4.4	
		Medium			30	45	60		4.2	
		Low			5	7.5	10		4.0	
η	Remote transistor ideality factor		TMP9R01-SEP/ TMP9R01-SP optimized ideality factor		1.008					
SERIAL INTERFACE (SCL, SDA)										
V _{IH}	High-level input voltage			[1, 2, 3]	1.4			V		
V _{IL}	Low-level input voltage			[1, 2, 3]	0.45			V	2.4, 2.5, 2.6	
V _{HYST}	Hysteresis				200			mV		
	SDA output-low sink current			[1, 2, 3]	6			mA		
V _{OL}	Low-level output voltage		I _O = -6mA	[1, 2, 3]	0.15			0.4	V	
I _{IN}	Serial bus input leakage current		0V ≤ V _{IN} ≤ 3.6V	[1, 2, 3]	-1			1	μA	
C _{IN}	Serial bus input capacitance		SCL		3.5			pF		
			SDA		5					
	Serial bus clock frequency			[9, 10, 11]	2.17			MHz		
	Serial bus timeout			[9, 10, 11]	20	25	30	ms	2.24	
DIGITAL INPUTS (A0, A1)										
V _{IH}	High-level input voltage			[1, 2, 3]	0.9x(V+)		(V+) +0.3	V		

Table 3-1. Electrical Parameters Table (continued)

V+ = 1.7V to 3.6V, unless otherwise noted, TA = -55°C to 125°C, unless otherwise noted.

PARAMETER		CONDITIONS	SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBER
V _{IL}	Low-level input voltage		[1, 2, 3]	-0.3		0.1x(V ₊)	V	
I _{IN}	Input leakage current	0V ≤ V _{IN} ≤ 3.6V	[1, 2, 3]	-1		1	μA	
C _{IN}	Input capacitance				4.5		pF	
DIGITAL OUTPUTS (THERM1, ALERT/THERM2)								
	Output-low sink current		[1, 2, 3]	6			mA	
V _{OL}	Low-level output voltage	I _O = -6mA	[1, 2, 3]		0.15	0.4	V	
I _{OH}	High-level output leakage current	V _O = V+	[1, 2, 3]			1	μA	
POWER SUPPLY								
V+	Specified supply voltage range		[1, 2, 3]	1.7		3.6	V	
I _Q	Quiescent current	Active conversion, local sensor	[1, 2, 3]		240	375	μA	1.12, 5.2
		Active conversion, remote sensors	[1, 2, 3]		400	600		1.13, 5.3
		Standby mode (between conversions)	[1, 2, 3]		15	50		1.11, 5.1
		Shutdown mode, serial bus inactive	[1, 2, 3]		3	25		1.10, 5.0
		Shutdown mode, serial bus active, f _S = 400kHz			90			
		Shutdown mode, serial bus active, f _S = 2.17MHz			350			
POR	Power-on reset threshold	Rising edge	[1, 2, 3]		1.41	1.55	V	

4 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.

Appendix A: LDR TID Report Data

This appendix provides the TMP9R01-SP TID LDR report. The report shows the variation for each parameter up to 100krad(Si).

Delta Threshold 10.00%

TID Report TMP9R01-SP

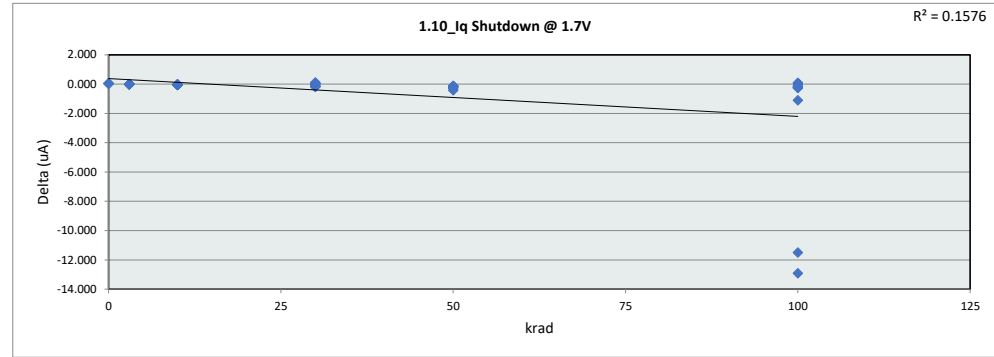
TID Report

TMP9R01-SP

1.10_Iq Shutdown @ 1.7V

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	uA	uA
Max Limit	25	25
Min Limit	0	0

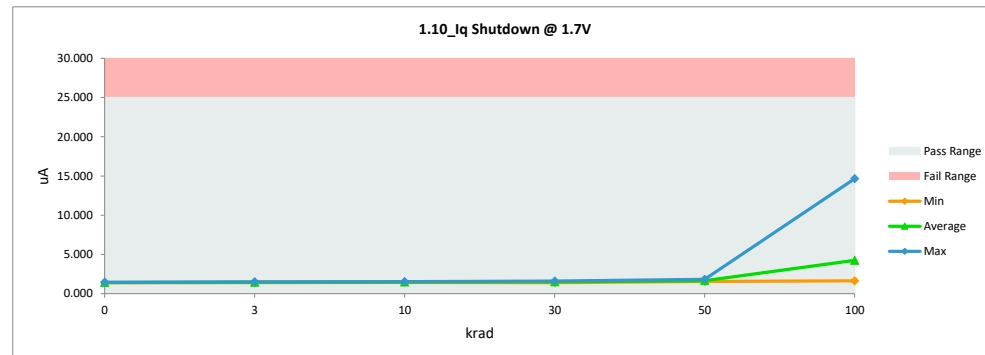
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	1.411	1.424	-0.013
3	2	1.415	1.412	0.003
3	3	1.410	1.409	0.001
3	4	1.408	1.416	-0.008
3	5	1.422	1.424	-0.002
3	6	1.424	1.425	-0.001
3	7	1.458	1.450	0.008
3	8	1.497	1.490	0.007
3	9	1.489	1.487	0.002
3	10	1.504	1.495	0.009
10	11	1.411	1.446	-0.035
10	12	1.415	1.463	-0.048
10	13	1.410	1.456	-0.046
10	14	1.408	1.453	-0.045
10	15	1.422	1.441	-0.019
10	16	1.424	1.439	-0.015
10	17	1.458	1.499	-0.041
10	18	1.497	1.520	-0.023
10	19	1.489	1.519	-0.030
10	20	1.504	1.533	-0.029
30	21	1.411	1.501	-0.090
30	22	1.415	1.577	-0.162
30	23	1.410	1.573	-0.163
30	24	1.408	1.565	-0.157
30	25	1.422	1.588	-0.166
30	26	1.424	1.412	0.012
30	27	1.458	1.445	0.013
30	28	1.497	1.436	0.061
30	29	1.489	1.447	0.042
30	30	1.504	1.389	0.115
50	31	1.411	1.684	-0.273
50	32	1.415	1.620	-0.205
50	33	1.410	1.821	-0.411
50	34	1.408	1.658	-0.250
50	35	1.422	1.572	-0.150
50	36	1.424	1.552	-0.128
50	37	1.458	1.617	-0.159
50	38	1.497	1.610	-0.113
50	39	1.489	1.616	-0.127
50	40	1.504	1.639	-0.135
100	41	1.690	2.793	-1.103
100	42	1.739	14.653	-12.914
100	43	1.775	1.680	0.095
100	44	1.848	1.856	-0.008
100	45	1.665	13.155	-11.490
100	46	1.467	1.661	-0.194
100	47	1.490	1.651	-0.161
100	48	1.411	1.671	-0.260
100	49	1.440	1.667	-0.227



1.10_Iq Shutdown @ 1.7V

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	25 uA
Min Limit	0 uA

krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	1.392	1.409	1.439	1.389	1.552	1.636
Average	1.418	1.443	1.477	1.493	1.639	4.242
Max	1.446	1.495	1.533	1.588	1.821	14.653
UL	25.000	25.000	25.000	25.000	25.000	25.000



TID Report TMP9R01-SP

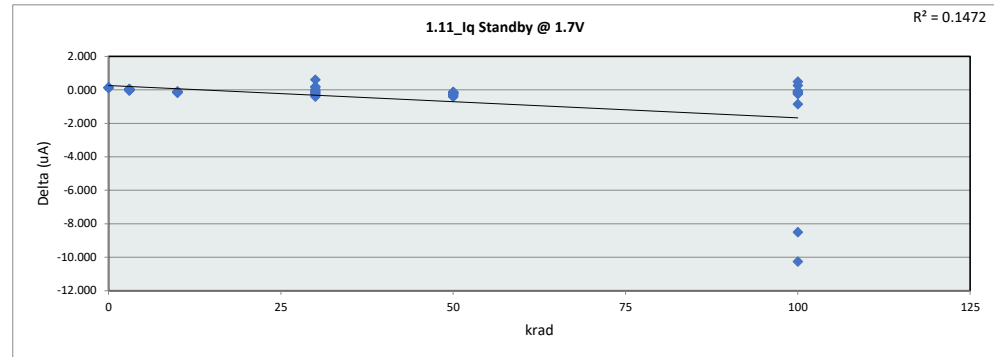
100	50	1.491	1.636	-0.145
0	51	1.445	1.396	0.049
0	52	1.498	1.446	0.052
0	53	1.475	1.426	0.049
0	54	1.472	1.429	0.043
0	55	1.445	1.392	0.053
Max		1.848	14.653	0.115
Average		1.475	2.001	-0.526
Min		1.408	1.389	-12.914
Std Dev		0.095	2.347	2.300

TID Report

TMP9R01-SP

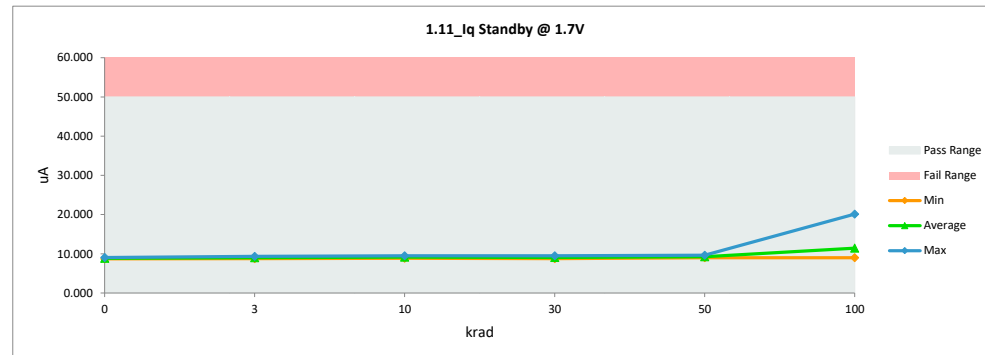
1.11_Iq Standby @ 1.7V		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	uA	uA
Max Limit	50	50
Min Limit	0	0

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	9.321	9.337	-0.016
3	2	9.301	9.339	-0.038
3	3	8.746	8.734	0.012
3	4	8.734	8.762	-0.028
3	5	8.888	8.885	0.003
3	6	9.355	9.360	-0.005
3	7	9.052	9.019	0.033
3	8	8.852	8.861	-0.009
3	9	8.978	8.944	0.034
3	10	8.976	8.928	0.048
10	11	9.321	9.491	-0.170
10	12	9.301	9.452	-0.151
10	13	8.746	8.846	-0.100
10	14	8.734	8.906	-0.172
10	15	8.888	9.036	-0.148
10	16	9.355	9.493	-0.138
10	17	9.052	9.181	-0.129
10	18	8.852	8.966	-0.114
10	19	8.978	9.104	-0.126
10	20	8.976	9.098	-0.122
30	21	9.321	9.506	-0.185
30	22	9.301	9.281	0.020
30	23	8.746	9.004	-0.258
30	24	8.734	9.149	-0.415
30	25	8.888	9.142	-0.254
30	26	9.355	8.752	0.603
30	27	9.052	8.892	0.160
30	28	8.852	8.916	-0.064
30	29	8.978	9.084	-0.106
30	30	8.976	8.790	0.186
50	31	9.321	9.612	-0.291
50	32	9.301	9.518	-0.217
50	33	8.746	9.172	-0.426
50	34	8.734	9.085	-0.351
50	35	8.888	9.022	-0.134
50	36	9.355	9.538	-0.183
50	37	9.052	9.291	-0.239
50	38	8.852	8.988	-0.136
50	39	8.978	9.154	-0.176
50	40	8.976	9.150	-0.174
100	41	9.168	10.029	-0.861
100	42	9.853	20.111	-10.258
100	43	9.437	9.180	0.257
100	44	9.825	9.343	0.482
100	45	9.895	18.399	-8.504
100	46	9.603	9.705	-0.102
100	47	8.915	8.988	-0.073
100	48	8.836	9.089	-0.253
100	49	9.446	9.685	-0.239



1.11_Iq Standby @ 1.7V		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	50	uA
Min Limit	0	uA

krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	8.710	8.734	8.846	8.752	8.988	8.988
Average	8.846	9.017	9.157	9.052	9.253	11.429
Max	9.039	9.360	9.493	9.506	9.612	20.111
UL	50.000	50.000	50.000	50.000	50.000	50.000



TID Report TMP9R01-SP

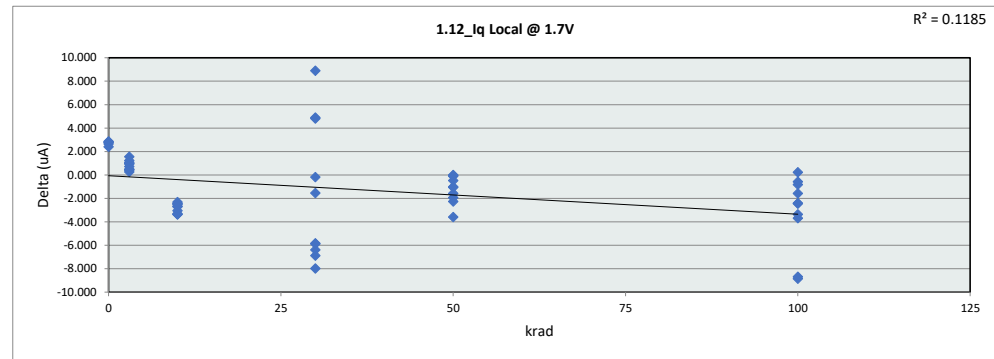
100	50	9.609	9.763	-0.154
0	51	8.844	8.710	0.134
0	52	8.984	8.858	0.126
0	53	9.000	8.875	0.125
0	54	9.172	9.039	0.133
0	55	8.873	8.746	0.127
Max		9.895	20.111	0.603
Average		9.096	9.515	-0.419
Min		8.734	8.710	-10.258
Std Dev		0.302	1.939	1.778

TID Report

TMP9R01-SP

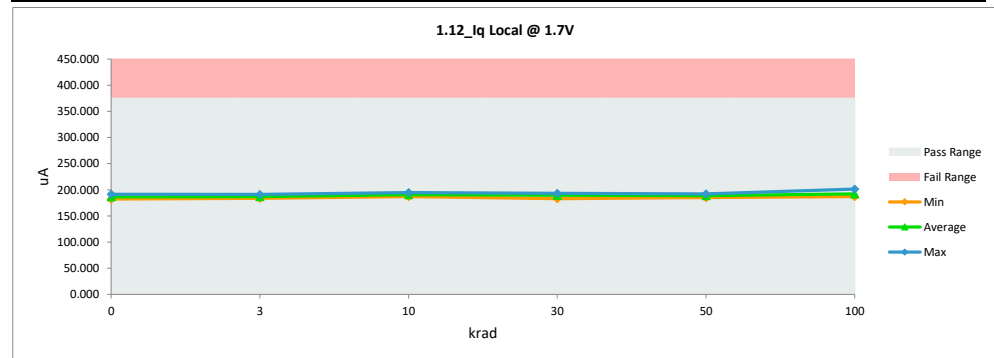
1.12_Iq Local @ 1.7V		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	uA	uA
Max Limit	375	375
Min Limit	0	0

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	184.724	184.326	0.398
3	2	184.364	183.647	0.717
3	3	186.295	185.326	0.969
3	4	186.690	186.436	0.254
3	5	187.420	186.474	0.946
3	6	189.170	188.702	0.468
3	7	190.684	189.126	1.558
3	8	191.659	191.168	0.491
3	9	184.935	183.881	1.054
3	10	191.875	190.646	1.229
10	11	184.724	188.039	-3.315
10	12	184.364	187.070	-2.706
10	13	186.295	188.826	-2.531
10	14	186.690	190.060	-3.370
10	15	187.420	190.775	-3.355
10	16	189.170	191.840	-2.670
10	17	190.684	193.000	-2.316
10	18	191.659	194.713	-3.054
10	19	184.935	187.394	-2.459
10	20	191.875	194.304	-2.429
30	21	184.724	191.114	-6.390
30	22	184.364	192.342	-7.978
30	23	186.295	193.185	-6.890
30	24	186.690	186.874	-0.184
30	25	187.420	193.254	-5.834
30	26	189.170	184.279	4.891
30	27	190.684	192.228	-1.544
30	28	191.659	186.845	4.814
30	29	184.935	190.816	-5.881
30	30	191.875	182.985	8.890
50	31	184.724	186.996	-2.272
50	32	184.364	186.306	-1.942
50	33	186.295	189.892	-3.597
50	34	186.690	187.709	-1.019
50	35	187.420	188.991	-1.571
50	36	189.170	190.216	-1.046
50	37	190.684	190.735	-0.051
50	38	191.659	192.134	-0.475
50	39	184.935	185.043	-0.108
50	40	191.875	191.882	-0.007
100	41	189.798	192.243	-2.445
100	42	192.517	201.364	-8.847
100	43	187.598	190.968	-3.370
100	44	188.007	191.691	-3.684
100	45	189.773	198.454	-8.681
100	46	189.374	189.947	-0.573
100	47	188.239	188.018	0.221
100	48	189.284	191.703	-2.419
100	49	185.399	186.974	-1.575



1.12_Iq Local @ 1.7V		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	375	uA
Min Limit	0	uA

krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	182.304	183.647	187.070	182.985	185.043	186.974
Average	186.460	186.973	190.602	189.392	188.990	192.180
Max	191.237	191.168	194.713	193.254	192.134	201.364
UL	375.000	375.000	375.000	375.000	375.000	375.000



TID Report TMP9R01-SP

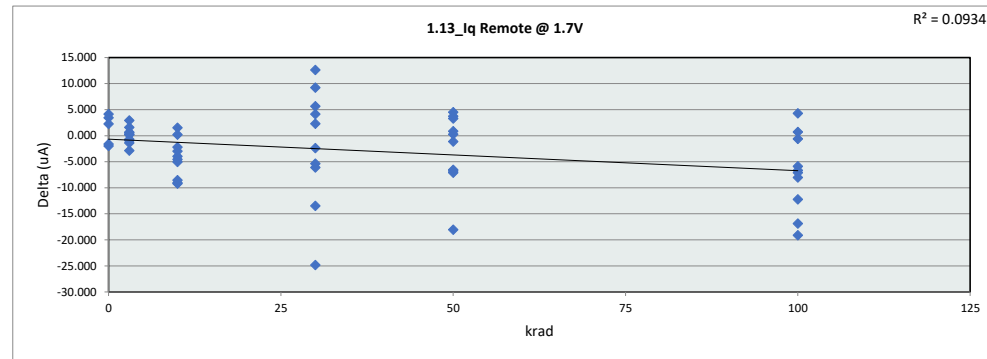
100	50	189.607	190.435	-0.828
0	51	186.165	183.302	2.863
0	52	193.885	191.237	2.648
0	53	188.487	185.694	2.793
0	54	192.536	189.762	2.774
0	55	184.716	182.304	2.412
Max		193.885	201.364	8.890
Average		188.121	189.340	-1.219
Min		184.364	182.304	-8.847
Std Dev		2.755	3.747	3.371

TID Report

TMP9R01-SP

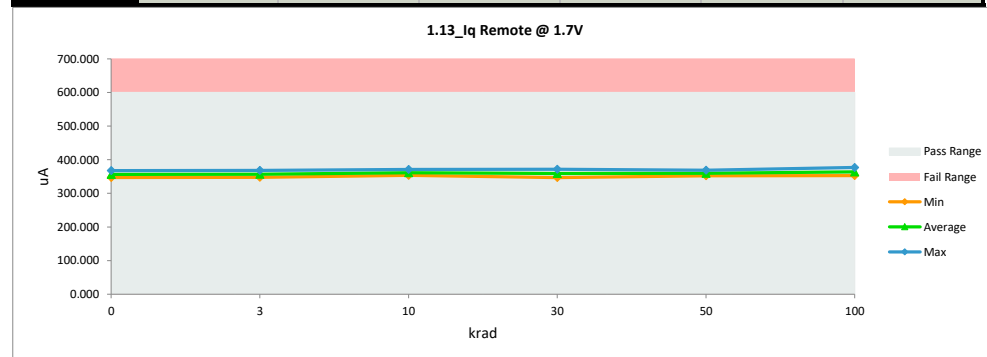
1.13_Iq Remote @ 1.7V		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	uA	uA
Max Limit	600	600
Min Limit	0	0

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	352.050	352.742	-0.692
3	2	346.640	347.593	-0.953
3	3	348.580	348.337	0.243
3	4	356.940	359.799	-2.859
3	5	366.639	365.942	0.697
3	6	352.518	351.974	0.544
3	7	362.031	359.095	2.936
3	8	366.774	368.172	-1.398
3	9	353.347	353.135	0.212
3	10	364.635	363.044	1.591
10	11	352.050	361.081	-9.031
10	12	346.640	355.176	-8.536
10	13	348.580	353.598	-5.018
10	14	356.940	360.886	-3.946
10	15	366.639	366.444	0.195
10	16	352.518	355.481	-2.963
10	17	362.031	371.238	-9.207
10	18	366.774	368.964	-2.190
10	19	353.347	357.908	-4.561
10	20	364.635	363.121	1.514
30	21	352.050	354.431	-2.381
30	22	346.640	371.459	-24.819
30	23	348.580	362.047	-13.467
30	24	356.940	354.639	2.301
30	25	366.639	362.477	4.162
30	26	352.518	346.857	5.661
30	27	362.031	367.409	-5.378
30	28	366.774	357.550	9.224
30	29	353.347	359.432	-6.085
30	30	364.635	351.991	12.644
50	31	352.050	359.160	-7.110
50	32	346.640	353.196	-6.556
50	33	348.580	366.629	-18.049
50	34	356.940	352.433	4.507
50	35	366.639	365.789	0.850
50	36	352.518	353.652	-1.134
50	37	362.031	368.808	-6.777
50	38	366.774	363.461	3.313
50	39	353.347	353.058	0.289
50	40	364.635	360.876	3.759
100	41	355.831	374.948	-19.117
100	42	365.452	372.087	-6.635
100	43	352.074	357.959	-5.885
100	44	356.804	364.835	-8.031
100	45	360.209	377.068	-16.859
100	46	355.229	354.493	0.736
100	47	352.399	364.634	-12.235
100	48	352.249	352.846	-0.597
100	49	359.708	355.430	4.278



1.13_Iq Remote @ 1.7V		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	600	uA
Min Limit	0	uA

krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	347.183	347.593	353.598	346.857	352.433	352.846
Average	356.325	356.983	361.390	358.829	359.706	363.861
Max	367.619	368.172	371.238	371.459	368.808	377.068
UL	600.000	600.000	600.000	600.000	600.000	600.000



TID Report TMP9R01-SP

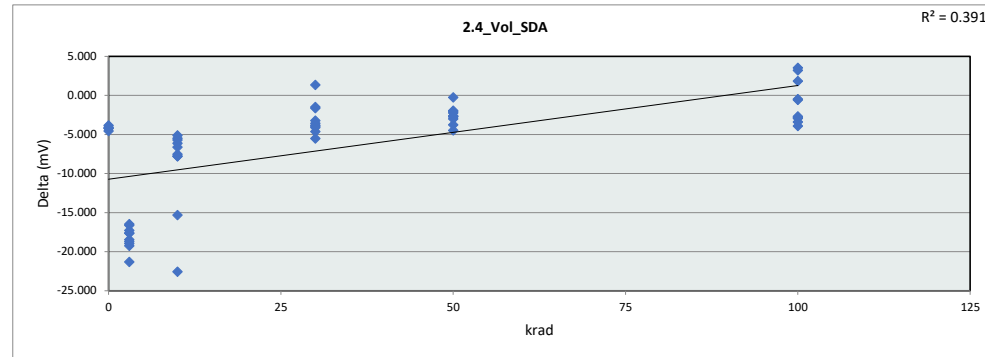
100	50	357.224	364.308	-7.084
0	51	349.453	347.183	2.270
0	52	365.650	367.619	-1.969
0	53	355.968	357.576	-1.608
0	54	361.799	358.338	3.461
0	55	355.060	350.909	4.151
Max		366.774	377.068	12.644
Average		357.013	359.806	-2.793
Min		346.640	346.857	-24.819
Std Dev		6.603	7.351	6.999

TID Report

TMP9R01-SP

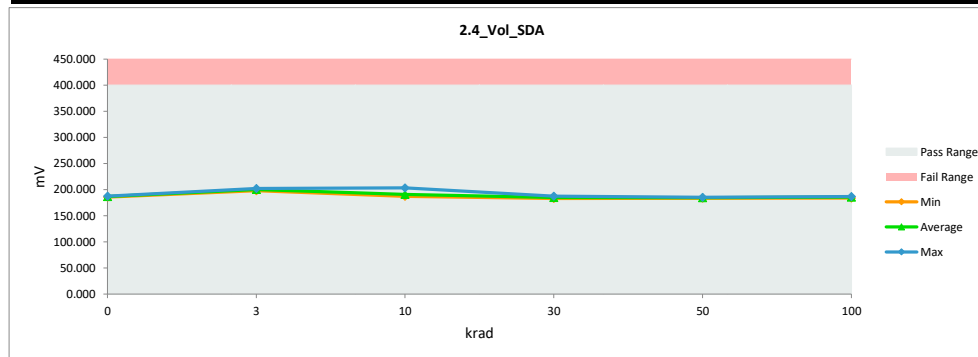
2.4_Vol_SDA		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	mV	mV
Max Limit	400	400
Min Limit	0	0

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	180.739	202.059	-21.320
3	2	180.876	199.824	-18.948
3	3	181.263	199.724	-18.461
3	4	180.377	198.013	-17.636
3	5	184.396	201.685	-17.289
3	6	182.699	201.422	-18.723
3	7	182.449	199.074	-16.625
3	8	183.085	202.347	-19.262
3	9	182.049	199.674	-17.625
3	10	182.511	199.000	-16.489
10	11	180.739	188.519	-7.780
10	12	180.876	203.460	-22.584
10	13	181.263	189.056	-7.793
10	14	180.377	187.907	-7.530
10	15	184.396	190.529	-6.133
10	16	182.699	198.018	-15.319
10	17	182.449	189.068	-6.619
10	18	183.085	188.794	-5.709
10	19	182.049	187.183	-5.134
10	20	182.511	187.995	-5.484
30	21	180.739	185.376	-4.637
30	22	180.876	185.003	-4.127
30	23	181.263	184.828	-3.565
30	24	180.377	183.608	-3.231
30	25	184.396	183.060	1.336
30	26	182.699	184.330	-1.631
30	27	182.449	186.273	-3.824
30	28	183.085	184.579	-1.494
30	29	182.049	187.568	-5.519
30	30	182.511	186.447	-3.936
50	31	180.739	183.389	-2.650
50	32	180.876	183.888	-3.012
50	33	181.263	185.024	-3.761
50	34	180.377	184.862	-4.485
50	35	184.396	184.662	-0.266
50	36	182.699	185.436	-2.737
50	37	182.449	185.124	-2.675
50	38	183.085	185.336	-2.251
50	39	182.049	184.000	-1.951
50	40	182.511	184.612	-2.101
100	41	189.163	185.633	3.530
100	42	186.318	186.794	-0.476
100	43	187.853	186.020	1.833
100	44	185.919	186.507	-0.588
100	45	188.352	185.146	3.206
100	46	183.310	186.258	-2.948
100	47	183.148	185.995	-2.847
100	48	181.088	184.996	-3.908
100	49	180.340	183.748	-3.408



2.4_Vol_SDA		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	400	mV
Min Limit	0	mV

krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	185.648	198.013	187.183	183.060	183.389	183.748
Average	186.692	200.282	191.053	185.107	184.633	185.627
Max	187.720	202.347	203.460	187.568	185.436	186.794
UL	400.000	400.000	400.000	400.000	400.000	400.000



TID Report TMP9R01-SP

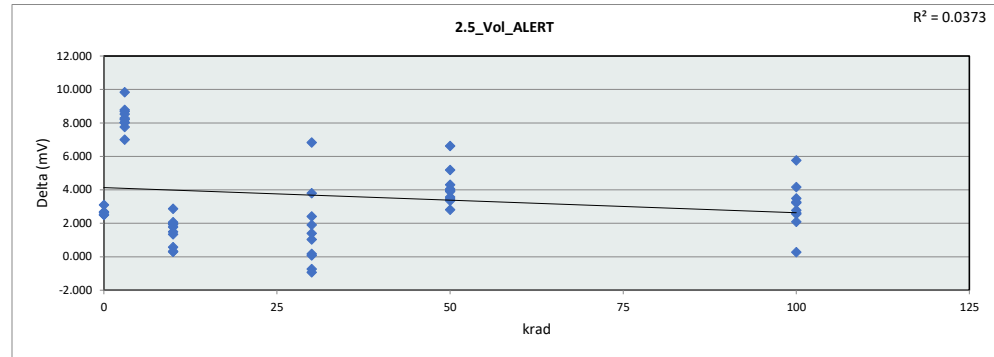
100	50	182.486	185.171	-2.685
0	51	181.550	185.648	-4.098
0	52	182.836	187.059	-4.223
0	53	181.126	185.673	-4.547
0	54	183.884	187.720	-3.836
0	55	183.148	187.358	-4.210
Max		189.163	203.460	3.530
Average		182.587	189.100	-6.512
Min		180.340	183.060	-22.584
Std Dev		1.972	6.244	6.774

TID Report

TMP9R01-SP

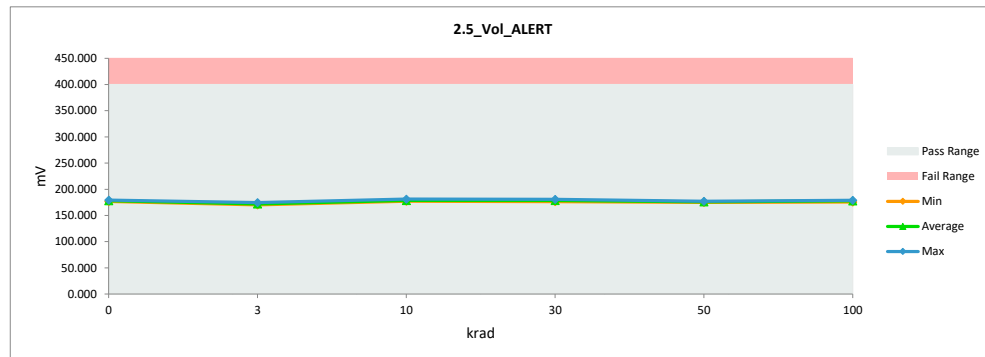
2.5_Vol_ALERT		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	mV	mV
Max Limit	400	400
Min Limit	0	0

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	178.974	171.973	7.001
3	2	179.174	171.161	8.013
3	3	179.498	171.486	8.012
3	4	178.849	170.562	8.287
3	5	183.091	174.571	8.520
3	6	180.858	172.660	8.198
3	7	180.296	172.548	7.748
3	8	181.257	172.485	8.772
3	9	179.860	171.174	8.686
3	10	180.047	170.212	9.835
10	11	178.974	178.682	0.292
10	12	179.174	177.833	1.341
10	13	179.498	179.181	0.317
10	14	178.849	178.283	0.566
10	15	183.091	181.314	1.777
10	16	180.858	178.881	1.977
10	17	180.296	178.807	1.489
10	18	181.257	179.193	2.064
10	19	179.860	177.933	1.927
10	20	180.047	177.185	2.862
30	21	178.974	178.811	0.163
30	22	179.174	177.279	1.895
30	23	179.498	178.475	1.023
30	24	178.849	177.453	1.396
30	25	183.091	176.269	6.822
30	26	180.858	178.450	2.408
30	27	180.296	180.219	0.077
30	28	181.257	177.465	3.792
30	29	179.860	180.792	-0.932
30	30	180.047	180.792	-0.745
50	31	178.974	175.525	3.449
50	32	179.174	175.825	3.349
50	33	179.498	175.600	3.898
50	34	178.849	176.037	2.812
50	35	183.091	176.473	6.618
50	36	180.858	176.898	3.960
50	37	180.296	176.735	3.561
50	38	181.257	176.960	4.297
50	39	179.860	175.812	4.048
50	40	180.047	174.864	5.183
100	41	182.158	178.000	4.158
100	42	180.861	178.312	2.549
100	43	182.532	179.048	3.484
100	44	179.314	179.048	0.266
100	45	182.171	176.414	5.757
100	46	181.282	178.674	2.608
100	47	181.320	178.100	3.220
100	48	179.361	177.276	2.085
100	49	178.462	175.690	2.772



2.5_Vol_ALERT		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	400	mV
Min Limit	0	mV

krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	176.611	170.212	177.185	176.269	174.864	175.690
Average	178.088	171.883	178.729	178.601	176.073	177.786
Max	179.418	174.571	181.314	180.792	176.960	179.048
UL	400.000	400.000	400.000	400.000	400.000	400.000



TID Report TMP9R01-SP

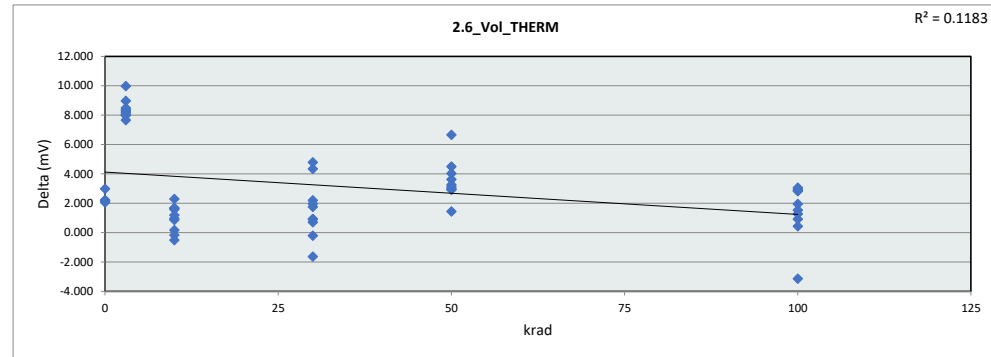
100	50	180.571	177.301	3.270
0	51	179.723	177.222	2.501
0	52	181.120	178.607	2.513
0	53	179.286	176.611	2.675
0	54	182.517	179.418	3.099
0	55	181.220	178.582	2.638
Max		183.091	181.314	9.835
Average		180.355	176.748	3.606
Min		178.462	170.212	-0.932
Std Dev		1.272	2.731	2.747

TID Report

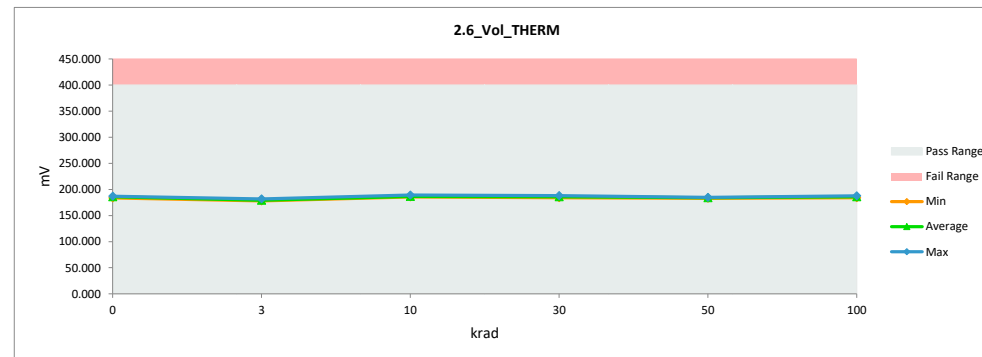
TMP9R01-SP

2.6_Vol_THERM		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	mV	mV
Max Limit	400	400
Min Limit	0	0

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	186.328	178.664	7.664
3	2	186.803	178.801	8.002
3	3	185.966	177.977	7.989
3	4	186.291	178.014	8.277
3	5	190.123	181.762	8.361
3	6	188.151	179.988	8.163
3	7	187.914	179.426	8.488
3	8	188.525	179.550	8.975
3	9	186.616	178.601	8.015
3	10	188.787	178.813	9.974
10	11	186.328	186.832	-0.504
10	12	186.803	185.610	1.193
10	13	185.966	186.134	-0.168
10	14	186.291	186.121	0.170
10	15	190.123	189.265	0.858
10	16	188.151	186.570	1.581
10	17	187.914	186.233	1.681
10	18	188.525	186.857	1.668
10	19	186.616	185.659	0.957
10	20	188.787	186.495	2.292
30	21	186.328	186.538	-0.210
30	22	186.803	184.843	1.960
30	23	185.966	185.030	0.936
30	24	186.291	184.544	1.747
30	25	190.123	185.341	4.782
30	26	188.151	185.952	2.199
30	27	187.914	187.211	0.703
30	28	188.525	184.182	4.343
30	29	186.616	188.245	-1.629
30	30	188.787	187.871	0.916
50	31	186.328	183.389	2.939
50	32	186.803	183.788	3.015
50	33	185.966	182.840	3.126
50	34	186.291	184.849	1.442
50	35	190.123	183.464	6.659
50	36	188.151	184.524	3.627
50	37	187.914	184.661	3.253
50	38	188.525	184.499	4.026
50	39	186.616	183.701	2.915
50	40	188.787	184.287	4.500
100	41	187.972	186.703	1.269
100	42	186.337	185.904	0.433
100	43	187.435	186.516	0.919
100	44	184.678	187.814	-3.136
100	45	187.211	184.144	3.067
100	46	189.237	187.290	1.947
100	47	189.424	186.466	2.958
100	48	186.091	184.556	1.535
100	49	186.940	184.119	2.821



2.6_Vol_THERM						
Test Site	J2S					
Tester	FETS36405					
Test Number	EE131301					
Max Limit	400	mV				
Min Limit	0	mV				
krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	183.713	177.977	185.610	184.182	182.840	184.119
Average	185.884	179.160	186.578	185.976	184.000	185.920
Max	186.982	181.762	189.265	188.245	184.849	187.814
UL	400.000	400.000	400.000	400.000	400.000	400.000



TID Report TMP9R01-SP

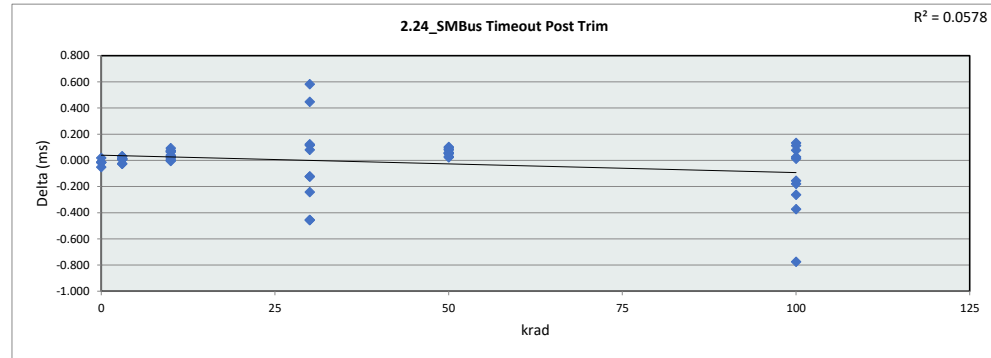
100	50	188.550	185.692	2.858
0	51	187.065	184.923	2.142
0	52	188.962	186.907	2.055
0	53	185.904	183.713	2.191
0	54	189.960	186.982	2.978
0	55	189.124	186.895	2.229
Max		190.123	189.265	9.974
Average		187.580	184.468	3.112
Min		184.678	177.977	-3.136
Std Dev		1.357	2.885	2.961

TID Report

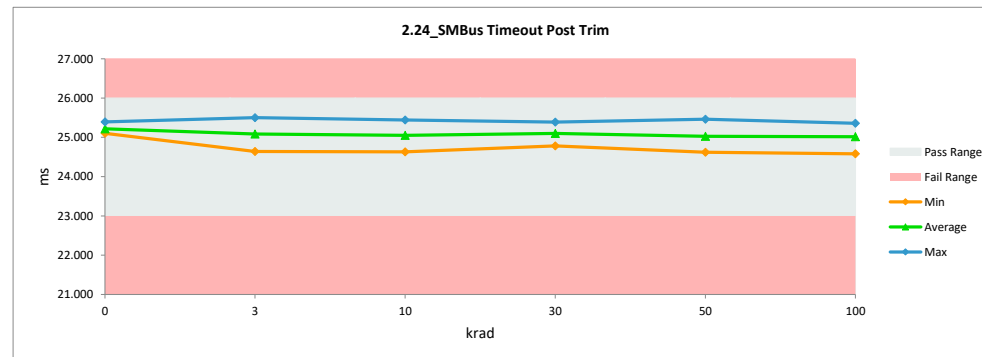
TMP9R01-SP

2.24_SMBus Timeout Post Trim		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	ms	ms
Max Limit	26	26
Min Limit	23	23

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	24.672	24.641	0.031
3	2	24.896	24.889	0.007
3	3	25.333	25.360	-0.027
3	4	25.441	25.434	0.007
3	5	25.513	25.502	0.011
3	6	24.934	24.921	0.013
3	7	24.818	24.843	-0.025
3	8	25.271	25.240	0.031
3	9	25.037	25.026	0.011
3	10	25.013	24.997	0.016
10	11	24.672	24.633	0.039
10	12	24.896	24.830	0.066
10	13	25.333	25.338	-0.005
10	14	25.441	25.441	0.000
10	15	25.513	25.437	0.076
10	16	24.934	24.924	0.010
10	17	24.818	24.796	0.022
10	18	25.271	25.205	0.066
10	19	25.037	25.007	0.030
10	20	25.013	24.919	0.094
30	21	24.672	24.915	-0.243
30	22	24.896	24.780	0.116
30	23	25.333	25.210	0.123
30	24	25.441	24.994	0.447
30	25	25.513	24.931	0.582
30	26	24.934	25.391	-0.457
30	27	24.818	25.273	-0.455
30	28	25.271	25.190	0.081
30	29	25.037	25.160	-0.123
30	30	25.013	25.136	-0.123
50	31	24.672	24.619	0.053
50	32	24.896	24.793	0.103
50	33	25.333	25.276	0.057
50	34	25.441	25.412	0.029
50	35	25.513	25.460	0.053
50	36	24.934	24.874	0.060
50	37	24.818	24.794	0.024
50	38	25.271	25.186	0.085
50	39	25.037	24.957	0.080
50	40	25.013	24.917	0.096
100	41	25.130	25.309	-0.179
100	42	24.491	24.647	-0.156
100	43	24.900	25.163	-0.263
100	44	24.818	25.191	-0.373
100	45	24.457	25.231	-0.774
100	46	24.680	24.654	0.026
100	47	25.375	25.297	0.078
100	48	25.371	25.358	0.013
100	49	24.842	24.729	0.113



2.24_SMBus Timeout Post Trim						
Test Site	J2S					
Tester	FETS36405					
Test Number	EE131301					
Max Limit	26	ms				
Min Limit	23	ms				
krad	0	3	10	30	50	100
LL	23.000	23.000	23.000	23.000	23.000	23.000
Min	25.103	24.641	24.633	24.780	24.619	24.581
Average	25.218	25.085	25.053	25.098	25.029	25.016
Max	25.393	25.502	25.441	25.391	25.460	25.358
UL	26.000	26.000	26.000	26.000	26.000	26.000



TID Report TMP9R01-SP

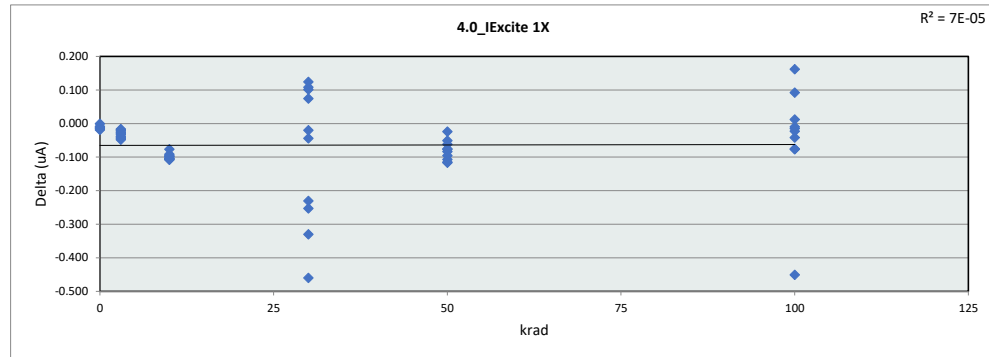
100	50	24.714	24.581	0.133
0	51	25.378	25.393	-0.015
0	52	25.225	25.240	-0.015
0	53	25.140	25.192	-0.052
0	54	25.145	25.160	-0.015
0	55	25.122	25.103	0.019
Max		25.513	25.502	0.582
Average		25.064	25.071	-0.007
Min		24.457	24.581	-0.774
Std Dev		0.283	0.260	0.195

TID Report

TMP9R01-SP

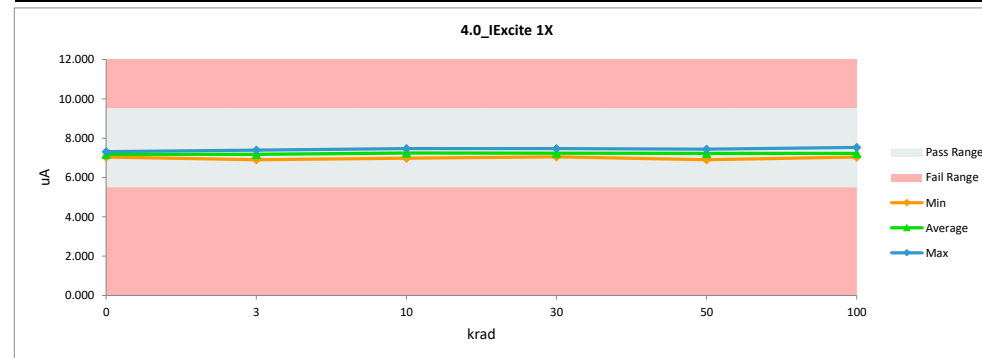
4.0_IExcite 1X		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	uA	uA
Max Limit	9.5	9.5
Min Limit	5.5	5.5

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	7.134	7.172	-0.038
3	2	6.881	6.900	-0.019
3	3	7.101	7.118	-0.017
3	4	7.190	7.234	-0.044
3	5	7.134	7.166	-0.032
3	6	7.086	7.127	-0.041
3	7	7.256	7.282	-0.026
3	8	7.267	7.315	-0.048
3	9	7.028	7.057	-0.029
3	10	7.372	7.394	-0.022
10	11	7.134	7.242	-0.108
10	12	6.881	6.979	-0.098
10	13	7.101	7.178	-0.077
10	14	7.190	7.289	-0.099
10	15	7.134	7.239	-0.105
10	16	7.086	7.191	-0.105
10	17	7.256	7.359	-0.103
10	18	7.267	7.375	-0.108
10	19	7.028	7.124	-0.096
10	20	7.372	7.464	-0.092
30	21	7.134	7.178	-0.044
30	22	6.881	7.341	-0.460
30	23	7.101	7.354	-0.253
30	24	7.190	7.116	0.074
30	25	7.134	7.464	-0.330
30	26	7.086	7.317	-0.231
30	27	7.256	7.148	0.108
30	28	7.267	7.166	0.101
30	29	7.028	7.048	-0.020
30	30	7.372	7.248	0.124
50	31	7.134	7.241	-0.107
50	32	6.881	6.905	-0.024
50	33	7.101	7.218	-0.117
50	34	7.190	7.241	-0.051
50	35	7.134	7.249	-0.115
50	36	7.086	7.170	-0.084
50	37	7.256	7.332	-0.076
50	38	7.267	7.363	-0.096
50	39	7.028	7.105	-0.077
50	40	7.372	7.434	-0.062
100	41	7.270	7.258	0.012
100	42	7.149	7.226	-0.077
100	43	7.322	7.160	0.162
100	44	7.077	7.528	-0.451
100	45	7.244	7.152	0.092
100	46	7.064	7.079	-0.015
100	47	7.195	7.218	-0.023
100	48	7.322	7.364	-0.042
100	49	6.964	7.040	-0.076



4.0_IExcite 1X		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	9.5	uA
Min Limit	5.5	uA

krad	0	3	10	30	50	100
LL	5.500	5.500	5.500	5.500	5.500	5.500
Min	7.040	6.900	6.979	7.048	6.905	7.040
Average	7.177	7.177	7.244	7.238	7.226	7.220
Max	7.312	7.394	7.464	7.464	7.434	7.528
UL	9.500	9.500	9.500	9.500	9.500	9.500



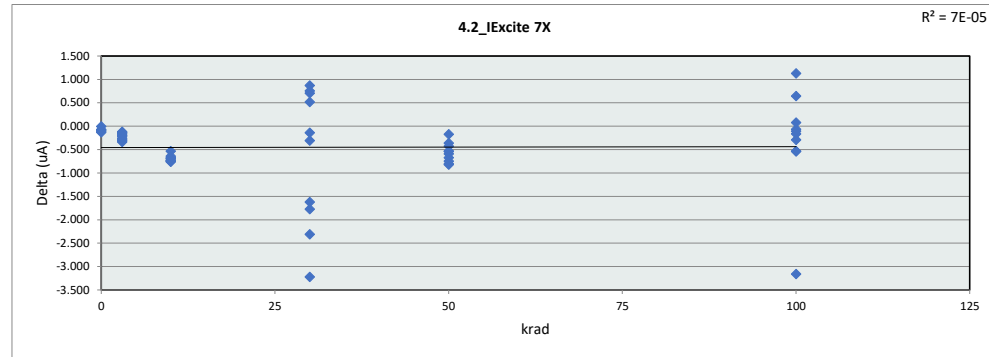
TID Report TMP9R01-SP

100	50	7.163	7.173	-0.010
0	51	7.293	7.312	-0.019
0	52	7.133	7.134	-0.001
0	53	7.145	7.160	-0.015
0	54	7.031	7.040	-0.009
0	55	7.228	7.240	-0.012
Max		7.372	7.528	0.162
Average		7.153	7.217	-0.064
Min		6.881	6.900	-0.460
Std Dev		0.126	0.133	0.113

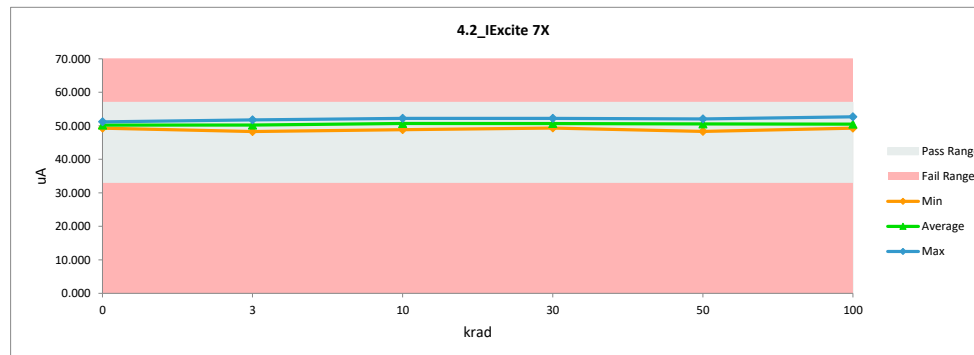
TID Report

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4.2_IExcite 7X				
Test Site	J2S	J2S		
Tester	FETS36405	FETS36406		
Test Number	EE131301	EE131301		
Unit	uA	uA		
Max Limit	57	57		
Min Limit	33	33		
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	49.938	50.203	-0.265
3	2	48.167	48.300	-0.133
3	3	49.709	49.826	-0.117
3	4	50.327	50.640	-0.313
3	5	49.937	50.163	-0.226
3	6	49.599	49.890	-0.291
3	7	50.789	50.972	-0.183
3	8	50.867	51.204	-0.337
3	9	49.198	49.397	-0.199
3	10	51.607	51.758	-0.151
10	11	49.938	50.696	-0.758
10	12	48.167	48.856	-0.689
10	13	49.709	50.243	-0.534
10	14	50.327	51.022	-0.695
10	15	49.937	50.673	-0.736
10	16	49.599	50.337	-0.738
10	17	50.789	51.514	-0.725
10	18	50.867	51.623	-0.756
10	19	49.198	49.867	-0.669
10	20	51.607	52.248	-0.641
30	21	49.938	50.246	-0.308
30	22	48.167	51.389	-3.222
30	23	49.709	51.481	-1.772
30	24	50.327	49.811	0.516
30	25	49.937	52.245	-2.308
30	26	49.599	51.220	-1.621
30	27	50.789	50.034	0.755
30	28	50.867	50.162	0.705
30	29	49.198	49.337	-0.139
30	30	51.607	50.738	0.869
50	31	49.938	50.686	-0.748
50	32	48.167	48.338	-0.171
50	33	49.709	50.527	-0.818
50	34	50.327	50.689	-0.362
50	35	49.937	50.742	-0.805
50	36	49.599	50.189	-0.590
50	37	50.789	51.327	-0.538
50	38	50.867	51.539	-0.672
50	39	49.198	49.732	-0.534
50	40	51.607	52.035	-0.428
100	41	50.887	50.807	0.080
100	42	50.043	50.582	-0.539
100	43	51.252	50.122	1.130
100	44	49.538	52.699	-3.161
100	45	50.707	50.061	0.646
100	46	49.447	49.553	-0.106
100	47	50.362	50.526	-0.164
100	48	51.255	51.547	-0.292
100	49	48.749	49.280	-0.531



4.2_IExcite 7X						
Test Site	J2S					
Tester	FETS36405					
Test Number	EE131301					
Max Limit	57	uA				
Min Limit	33	uA				
krad	0	3	10	30	50	100
LL	33.000	33.000	33.000	33.000	33.000	33.000
Min	49.282	48.300	48.856	49.337	48.338	49.280
Average	50.241	50.235	50.708	50.666	50.580	50.539
Max	51.184	51.758	52.248	52.245	52.035	52.699
UL	57.000	57.000	57.000	57.000	57.000	57.000



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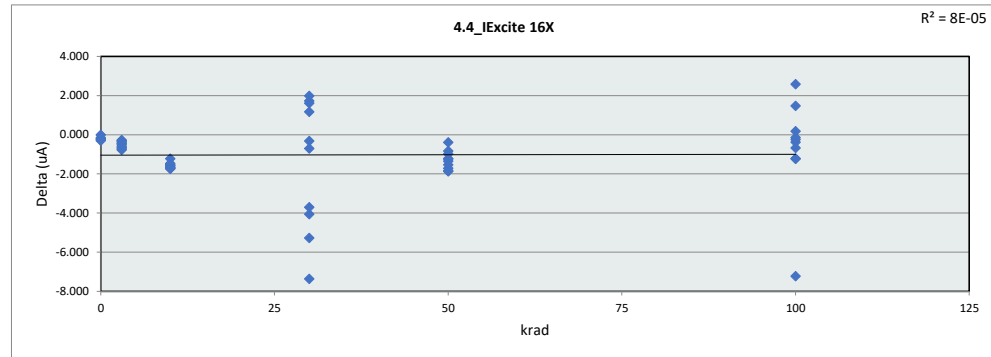
100	50	50.144	50.208	-0.064
0	51	51.053	51.184	-0.131
0	52	49.933	49.936	-0.003
0	53	50.013	50.120	-0.107
0	54	49.214	49.282	-0.068
0	55	50.595	50.682	-0.087
Max		51.607	52.699	1.130
Average		50.068	50.518	-0.450
Min		48.167	48.300	-3.222
Std Dev		0.880	0.931	0.793

TID Report

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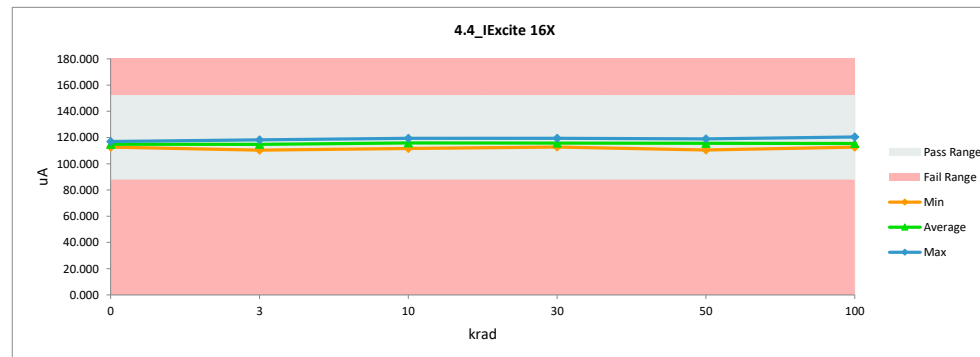
4.4_IExcite 16X		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	uA	uA
Max Limit	152	152
Min Limit	88	88

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	114.145	114.749	-0.604
3	2	110.096	110.400	-0.304
3	3	113.620	113.888	-0.268
3	4	115.032	115.748	-0.716
3	5	114.143	114.657	-0.514
3	6	113.368	114.034	-0.666
3	7	116.090	116.508	-0.418
3	8	116.268	117.038	-0.770
3	9	112.453	112.908	-0.455
3	10	117.959	118.304	-0.345
10	11	114.145	115.876	-1.731
10	12	110.096	111.670	-1.574
10	13	113.620	114.841	-1.221
10	14	115.032	116.622	-1.590
10	15	114.143	115.824	-1.681
10	16	113.368	115.055	-1.687
10	17	116.090	117.746	-1.656
10	18	116.268	117.996	-1.728
10	19	112.453	113.982	-1.529
10	20	117.959	119.424	-1.465
30	21	114.145	114.848	-0.703
30	22	110.096	117.459	-7.363
30	23	113.620	117.672	-4.052
30	24	115.032	113.855	1.177
30	25	114.143	119.418	-5.275
30	26	113.368	117.074	-3.706
30	27	116.090	114.363	1.727
30	28	116.268	114.657	1.611
30	29	112.453	112.771	-0.318
30	30	117.959	115.974	1.985
50	31	114.145	115.854	-1.709
50	32	110.096	110.487	-0.391
50	33	113.620	115.491	-1.871
50	34	115.032	115.861	-0.829
50	35	114.143	115.982	-1.839
50	36	113.368	114.717	-1.349
50	37	116.090	117.319	-1.229
50	38	116.268	117.803	-1.535
50	39	112.453	113.673	-1.220
50	40	117.959	118.938	-0.979
100	41	116.313	116.130	0.183
100	42	114.385	115.616	-1.231
100	43	117.148	114.565	2.583
100	44	113.230	120.455	-7.225
100	45	115.901	114.426	1.475
100	46	113.022	113.263	-0.241
100	47	115.113	115.488	-0.375
100	48	117.155	117.822	-0.667
100	49	111.427	112.639	-1.212



4.4_IExcite 16X		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	152	uA
Min Limit	88	uA

krad	0	3	10	30	50	100
LL	88.000	88.000	88.000	88.000	88.000	88.000
Min	112.644	110.400	111.670	112.771	110.487	112.639
Average	114.836	114.823	115.904	115.809	115.613	115.516
Max	116.991	118.304	119.424	119.418	118.938	120.455
UL	152.000	152.000	152.000	152.000	152.000	152.000



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100	50	114.615	114.760	-0.145
0	51	116.692	116.991	-0.299
0	52	114.132	114.139	-0.007
0	53	114.315	114.559	-0.244
0	54	112.489	112.644	-0.155
0	55	115.645	115.845	-0.200
Max		117.959	120.455	2.583
Average		114.441	115.470	-1.028
Min		110.096	110.400	-7.363
Std Dev		2.011	2.127	1.813

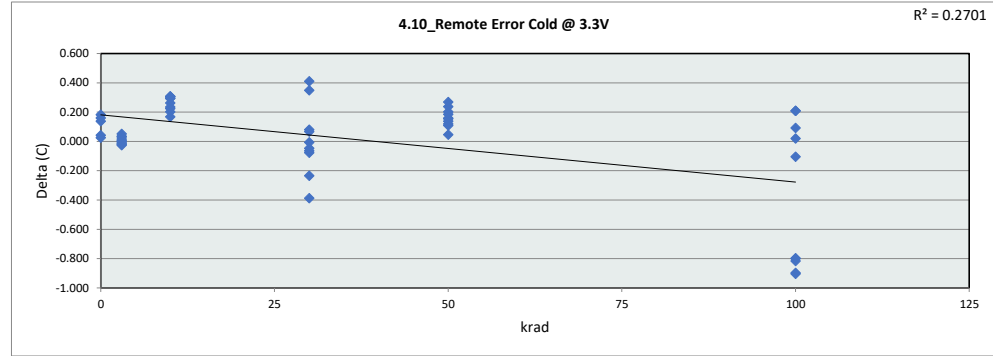
TID Report

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4.10_Remote Error Cold @ 3.3V

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

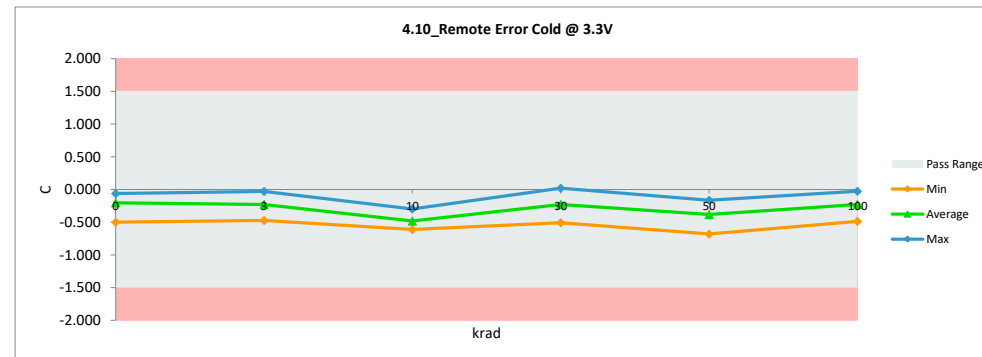
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	-0.074	-0.089	0.015
3	2	-0.116	-0.096	-0.020
3	3	-0.443	-0.473	0.030
3	4	-0.275	-0.326	0.051
3	5	-0.067	-0.061	-0.006
3	6	-0.340	-0.342	0.002
3	7	-0.045	-0.029	-0.016
3	8	-0.369	-0.404	0.035
3	9	-0.120	-0.123	0.003
3	10	-0.368	-0.342	-0.026
10	11	-0.074	-0.298	0.224
10	12	-0.116	-0.423	0.307
10	13	-0.443	-0.611	0.168
10	14	-0.275	-0.579	0.304
10	15	-0.067	-0.361	0.294
10	16	-0.340	-0.602	0.262
10	17	-0.045	-0.352	0.307
10	18	-0.369	-0.571	0.202
10	19	-0.120	-0.414	0.294
10	20	-0.368	-0.602	0.234
30	21	-0.074	-0.484	0.410
30	22	-0.116	-0.109	-0.007
30	23	-0.443	-0.509	0.066
30	24	-0.275	-0.228	-0.047
30	25	-0.067	-0.415	0.348
30	26	-0.340	-0.105	-0.235
30	27	-0.045	0.020	-0.065
30	28	-0.369	-0.449	0.080
30	29	-0.120	-0.042	-0.078
30	30	-0.368	0.020	-0.388
50	31	-0.074	-0.275	0.201
50	32	-0.116	-0.274	0.158
50	33	-0.443	-0.680	0.237
50	34	-0.275	-0.430	0.155
50	35	-0.067	-0.336	0.269
50	36	-0.340	-0.524	0.184
50	37	-0.045	-0.164	0.119
50	38	-0.369	-0.477	0.108
50	39	-0.120	-0.258	0.138
50	40	-0.368	-0.414	0.046
100	41	-1.306	-0.408	-0.898
100	42	-1.368	-0.464	-0.904
100	43	-0.931	-0.132	-0.799
100	44	-0.962	-0.162	-0.800
100	45	-1.306	-0.489	-0.817
100	46	0.088	-0.120	0.208
100	47	-0.131	-0.026	-0.105
100	48	-0.068	-0.276	0.208
100	49	-0.006	-0.026	0.020



4.10_Remote Error Cold @ 3.3V

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	1.5 C
Min Limit	-1.5 C

krad	0	3	10	30	50	100
LL	-1.500	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.499	-0.473	-0.611	-0.509	-0.680	-0.489
Average	-0.204	-0.229	-0.481	-0.230	-0.383	-0.229
Max	-0.061	-0.029	-0.298	0.020	-0.164	-0.026
UL	1.500	1.500	1.500	1.500	1.500	1.500



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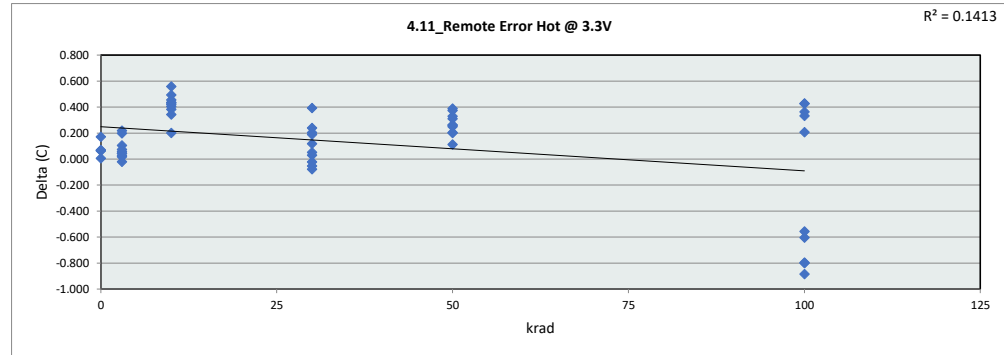
100	50	-0.099	-0.191	0.092
0	51	-0.129	-0.171	0.042
0	52	0.027	-0.133	0.160
0	53	-0.317	-0.499	0.182
0	54	-0.036	-0.061	0.025
0	55	-0.016	-0.154	0.138
Max		0.088	0.020	0.410
Average		-0.280	-0.301	0.020
Min		-1.368	-0.680	-0.904
Std Dev		0.325	0.191	0.312

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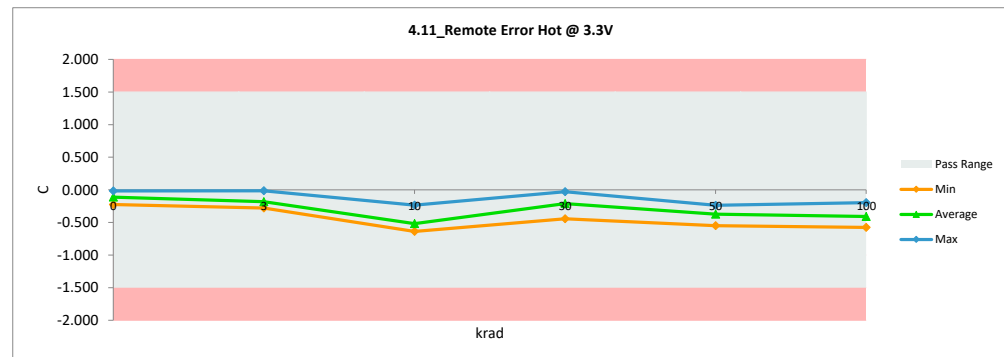
4.11_Remote Error Hot @ 3.3V		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	-0.175	-0.200	0.025
3	2	-0.052	-0.250	0.198
3	3	-0.035	-0.015	-0.020
3	4	-0.125	-0.170	0.045
3	5	-0.175	-0.280	0.105
3	6	-0.098	-0.155	0.057
3	7	-0.144	-0.187	0.043
3	8	0.000	-0.218	0.218
3	9	-0.113	-0.187	0.074
3	10	-0.138	-0.155	0.017
10	11	-0.175	-0.580	0.405
10	12	-0.052	-0.611	0.559
10	13	-0.035	-0.236	0.201
10	14	-0.125	-0.580	0.455
10	15	-0.175	-0.611	0.436
10	16	-0.098	-0.481	0.383
10	17	-0.144	-0.638	0.494
10	18	0.000	-0.419	0.419
10	19	-0.113	-0.544	0.431
10	20	-0.138	-0.481	0.343
30	21	-0.175	-0.226	0.051
30	22	-0.052	-0.445	0.393
30	23	-0.035	-0.239	0.204
30	24	-0.125	-0.364	0.239
30	25	-0.175	-0.364	0.189
30	26	-0.098	-0.216	0.118
30	27	-0.144	-0.091	-0.053
30	28	0.000	-0.029	0.029
30	29	-0.113	-0.091	-0.022
30	30	-0.138	-0.060	-0.078
50	31	-0.175	-0.504	0.329
50	32	-0.052	-0.362	0.310
50	33	-0.035	-0.424	0.389
50	34	-0.125	-0.237	0.112
50	35	-0.175	-0.549	0.374
50	36	-0.098	-0.299	0.201
50	37	-0.144	-0.405	0.261
50	38	0.000	-0.249	0.249
50	39	-0.113	-0.374	0.261
50	40	-0.138	-0.342	0.204
100	41	-1.182	-0.577	-0.605
100	42	-1.025	-0.469	-0.556
100	43	-1.244	-0.360	-0.884
100	44	-1.213	-0.413	-0.800
100	45	-0.994	-0.198	-0.796
100	46	0.014	-0.350	0.364
100	47	-0.174	-0.381	0.207
100	48	0.014	-0.413	0.427
100	49	-0.080	-0.413	0.333



4.11_Remote Error Hot @ 3.3V		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	1.5	C
Min Limit	-1.5	C

krad	0	3	10	30	50	100
LL	-1.500	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.225	-0.280	-0.638	-0.445	-0.549	-0.577
Average	-0.112	-0.182	-0.518	-0.213	-0.375	-0.408
Max	-0.018	-0.015	-0.236	-0.029	-0.237	-0.198
UL	1.500	1.500	1.500	1.500	1.500	1.500



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100	50	-0.080	-0.507	0.427
0	51	-0.159	-0.225	0.066
0	52	-0.066	-0.072	0.006
0	53	0.153	-0.018	0.171
0	54	-0.066	-0.136	0.070
0	55	-0.047	-0.110	0.063
Max		0.153	-0.015	0.559
Average		-0.189	-0.318	0.130
Min		-1.244	-0.638	-0.884
Std Dev		0.310	0.172	0.319

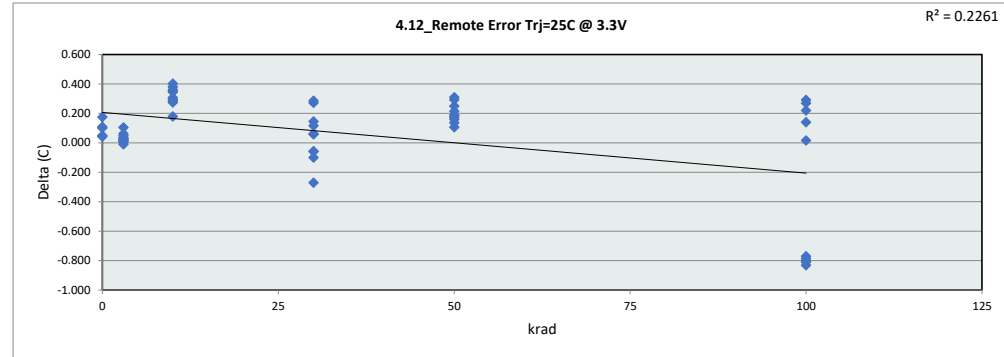
TID Report

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4.12_Remote Error Trj=25C @ 3.3V

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

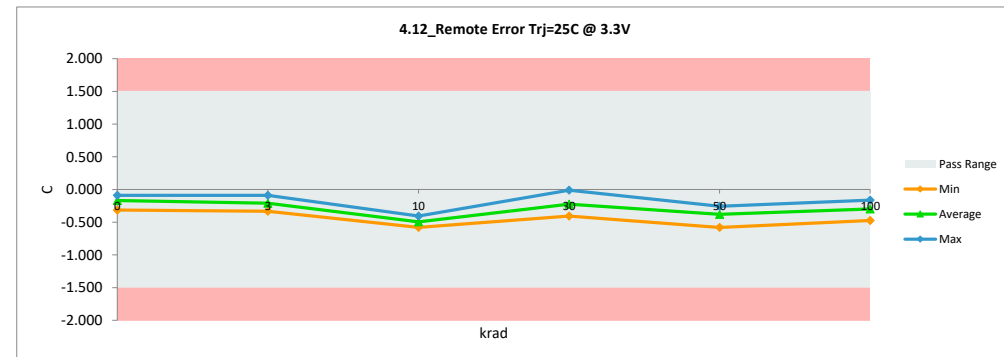
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	-0.113	-0.131	0.018
3	2	-0.092	-0.154	0.062
3	3	-0.288	-0.299	0.011
3	4	-0.218	-0.267	0.049
3	5	-0.108	-0.144	0.036
3	6	-0.248	-0.271	0.023
3	7	-0.082	-0.089	0.007
3	8	-0.229	-0.334	0.105
3	9	-0.117	-0.147	0.030
3	10	-0.281	-0.271	-0.010
10	11	-0.113	-0.406	0.293
10	12	-0.092	-0.495	0.403
10	13	-0.288	-0.467	0.179
10	14	-0.218	-0.579	0.361
10	15	-0.108	-0.457	0.349
10	16	-0.248	-0.556	0.308
10	17	-0.082	-0.462	0.380
10	18	-0.229	-0.512	0.283
10	19	-0.117	-0.464	0.347
10	20	-0.281	-0.556	0.275
30	21	-0.113	-0.385	0.272
30	22	-0.092	-0.238	0.146
30	23	-0.288	-0.405	0.117
30	24	-0.218	-0.280	0.062
30	25	-0.108	-0.395	0.287
30	26	-0.248	-0.148	-0.100
30	27	-0.082	-0.023	-0.059
30	28	-0.229	-0.287	0.058
30	29	-0.117	-0.061	-0.056
30	30	-0.281	-0.011	-0.270
50	31	-0.113	-0.363	0.250
50	32	-0.092	-0.307	0.215
50	33	-0.288	-0.581	0.293
50	34	-0.218	-0.355	0.137
50	35	-0.108	-0.418	0.310
50	36	-0.248	-0.437	0.189
50	37	-0.082	-0.257	0.175
50	38	-0.229	-0.389	0.160
50	39	-0.117	-0.303	0.186
50	40	-0.281	-0.387	0.106
100	41	-1.258	-0.473	-0.785
100	42	-1.236	-0.466	-0.770
100	43	-1.051	-0.220	-0.831
100	44	-1.058	-0.258	-0.800
100	45	-1.186	-0.377	-0.809
100	46	0.060	-0.209	0.269
100	47	-0.147	-0.163	0.016
100	48	-0.037	-0.329	0.292
100	49	-0.034	-0.175	0.141



4.12_Remote Error Trj=25C @ 3.3V

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	1.5 C
Min Limit	-1.5 C

krad	0	3	10	30	50	100
LL	-1.500	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.314	-0.334	-0.579	-0.405	-0.581	-0.473
Average	-0.169	-0.211	-0.495	-0.223	-0.380	-0.298
Max	-0.090	-0.089	-0.406	-0.011	-0.257	-0.163
UL	1.500	1.500	1.500	1.500	1.500	1.500



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100	50	-0.092	-0.312	0.220
0	51	-0.141	-0.192	0.051
0	52	-0.008	-0.110	0.102
0	53	-0.138	-0.314	0.176
0	54	-0.047	-0.090	0.043
0	55	-0.028	-0.137	0.109
Max		0.060	-0.011	0.403
Average		-0.246	-0.308	0.062
Min		-1.258	-0.581	-0.831
Std Dev		0.305	0.149	0.306

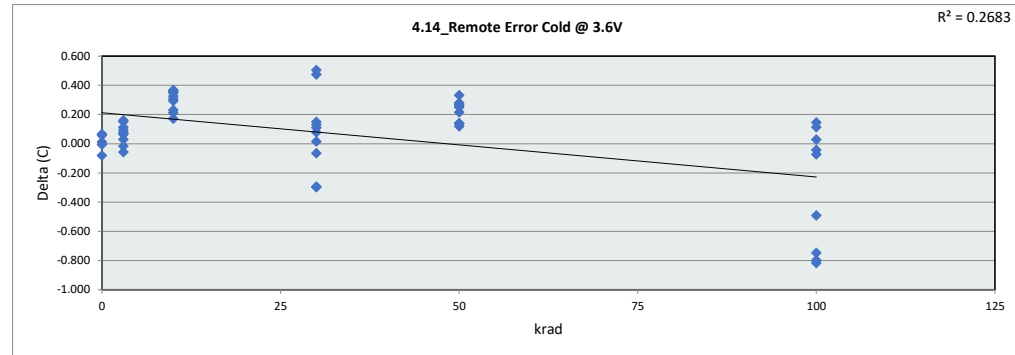
TID Report

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4.14_Remote Error Cold @ 3.6V

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

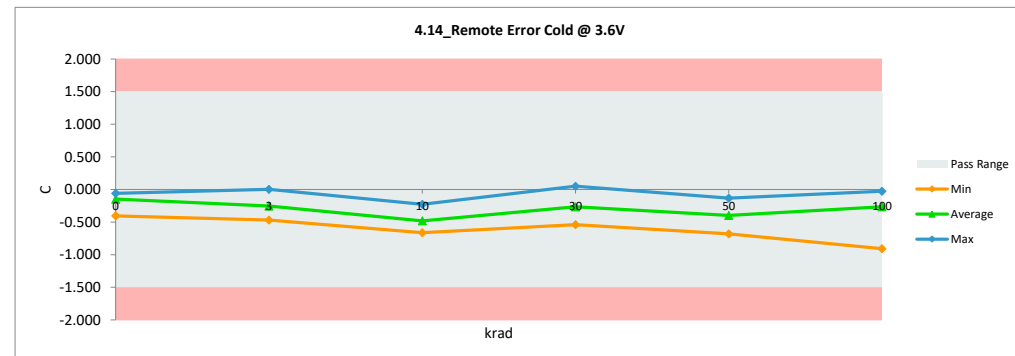
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	0.020	-0.058	0.078
3	2	-0.054	-0.127	0.073
3	3	-0.411	-0.441	0.030
3	4	-0.275	-0.388	0.113
3	5	-0.004	-0.154	0.150
3	6	-0.340	-0.404	0.064
3	7	-0.014	0.002	-0.016
3	8	-0.307	-0.467	0.160
3	9	-0.058	-0.154	0.096
3	10	-0.399	-0.342	-0.057
10	11	0.020	-0.329	0.349
10	12	-0.054	-0.361	0.307
10	13	-0.411	-0.642	0.231
10	14	-0.275	-0.642	0.367
10	15	-0.004	-0.361	0.357
10	16	-0.340	-0.633	0.293
10	17	-0.014	-0.227	0.213
10	18	-0.307	-0.664	0.357
10	19	-0.058	-0.383	0.325
10	20	-0.399	-0.571	0.172
30	21	0.020	-0.484	0.504
30	22	-0.054	-0.203	0.149
30	23	-0.411	-0.540	0.129
30	24	-0.275	-0.290	0.015
30	25	-0.004	-0.478	0.474
30	26	-0.340	-0.042	-0.298
30	27	-0.014	0.051	-0.065
30	28	-0.307	-0.417	0.110
30	29	-0.058	-0.136	0.078
30	30	-0.399	-0.105	-0.294
50	31	0.020	-0.244	0.264
50	32	-0.054	-0.305	0.251
50	33	-0.411	-0.680	0.269
50	34	-0.275	-0.555	0.280
50	35	-0.004	-0.336	0.332
50	36	-0.340	-0.555	0.215
50	37	-0.014	-0.133	0.119
50	38	-0.307	-0.446	0.139
50	39	-0.058	-0.196	0.138
50	40	-0.399	-0.539	0.140
100	41	-1.399	-0.908	-0.491
100	42	-1.306	-0.558	-0.748
100	43	-0.899	-0.101	-0.798
100	44	-0.993	-0.193	-0.800
100	45	-1.212	-0.395	-0.817
100	46	0.119	-0.026	0.145
100	47	-0.099	-0.026	-0.073
100	48	-0.162	-0.120	-0.042
100	49	-0.006	-0.120	0.114



4.14_Remote Error Cold @ 3.6V

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	1.5 C
Min Limit	-1.5 C

krad	0	3	10	30	50	100
LL	-1.500	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.405	-0.467	-0.664	-0.540	-0.680	-0.908
Average	-0.147	-0.253	-0.481	-0.264	-0.399	-0.264
Max	-0.060	0.002	-0.227	0.051	-0.133	-0.026
UL	1.500	1.500	1.500	1.500	1.500	1.500



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100	50	-0.162	-0.191	0.029
0	51	-0.129	-0.140	0.011
0	52	-0.004	-0.070	0.066
0	53	-0.411	-0.405	-0.006
0	54	-0.004	-0.061	0.057
0	55	-0.141	-0.060	-0.081
Max		0.119	0.051	0.504
Average		-0.258	-0.316	0.058
Min		-1.399	-0.908	-0.817
Std Dev		0.334	0.218	0.300

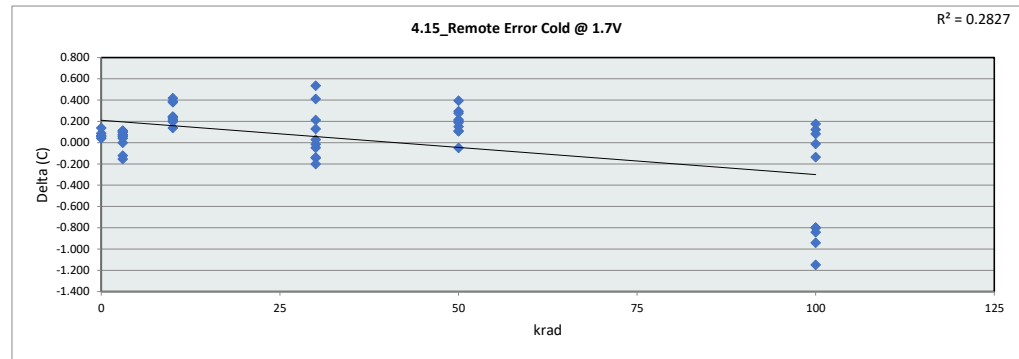
TID Report

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4.15_Remote Error Cold @ 1.7V

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

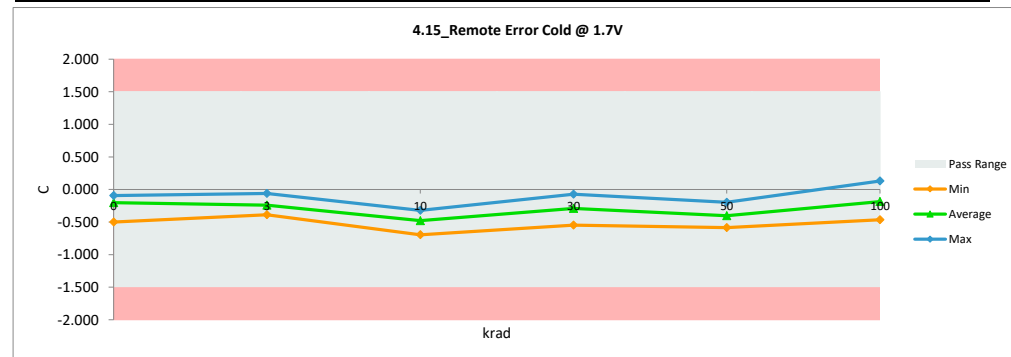
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	-0.012	-0.089	0.077
3	2	-0.116	-0.158	0.042
3	3	-0.380	-0.379	-0.001
3	4	-0.275	-0.388	0.113
3	5	-0.004	-0.061	0.057
3	6	-0.309	-0.373	0.064
3	7	-0.107	-0.217	0.110
3	8	-0.400	-0.279	-0.121
3	9	-0.245	-0.092	-0.153
3	10	-0.274	-0.373	0.099
10	11	-0.012	-0.392	0.380
10	12	-0.116	-0.361	0.245
10	13	-0.380	-0.579	0.199
10	14	-0.275	-0.517	0.242
10	15	-0.004	-0.423	0.419
10	16	-0.309	-0.696	0.387
10	17	-0.107	-0.321	0.214
10	18	-0.400	-0.602	0.202
10	19	-0.245	-0.383	0.138
10	20	-0.274	-0.508	0.234
30	21	-0.012	-0.547	0.535
30	22	-0.116	-0.328	0.212
30	23	-0.380	-0.509	0.129
30	24	-0.275	-0.228	-0.047
30	25	-0.004	-0.415	0.411
30	26	-0.309	-0.167	-0.142
30	27	-0.107	-0.136	0.029
30	28	-0.400	-0.386	-0.014
30	29	-0.245	-0.105	-0.140
30	30	-0.274	-0.074	-0.200
50	31	-0.012	-0.307	0.295
50	32	-0.116	-0.305	0.189
50	33	-0.380	-0.586	0.206
50	34	-0.275	-0.492	0.217
50	35	-0.004	-0.399	0.395
50	36	-0.309	-0.586	0.277
50	37	-0.107	-0.258	0.151
50	38	-0.400	-0.508	0.108
50	39	-0.245	-0.196	-0.049
50	40	-0.274	-0.383	0.109
100	41	-1.306	-0.158	-1.148
100	42	-1.306	-0.464	-0.842
100	43	-0.931	-0.132	-0.799
100	44	-1.056	-0.256	-0.800
100	45	-1.274	-0.333	-0.941
100	46	-0.006	-0.089	0.083
100	47	-0.006	0.130	-0.136
100	48	-0.162	-0.339	0.177
100	49	-0.037	-0.026	-0.011



4.15_Remote Error Cold @ 1.7V

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	1.5 C
Min Limit	-1.5 C

krad	0	3	10	30	50	100
LL	-1.500	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.499	-0.388	-0.696	-0.547	-0.586	-0.464
Average	-0.204	-0.241	-0.478	-0.290	-0.402	-0.186
Max	-0.093	-0.061	-0.321	-0.074	-0.196	0.130
UL	1.500	1.500	1.500	1.500	1.500	1.500



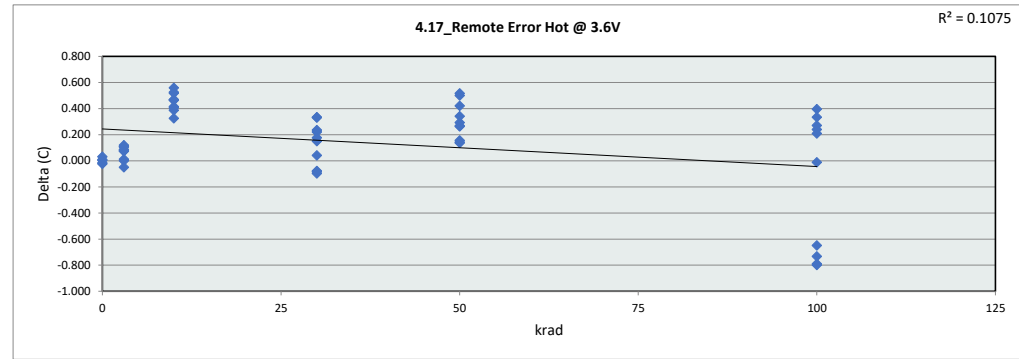
TID Report TMP9R01-SP

100	50	-0.068	-0.191	0.123
0	51	-0.098	-0.140	0.042
0	52	-0.067	-0.133	0.066
0	53	-0.411	-0.499	0.088
0	54	-0.036	-0.093	0.057
0	55	-0.016	-0.154	0.138
Max		-0.004	0.130	0.535
Average		-0.278	-0.309	0.031
Min		-1.306	-0.696	-1.148
Std Dev		0.320	0.179	0.339

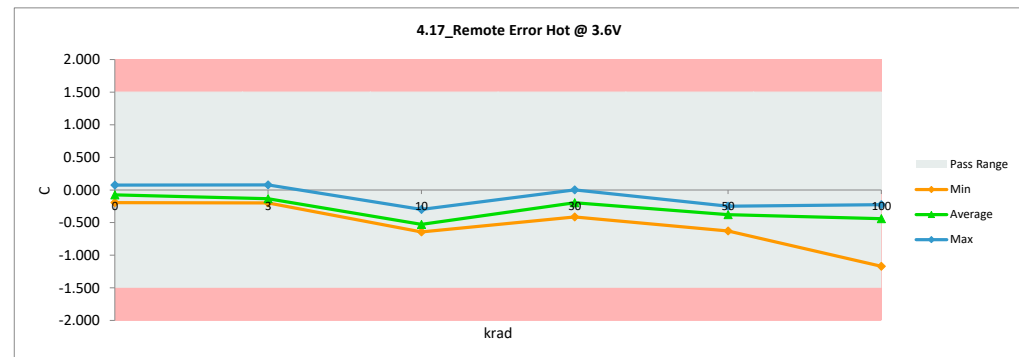
TID Report

TMP9R01-SP

4.17_Remote Error Hot @ 3.6V				
Test Site	J2S	J2S		
Tester	FETS36405	FETS36406		
Test Number	EE131301	EE131301		
Unit	C	C		
Max Limit	1.5	1.5		
Min Limit	-1.5	-1.5		
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	-0.113	-0.200	0.087
3	2	-0.083	-0.156	0.073
3	3	0.027	0.078	-0.051
3	4	-0.031	-0.139	0.108
3	5	-0.112	-0.187	0.075
3	6	-0.036	-0.155	0.119
3	7	-0.175	-0.187	0.012
3	8	-0.094	-0.093	-0.001
3	9	-0.019	-0.124	0.105
3	10	-0.107	-0.187	0.080
10	11	-0.113	-0.580	0.467
10	12	-0.083	-0.642	0.559
10	13	0.027	-0.298	0.325
10	14	-0.031	-0.548	0.517
10	15	-0.112	-0.517	0.405
10	16	-0.036	-0.450	0.414
10	17	-0.175	-0.638	0.463
10	18	-0.094	-0.481	0.387
10	19	-0.019	-0.544	0.525
10	20	-0.107	-0.575	0.468
30	21	-0.113	-0.289	0.176
30	22	-0.083	-0.414	0.331
30	23	0.027	-0.208	0.235
30	24	-0.031	-0.364	0.333
30	25	-0.112	-0.333	0.221
30	26	-0.036	-0.185	0.149
30	27	-0.175	-0.091	-0.084
30	28	-0.094	0.003	-0.097
30	29	-0.019	-0.060	0.041
30	30	-0.107	-0.029	-0.078
50	31	-0.113	-0.629	0.516
50	32	-0.083	-0.424	0.341
50	33	0.027	-0.393	0.420
50	34	-0.031	-0.299	0.268
50	35	-0.112	-0.612	0.500
50	36	-0.036	-0.299	0.263
50	37	-0.175	-0.311	0.136
50	38	-0.094	-0.249	0.155
50	39	-0.019	-0.311	0.292
50	40	-0.107	-0.249	0.142
100	41	-1.182	-1.170	-0.012
100	42	-1.088	-0.438	-0.650
100	43	-1.150	-0.360	-0.790
100	44	-1.088	-0.288	-0.800
100	45	-1.025	-0.292	-0.733
100	46	-0.017	-0.225	0.208
100	47	-0.205	-0.444	0.239
100	48	-0.017	-0.413	0.396
100	49	-0.080	-0.350	0.270



4.17_Remote Error Hot @ 3.6V						
Test Site	J2S					
Tester	FETS36405					
Test Number	EE131301					
Max Limit	1.5	C				
Min Limit	-1.5	C				
krad	0	3	10	30	50	100
LL	-1.500	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.194	-0.200	-0.642	-0.414	-0.629	-1.170
Average	-0.075	-0.135	-0.527	-0.197	-0.378	-0.439
Max	0.075	0.078	-0.298	0.003	-0.249	-0.225
UL	1.500	1.500	1.500	1.500	1.500	1.500



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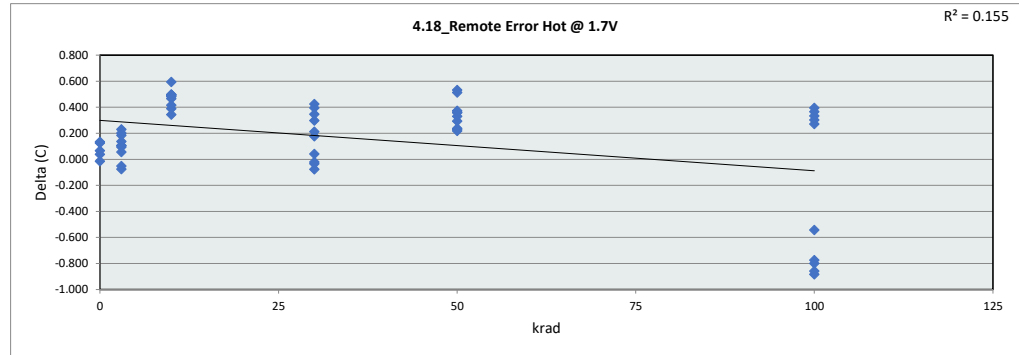
100	50	-0.080	-0.413	0.333
0	51	-0.191	-0.194	0.003
0	52	-0.128	-0.104	-0.024
0	53	0.059	0.075	-0.016
0	54	-0.034	-0.042	0.008
0	55	-0.079	-0.110	0.031
Max		0.059	0.078	0.559
Average		-0.169	-0.312	0.143
Min		-1.182	-1.170	-0.800
Std Dev		0.305	0.220	0.311

TID Report

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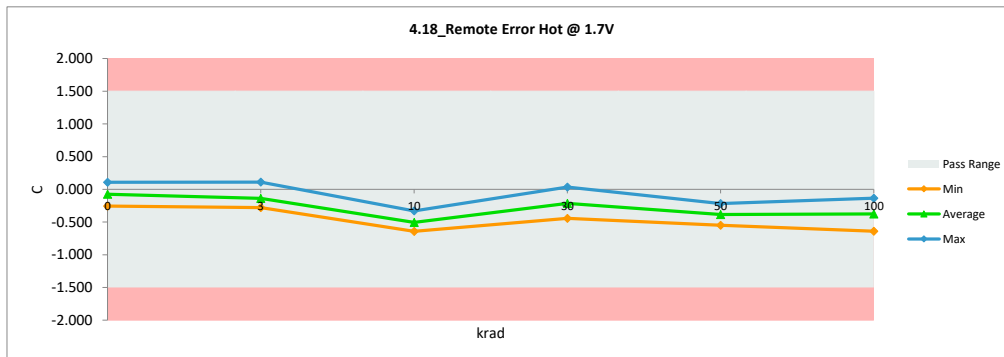
4.18_Remote Error Hot @ 1.7V		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	C	C
Max Limit	1.5	1.5
Min Limit	-1.5	-1.5

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	-0.144	-0.200	0.056
3	2	-0.021	-0.125	0.104
3	3	0.058	0.110	-0.052
3	4	0.000	-0.202	0.202
3	5	-0.018	-0.155	0.137
3	6	-0.004	-0.187	0.183
3	7	-0.050	-0.280	0.230
3	8	0.000	-0.093	0.093
3	9	-0.082	-0.187	0.105
3	10	-0.138	-0.062	-0.076
10	11	-0.144	-0.642	0.498
10	12	-0.021	-0.486	0.465
10	13	0.058	-0.330	0.388
10	14	0.000	-0.486	0.486
10	15	-0.018	-0.611	0.593
10	16	-0.004	-0.419	0.415
10	17	-0.050	-0.544	0.494
10	18	0.000	-0.481	0.481
10	19	-0.082	-0.575	0.493
10	20	-0.138	-0.481	0.343
30	21	-0.144	-0.320	0.176
30	22	-0.021	-0.445	0.424
30	23	0.058	-0.239	0.297
30	24	0.000	-0.395	0.395
30	25	-0.018	-0.364	0.346
30	26	-0.004	-0.216	0.212
30	27	-0.050	-0.091	0.041
30	28	0.000	0.034	-0.034
30	29	-0.082	-0.060	-0.022
30	30	-0.138	-0.060	-0.078
50	31	-0.144	-0.504	0.360
50	32	-0.021	-0.393	0.372
50	33	0.058	-0.455	0.513
50	34	0.000	-0.330	0.330
50	35	-0.018	-0.549	0.531
50	36	-0.004	-0.362	0.358
50	37	-0.050	-0.342	0.292
50	38	0.000	-0.217	0.217
50	39	-0.082	-0.311	0.229
50	40	-0.138	-0.374	0.236
100	41	-1.182	-0.639	-0.543
100	42	-1.088	-0.313	-0.775
100	43	-1.213	-0.329	-0.884
100	44	-1.213	-0.413	-0.800
100	45	-0.994	-0.136	-0.858
100	46	0.014	-0.256	0.270
100	47	-0.049	-0.350	0.301
100	48	-0.080	-0.475	0.395
100	49	-0.080	-0.413	0.333



4.18_Remote Error Hot @ 1.7V		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	1.5	C
Min Limit	-1.5	C

krad	0	3	10	30	50	100
LL	-1.500	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-0.256	-0.280	-0.642	-0.445	-0.549	-0.639
Average	-0.075	-0.138	-0.506	-0.216	-0.384	-0.377
Max	0.107	0.110	-0.330	0.034	-0.217	-0.136
UL	1.500	1.500	1.500	1.500	1.500	1.500



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100	50	-0.080	-0.445	0.365
0	51	-0.191	-0.256	0.065
0	52	-0.066	-0.104	0.038
0	53	0.091	0.107	-0.016
0	54	0.059	-0.074	0.133
0	55	0.078	-0.047	0.125
Max		0.091	0.110	0.593
Average		-0.138	-0.301	0.163
Min		-1.213	-0.642	-0.884
Std Dev		0.326	0.187	0.347

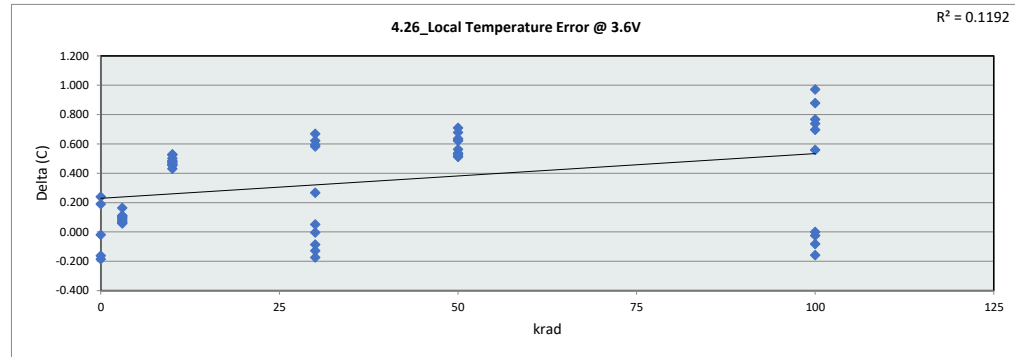
TID Report

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4.26_Local Temperature Error @

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	C	C
Max Limit	2	2
Min Limit	-2	-2

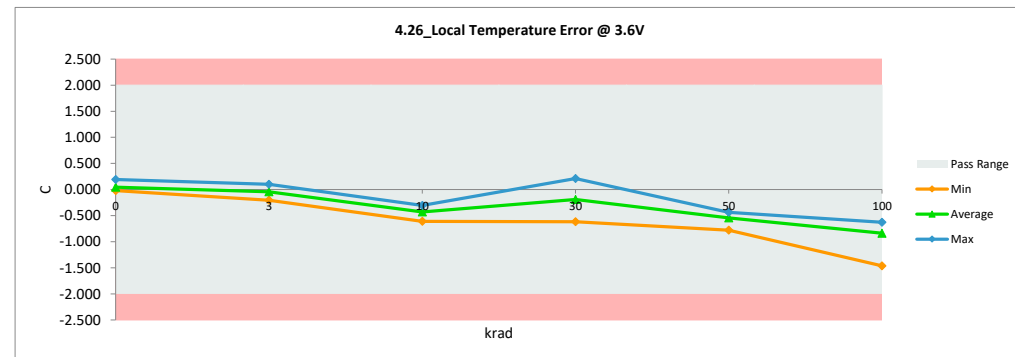
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	0.172	0.060	0.112
3	2	0.166	0.099	0.068
3	3	-0.101	-0.206	0.106
3	4	0.130	-0.034	0.164
3	5	0.005	-0.054	0.059
3	6	-0.050	-0.145	0.095
3	7	0.069	0.001	0.068
3	8	0.126	0.034	0.091
3	9	0.072	-0.007	0.079
3	10	-0.084	-0.193	0.110
10	11	0.172	-0.329	0.502
10	12	0.166	-0.320	0.486
10	13	-0.101	-0.557	0.456
10	14	0.130	-0.400	0.530
10	15	0.005	-0.473	0.478
10	16	-0.050	-0.505	0.455
10	17	0.069	-0.403	0.472
10	18	0.126	-0.306	0.432
10	19	0.072	-0.391	0.463
10	20	-0.084	-0.609	0.525
30	21	0.172	-0.498	0.670
30	22	0.166	-0.429	0.595
30	23	-0.101	-0.368	0.267
30	24	0.130	-0.453	0.583
30	25	0.005	-0.617	0.622
30	26	-0.050	0.078	-0.128
30	27	0.069	0.016	0.052
30	28	0.126	0.211	-0.085
30	29	0.072	0.075	-0.003
30	30	-0.084	0.090	-0.174
50	31	0.172	-0.454	0.626
50	32	0.166	-0.456	0.622
50	33	-0.101	-0.779	0.679
50	34	0.130	-0.579	0.709
50	35	0.005	-0.512	0.517
50	36	-0.050	-0.562	0.512
50	37	0.069	-0.469	0.537
50	38	0.126	-0.438	0.563
50	39	0.072	-0.457	0.529
50	40	-0.084	-0.720	0.636
100	41	-0.767	-1.463	0.696
100	42	-0.793	-0.769	-0.024
100	43	-0.709	-0.627	-0.082
100	44	-0.766	-0.766	0.000
100	45	-0.923	-0.765	-0.157
100	46	0.092	-0.675	0.767
100	47	-0.142	-0.701	0.559
100	48	0.025	-0.854	0.879
100	49	0.206	-0.766	0.972



4.26_Local Temperature Error

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	2 C
Min Limit	-2 C

krad	0	3	10	30	50	100
LL	-2.000	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-0.021	-0.206	-0.609	-0.617	-0.779	-1.463
Average	0.045	-0.045	-0.429	-0.189	-0.543	-0.837
Max	0.193	0.099	-0.306	0.211	-0.438	-0.627
UL	2.000	2.000	2.000	2.000	2.000	2.000



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100	50	-0.243	-0.981	0.739
0	51	0.250	0.009	0.241
0	52	-0.206	-0.021	-0.185
0	53	0.174	0.193	-0.019
0	54	0.233	0.043	0.190
0	55	-0.162	0.000	-0.162
Max		0.250	0.211	0.972
Average		-0.031	-0.367	0.336
Min		-0.923	-1.463	-0.185
Std Dev		0.270	0.347	0.312

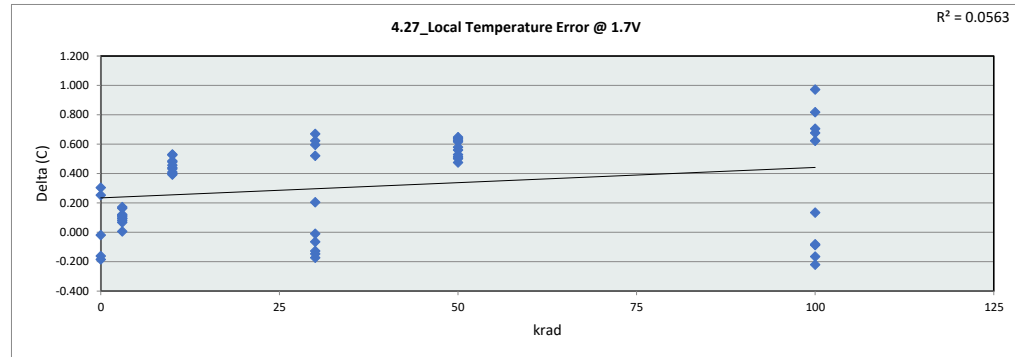
TID Report

TMP9R01-SP

4.27_Local Temperature Error @

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	C	C
Max Limit	2	2
Min Limit	-2	-2

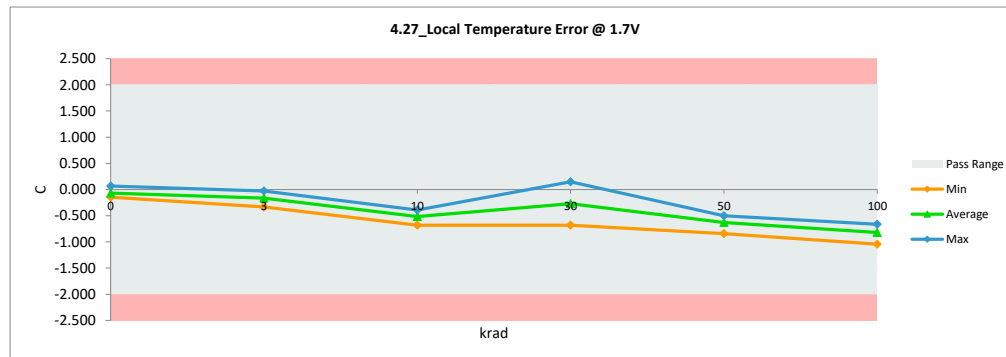
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	0.047	-0.065	0.112
3	2	0.041	-0.026	0.068
3	3	-0.226	-0.331	0.106
3	4	0.005	-0.159	0.164
3	5	-0.058	-0.179	0.121
3	6	-0.175	-0.270	0.095
3	7	-0.056	-0.062	0.005
3	8	0.001	-0.091	0.091
3	9	-0.053	-0.132	0.079
3	10	-0.146	-0.318	0.172
10	11	0.047	-0.392	0.439
10	12	0.041	-0.445	0.486
10	13	-0.226	-0.682	0.456
10	14	0.005	-0.525	0.530
10	15	-0.058	-0.536	0.478
10	16	-0.175	-0.567	0.392
10	17	-0.056	-0.465	0.409
10	18	0.001	-0.431	0.432
10	19	-0.053	-0.454	0.401
10	20	-0.146	-0.672	0.525
30	21	0.047	-0.623	0.670
30	22	0.041	-0.554	0.595
30	23	-0.226	-0.430	0.205
30	24	0.005	-0.515	0.520
30	25	-0.058	-0.679	0.622
30	26	-0.175	-0.047	-0.128
30	27	-0.056	-0.046	-0.010
30	28	0.001	0.148	-0.148
30	29	-0.053	0.013	-0.066
30	30	-0.146	0.028	-0.174
50	31	0.047	-0.579	0.626
50	32	0.041	-0.518	0.560
50	33	-0.226	-0.842	0.616
50	34	0.005	-0.642	0.647
50	35	-0.058	-0.637	0.579
50	36	-0.175	-0.687	0.512
50	37	-0.056	-0.531	0.475
50	38	0.001	-0.500	0.501
50	39	-0.053	-0.582	0.529
50	40	-0.146	-0.783	0.636
100	41	-0.829	-0.963	0.134
100	42	-0.856	-0.769	-0.087
100	43	-0.772	-0.690	-0.082
100	44	-0.829	-0.664	-0.165
100	45	-0.985	-0.765	-0.220
100	46	-0.033	-0.738	0.705
100	47	-0.205	-0.826	0.622
100	48	-0.100	-0.916	0.817
100	49	0.143	-0.829	0.972



4.27_Local Temperature Error

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	2 C
Min Limit	-2 C

krad	0	3	10	30	50	100
LL	-2.000	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-0.146	-0.331	-0.682	-0.680	-0.842	-1.044
Average	-0.068	-0.163	-0.517	-0.271	-0.630	-0.820
Max	0.068	-0.026	-0.392	0.148	-0.500	-0.664
UL	2.000	2.000	2.000	2.000	2.000	2.000



TID Report TMP9R01-SP

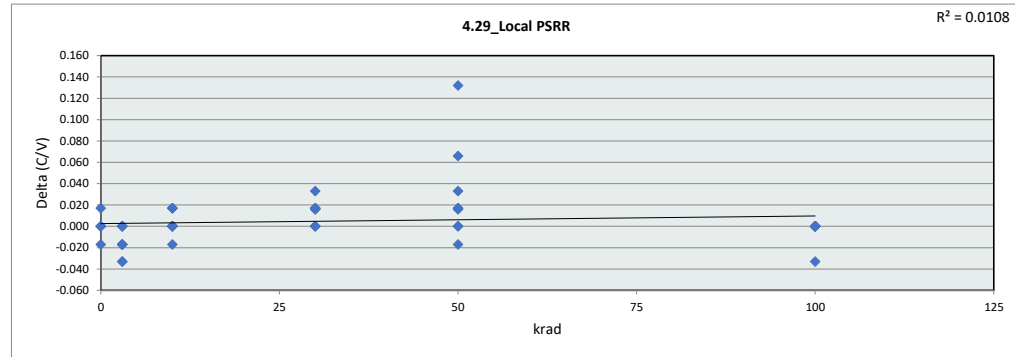
100	50	-0.368	-1.044	0.676
0	51	0.187	-0.116	0.303
0	52	-0.331	-0.146	-0.185
0	53	0.049	0.068	-0.019
0	54	0.170	-0.082	0.253
0	55	-0.225	-0.063	-0.162
Max		0.187	0.148	0.972
Average		-0.136	-0.443	0.307
Min		-0.985	-1.044	-0.220
Std Dev		0.257	0.304	0.309

TID Report

TMP9R01-SP

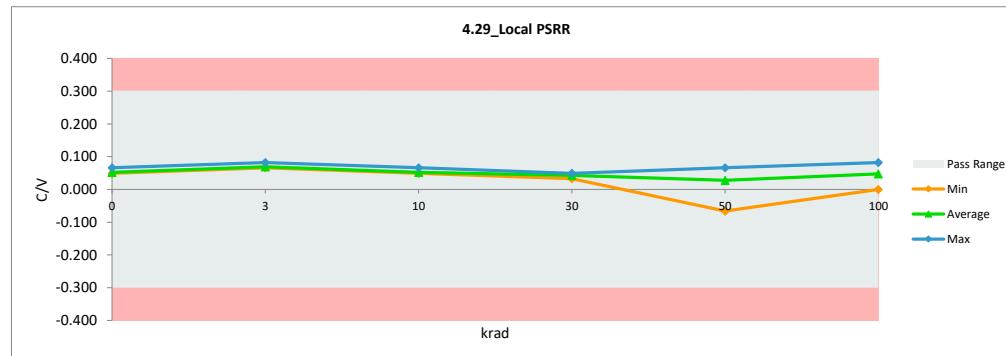
4.29_Local PSRR		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	C/V	C/V
Max Limit	0.3	0.3
Min Limit	-0.3	-0.3

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	0.066	0.066	0.000
3	2	0.066	0.066	0.000
3	3	0.049	0.066	-0.017
3	4	0.049	0.066	-0.017
3	5	0.049	0.066	-0.017
3	6	0.066	0.066	0.000
3	7	0.066	0.066	0.000
3	8	0.049	0.066	-0.017
3	9	0.049	0.082	-0.033
3	10	0.049	0.082	-0.033
10	11	0.066	0.049	0.017
10	12	0.066	0.066	0.000
10	13	0.049	0.049	0.000
10	14	0.049	0.066	-0.017
10	15	0.049	0.049	0.000
10	16	0.066	0.049	0.017
10	17	0.066	0.049	0.017
10	18	0.049	0.049	0.000
10	19	0.049	0.049	0.000
10	20	0.049	0.049	0.000
30	21	0.066	0.049	0.017
30	22	0.066	0.049	0.017
30	23	0.049	0.049	0.000
30	24	0.049	0.049	0.000
30	25	0.049	0.033	0.016
30	26	0.066	0.049	0.017
30	27	0.066	0.033	0.033
30	28	0.049	0.033	0.016
30	29	0.049	0.049	0.000
30	30	0.049	0.033	0.016
50	31	0.066	-0.066	0.132
50	32	0.066	0.000	0.066
50	33	0.049	0.033	0.016
50	34	0.049	0.016	0.033
50	35	0.049	0.033	0.016
50	36	0.066	0.049	0.017
50	37	0.066	0.049	0.017
50	38	0.049	0.049	0.000
50	39	0.049	0.066	-0.017
50	40	0.049	0.049	0.000
100	41	0.000	0.000	0.000
100	42	0.049	0.049	0.000
100	43	0.049	0.049	0.000
100	44	0.049	0.049	0.000
100	45	0.049	0.049	0.000
100	46	0.049	0.049	0.000
100	47	0.049	0.082	-0.033
100	48	0.049	0.049	0.000
100	49	0.049	0.049	0.000



4.29_Local PSRR		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	0.3	C/V
Min Limit	-0.3	C/V

krad	0	3	10	30	50	100
LL	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300
Min	0.049	0.066	0.049	0.033	-0.066	0.000
Average	0.052	0.069	0.052	0.043	0.028	0.048
Max	0.066	0.082	0.066	0.049	0.066	0.082
UL	0.300	0.300	0.300	0.300	0.300	0.300



TID Report TMP9R01-SP

100	50	0.049	0.049	0.000
0	51	0.049	0.066	-0.017
0	52	0.049	0.049	0.000
0	53	0.066	0.049	0.017
0	54	0.049	0.049	0.000
0	55	0.049	0.049	0.000
Max		0.066	0.082	0.132
Average		0.053	0.048	0.005
Min		0.000	-0.066	-0.033
Std Dev		0.011	0.023	0.024

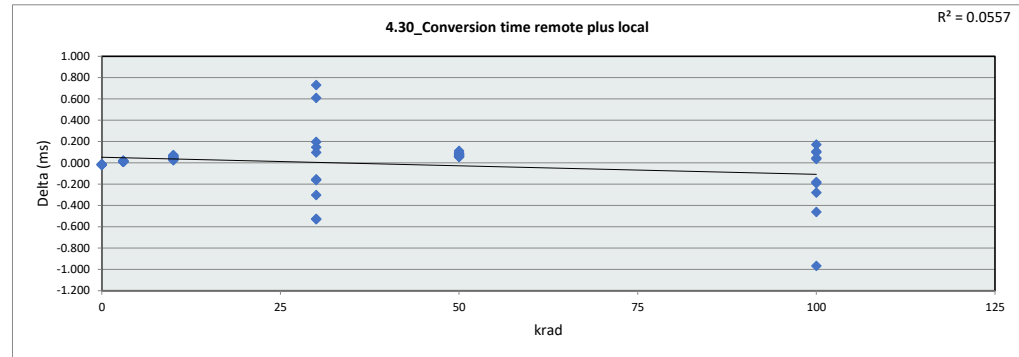
TID Report

TMP9R01-SP

4.30_Conversion time remote plus local

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	ms	ms
Max Limit	34	34
Min Limit	28	28

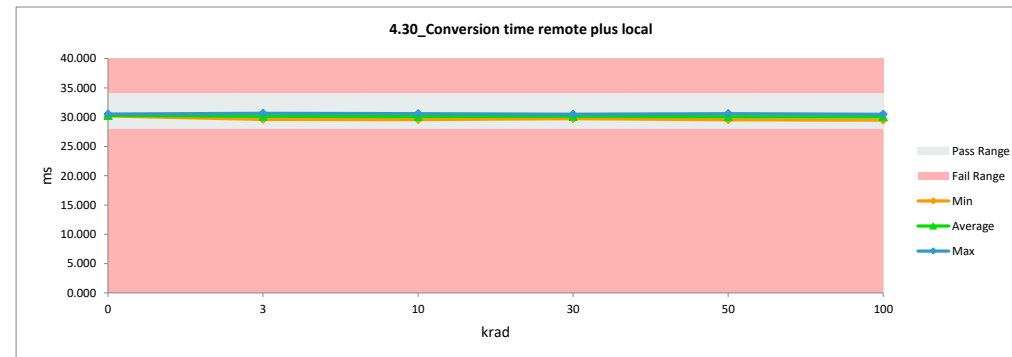
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	29.611	29.599	0.012
3	2	29.889	29.877	0.012
3	3	30.478	30.469	0.009
3	4	30.617	30.596	0.021
3	5	30.666	30.647	0.019
3	6	29.978	29.965	0.013
3	7	29.836	29.826	0.010
3	8	30.355	30.343	0.012
3	9	30.062	30.048	0.014
3	10	30.035	30.017	0.018
10	11	29.611	29.560	0.051
10	12	29.889	29.850	0.039
10	13	30.478	30.455	0.023
10	14	30.617	30.573	0.044
10	15	30.666	30.607	0.059
10	16	29.978	29.924	0.054
10	17	29.836	29.766	0.070
10	18	30.355	30.316	0.039
10	19	30.062	30.027	0.035
10	20	30.035	29.962	0.073
30	21	29.611	29.913	-0.302
30	22	29.889	29.743	0.146
30	23	30.478	30.282	0.196
30	24	30.617	30.008	0.609
30	25	30.666	29.935	0.731
30	26	29.978	30.508	-0.530
30	27	29.836	30.362	-0.526
30	28	30.355	30.258	0.097
30	29	30.062	30.223	-0.161
30	30	30.035	30.190	-0.155
50	31	29.611	29.543	0.068
50	32	29.889	29.801	0.088
50	33	30.478	30.386	0.092
50	34	30.617	30.534	0.083
50	35	30.666	30.605	0.061
50	36	29.978	29.900	0.078
50	37	29.836	29.765	0.071
50	38	30.355	30.295	0.060
50	39	30.062	30.007	0.055
50	40	30.035	29.922	0.113
100	41	30.220	30.401	-0.181
100	42	29.377	29.568	-0.191
100	43	29.936	30.214	-0.278
100	44	29.831	30.292	-0.461
100	45	29.377	30.345	-0.968
100	46	29.619	29.582	0.037
100	47	30.530	30.431	0.099
100	48	30.527	30.482	0.045
100	49	29.820	29.714	0.106



4.30_Conversion time remote plus local

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	34 ms
Min Limit	28 ms

krad	0	3	10	30	50	100
LL	28.000	28.000	28.000	28.000	28.000	28.000
Min	30.190	29.599	29.560	29.743	29.543	29.487
Average	30.308	30.139	30.104	30.142	30.076	30.052
Max	30.511	30.647	30.607	30.508	30.605	30.482
UL	34.000	34.000	34.000	34.000	34.000	34.000



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100	50	29.659	29.487	0.172
0	51	30.497	30.511	-0.014
0	52	30.345	30.362	-0.017
0	53	30.238	30.259	-0.021
0	54	30.204	30.218	-0.014
0	55	30.176	30.190	-0.014
Max		30.666	30.647	0.731
Average		30.118	30.121	-0.004
Min		29.377	29.487	-0.968
Std Dev		0.359	0.327	0.240

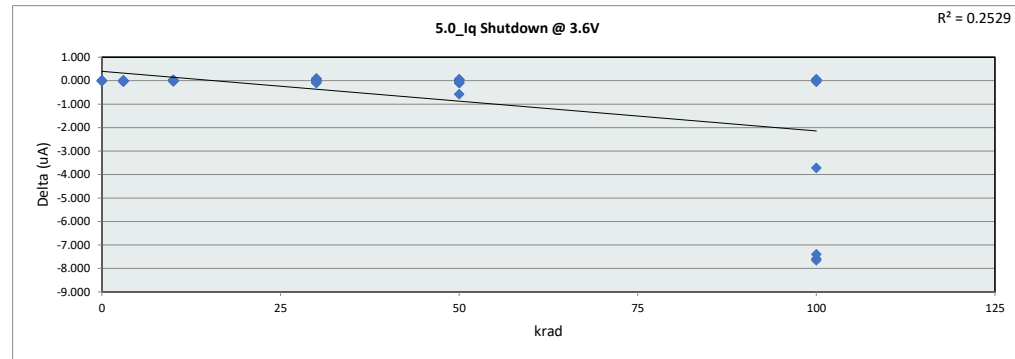
TID Report

TMP9R01-SP

5.0_Iq Shutdown @ 3.6V

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	uA	uA
Max Limit	25	25
Min Limit	0	0

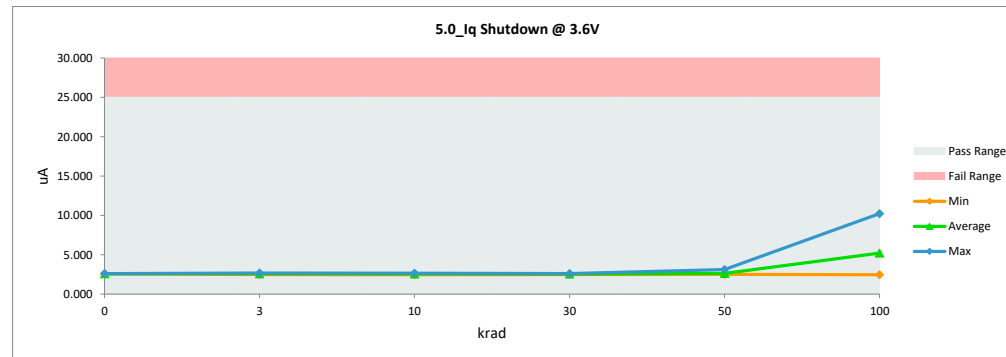
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	2.551	2.561	-0.010
3	2	2.473	2.501	-0.028
3	3	2.530	2.562	-0.032
3	4	2.504	2.492	0.012
3	5	2.518	2.532	-0.014
3	6	2.552	2.557	-0.005
3	7	2.639	2.674	-0.035
3	8	2.629	2.625	0.004
3	9	2.550	2.589	-0.039
3	10	2.622	2.632	-0.010
10	11	2.551	2.573	-0.022
10	12	2.473	2.461	0.012
10	13	2.530	2.546	-0.016
10	14	2.504	2.485	0.019
10	15	2.518	2.548	-0.030
10	16	2.552	2.543	0.009
10	17	2.639	2.652	-0.013
10	18	2.629	2.594	0.035
10	19	2.550	2.549	0.001
10	20	2.622	2.632	-0.010
30	21	2.551	2.480	0.071
30	22	2.473	2.579	-0.106
30	23	2.530	2.576	-0.046
30	24	2.504	2.494	0.010
30	25	2.518	2.557	-0.039
30	26	2.552	2.555	-0.003
30	27	2.639	2.573	0.066
30	28	2.629	2.534	0.095
30	29	2.550	2.605	-0.055
30	30	2.622	2.552	0.070
50	31	2.551	2.647	-0.096
50	32	2.473	2.569	-0.096
50	33	2.530	3.107	-0.577
50	34	2.504	2.609	-0.105
50	35	2.518	2.566	-0.048
50	36	2.552	2.511	0.041
50	37	2.639	2.619	0.020
50	38	2.629	2.613	0.016
50	39	2.550	2.497	0.053
50	40	2.622	2.576	0.046
100	41	2.603	6.322	-3.719
100	42	2.642	10.230	-7.588
100	43	2.489	2.539	-0.050
100	44	2.829	10.230	-7.401
100	45	2.574	10.230	-7.656
100	46	2.555	2.507	0.048
100	47	2.550	2.504	0.046
100	48	2.523	2.563	-0.040
100	49	2.535	2.505	0.030



5.0_Iq Shutdown @ 3.6V

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	25 uA
Min Limit	0 uA

krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	2.574	2.492	2.461	2.480	2.497	2.467
Average	2.585	2.573	2.558	2.551	2.631	5.210
Max	2.600	2.674	2.652	2.605	3.107	10.230
UL	25.000	25.000	25.000	25.000	25.000	25.000



TID Report TMP9R01-SP

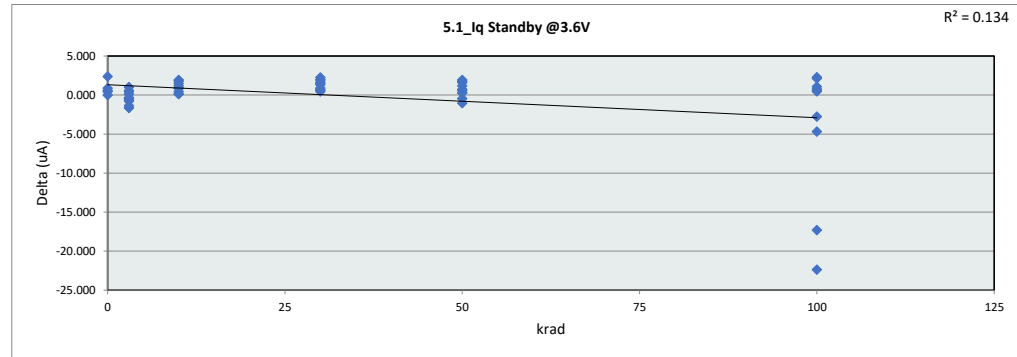
100	50	2.513	2.467	0.046
0	51	2.559	2.574	-0.015
0	52	2.598	2.600	-0.002
0	53	2.557	2.574	-0.017
0	54	2.607	2.597	0.010
0	55	2.572	2.582	-0.010
Max		2.829	10.230	0.095
Average		2.563	3.057	-0.494
Min		2.473	2.461	-7.656
Std Dev		0.062	1.813	1.784

TID Report

TMP9R01-SP

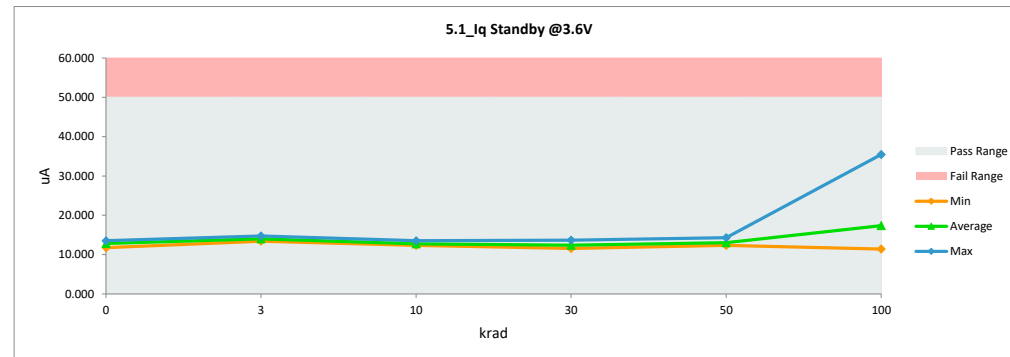
5.1_Iq Standby @3.6V		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	uA	uA
Max Limit	50	50
Min Limit	0	0

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	14.574	14.158	0.416
3	2	13.534	14.307	-0.773
3	3	13.683	13.565	0.118
3	4	12.495	14.158	-1.663
3	5	14.425	13.416	1.009
3	6	14.277	14.752	-0.475
3	7	13.980	14.307	-0.327
3	8	14.277	13.713	0.564
3	9	13.386	13.861	-0.475
3	10	12.643	14.010	-1.367
10	11	14.574	13.102	1.472
10	12	13.534	12.657	0.877
10	13	13.683	12.805	0.878
10	14	12.495	12.360	0.135
10	15	14.425	12.657	1.768
10	16	14.277	13.102	1.175
10	17	13.980	13.547	0.433
10	18	14.277	12.360	1.917
10	19	13.386	12.508	0.878
10	20	12.643	12.508	0.135
30	21	14.574	13.231	1.343
30	22	13.534	11.595	1.939
30	23	13.683	12.190	1.493
30	24	12.495	11.893	0.602
30	25	14.425	13.678	0.747
30	26	14.277	12.041	2.236
30	27	13.980	12.339	1.641
30	28	14.277	12.339	1.938
30	29	13.386	12.488	0.898
30	30	12.643	12.190	0.453
50	31	14.574	14.289	0.285
50	32	13.534	13.251	0.283
50	33	13.683	12.954	0.729
50	34	12.495	13.548	-1.053
50	35	14.425	13.251	1.174
50	36	14.277	12.509	1.768
50	37	13.980	12.361	1.619
50	38	14.277	12.361	1.916
50	39	13.386	12.806	0.580
50	40	12.643	13.103	-0.460
100	41	13.551	16.317	-2.766
100	42	13.106	35.469	-22.363
100	43	12.364	11.863	0.501
100	44	12.068	16.762	-4.694
100	45	13.848	31.164	-17.316
100	46	13.386	12.902	0.484
100	47	13.386	12.605	0.781
100	48	13.683	11.417	2.266
100	49	14.425	12.308	2.117



5.1_Iq Standby @3.6V		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	50	uA
Min Limit	0	uA

krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	11.767	13.416	12.360	11.595	12.361	11.417
Average	12.835	14.025	12.761	12.398	13.043	17.371
Max	13.547	14.752	13.547	13.678	14.289	35.469
UL	50.000	50.000	50.000	50.000	50.000	50.000



TID Report TMP9R01-SP

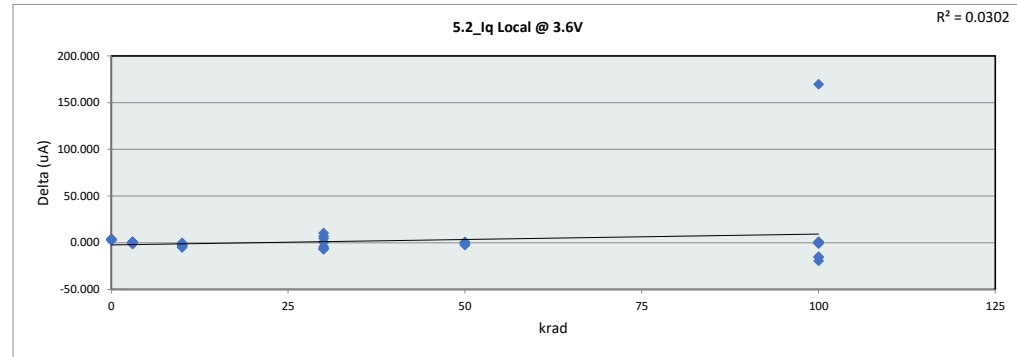
100	50	13.980	12.902	1.078
0	51	14.128	11.767	2.361
0	52	13.386	12.509	0.877
0	53	13.980	13.547	0.433
0	54	13.386	12.805	0.581
0	55	13.534	13.547	-0.013
Max		14.574	35.469	2.361
Average		13.660	13.821	-0.161
Min		12.068	11.417	-22.363
Std Dev		0.680	3.976	4.086

TID Report

TMP9R01-SP

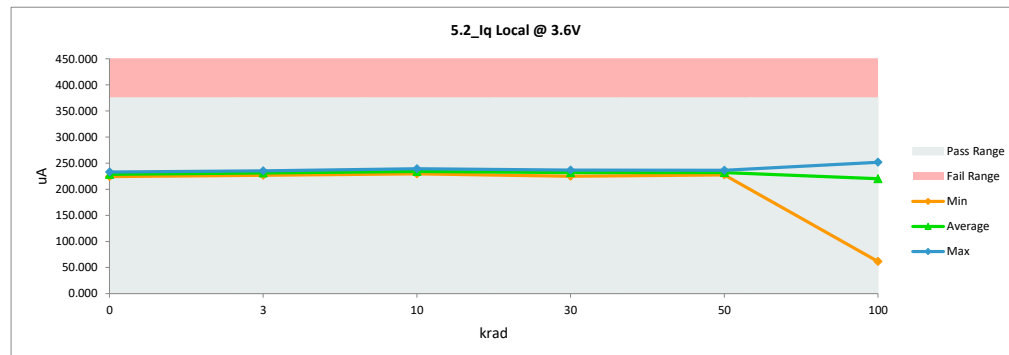
5.2_Iq Local @ 3.6V		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	uA	uA
Max Limit	375	375
Min Limit	0	0

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	227.215	226.762	0.453
3	2	228.194	228.106	0.088
3	3	229.417	228.534	0.883
3	4	229.906	230.733	-0.827
3	5	230.945	230.367	0.578
3	6	233.147	233.789	-0.642
3	7	235.409	234.827	0.582
3	8	233.881	235.194	-1.313
3	9	228.377	227.800	0.577
3	10	235.470	234.461	1.009
10	11	227.215	232.289	-5.074
10	12	228.194	231.007	-2.813
10	13	229.417	229.479	-0.062
10	14	229.906	232.961	-3.055
10	15	230.945	233.878	-2.933
10	16	233.147	236.993	-3.846
10	17	235.409	236.688	-1.279
10	18	233.881	237.054	-3.173
10	19	228.377	230.946	-2.569
10	20	235.470	239.253	-3.783
30	21	227.215	233.665	-6.450
30	22	228.194	234.829	-6.635
30	23	229.417	236.177	-6.760
30	24	229.906	229.255	0.651
30	25	230.945	236.606	-5.661
30	26	233.147	226.009	7.138
30	27	235.409	234.523	0.886
30	28	233.881	229.010	4.871
30	29	228.377	232.563	-4.186
30	30	235.470	224.968	10.502
50	31	227.215	229.236	-2.021
50	32	228.194	229.480	-1.286
50	33	229.417	231.679	-2.262
50	34	229.906	230.213	-0.307
50	35	230.945	232.351	-1.406
50	36	233.147	234.123	-0.976
50	37	235.409	234.734	0.675
50	38	233.881	234.551	-0.670
50	39	228.377	227.648	0.729
50	40	235.470	236.261	-0.791
100	41	231.311	250.652	-19.341
100	42	236.138	251.630	-15.492
100	43	231.556	232.189	-0.633
100	44	231.311	61.504	169.807
100	45	233.694	248.451	-14.757
100	46	232.535	231.334	1.201
100	47	231.190	230.417	0.773
100	48	231.924	232.189	-0.265
100	49	229.417	229.072	0.345



5.2_Iq Local @ 3.6V		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	375	uA
Min Limit	0	uA

krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	224.165	226.762	229.479	224.968	227.648	61.504
Average	228.686	231.057	234.055	231.761	232.028	220.146
Max	232.962	235.194	239.253	236.606	236.261	251.630
UL	375.000	375.000	375.000	375.000	375.000	375.000



TID Report TMP9R01-SP

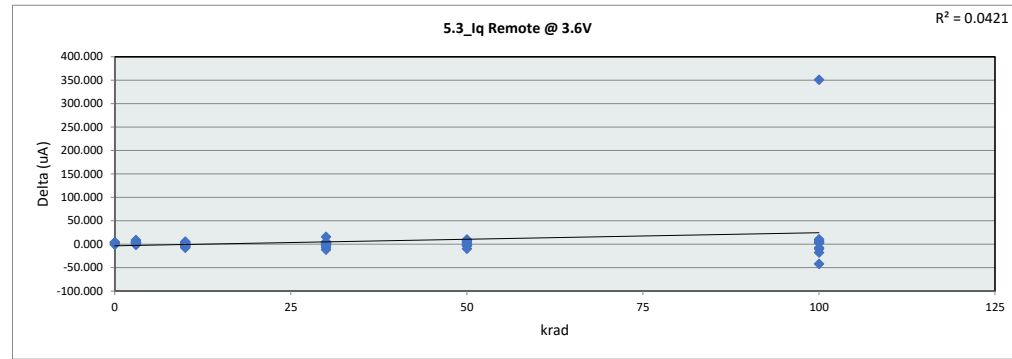
100	50	233.269	234.023	-0.754
0	51	230.823	226.853	3.970
0	52	236.571	232.962	3.609
0	53	230.395	227.647	2.748
0	54	235.776	231.801	3.975
0	55	227.032	224.165	2.867
Max		236.571	251.630	169.807
Average		231.469	229.707	1.762
Min		227.032	61.504	-19.341
Std Dev		2.866	23.719	23.589

TID Report

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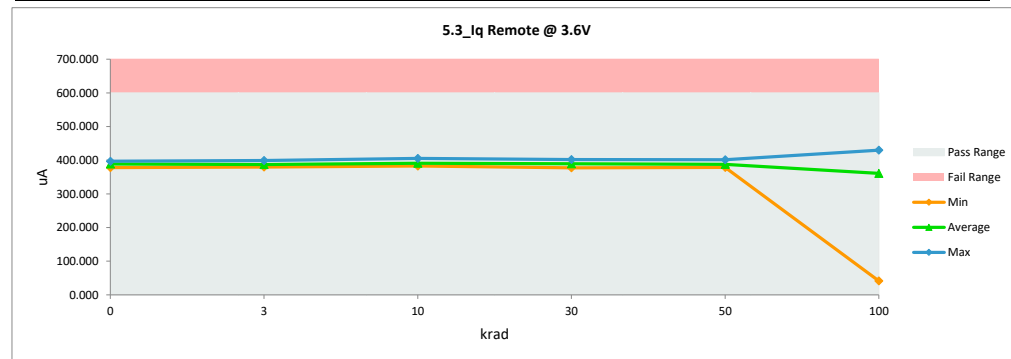
5.3_Iq Remote @ 3.6V		
Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	uA	uA
Max Limit	600	600
Min Limit	0	0

krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	388.221	382.635	5.586
3	2	385.836	386.607	-0.771
3	3	389.994	386.118	3.876
3	4	384.919	384.285	0.634
3	5	390.422	387.340	3.082
3	6	380.516	379.763	0.753
3	7	399.778	394.000	5.778
3	8	398.005	399.316	-1.311
3	9	388.832	380.008	8.824
3	10	392.990	390.456	2.534
10	11	388.221	382.807	5.414
10	12	385.836	390.321	-4.485
10	13	389.994	388.671	1.323
10	14	384.919	390.565	-5.646
10	15	390.422	392.459	-2.037
10	16	380.516	384.212	-3.696
10	17	399.778	396.796	2.982
10	18	398.005	405.592	-7.587
10	19	388.832	384.884	3.948
10	20	392.990	392.764	0.226
30	21	388.221	387.467	0.754
30	22	385.836	388.998	-3.162
30	23	389.994	401.739	-11.745
30	24	384.919	381.709	3.210
30	25	390.422	390.040	0.382
30	26	380.516	387.773	-7.257
30	27	399.778	397.145	2.633
30	28	398.005	392.367	5.638
30	29	388.832	391.203	-2.371
30	30	392.990	377.422	15.568
50	31	388.221	378.532	9.689
50	32	385.836	378.776	7.060
50	33	389.994	389.527	0.467
50	34	384.919	387.695	-2.776
50	35	390.422	391.727	-1.305
50	36	380.516	390.077	-9.561
50	37	399.778	390.322	9.456
50	38	398.005	401.623	-3.618
50	39	388.832	381.586	7.246
50	40	392.990	389.039	3.951
100	41	387.714	429.774	-42.060
100	42	398.040	405.810	-7.770
100	43	379.589	389.854	-10.265
100	44	392.358	41.452	350.906
100	45	391.991	409.844	-17.853
100	46	388.649	385.391	3.258
100	47	394.519	387.592	6.927
100	48	392.073	388.937	3.136
100	49	389.321	378.850	10.471



5.3_Iq Remote @ 3.6V		
Test Site	J2S	
Tester	FETS36405	
Test Number	EE131301	
Max Limit	600	uA
Min Limit	0	uA

krad	0	3	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	377.798	379.763	382.807	377.422	378.532	41.452
Average	388.830	387.053	390.907	389.586	387.890	360.889
Max	397.041	399.316	405.592	401.739	401.623	429.774
UL	600.000	600.000	600.000	600.000	600.000	600.000



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100	50	396.109	391.382	4.727
0	51	391.339	387.633	3.706
0	52	401.307	397.041	4.266
0	53	389.444	390.443	-0.999
0	54	391.890	391.237	0.653
0	55	380.516	377.798	2.718
Max		401.307	429.774	350.906
Average		390.235	383.771	6.464
Min		379.589	41.452	-42.060
Std Dev		5.608	47.860	48.036

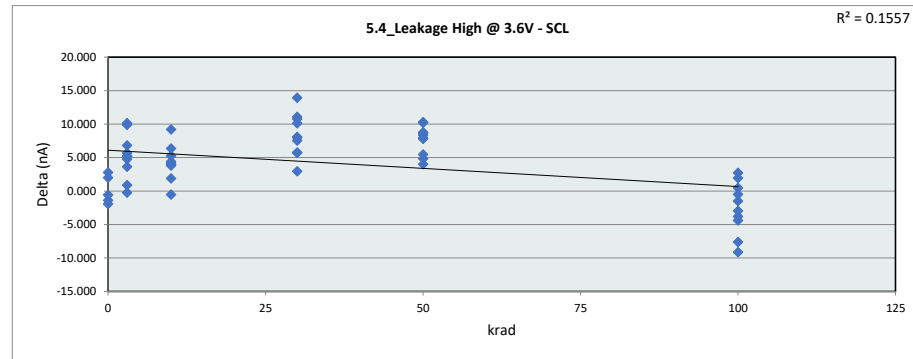
TID Report

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5.4_Leakage High @ 3.6V - SCL

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	nA	nA
Max Limit	150	150
Min Limit	-150	-150

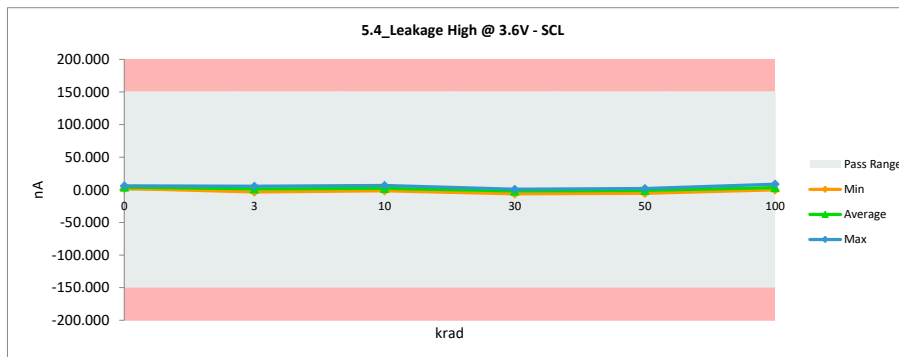
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	5.073	-0.605	5.678
3	2	9.063	5.441	3.622
3	3	7.772	0.952	6.820
3	4	6.643	-3.239	9.882
3	5	3.547	3.780	-0.233
3	6	8.652	3.915	4.737
3	7	5.630	4.753	0.877
3	8	7.464	-2.670	10.134
3	9	6.217	1.041	5.176
3	10	6.496	1.251	5.245
10	11	5.073	1.122	3.951
10	12	9.063	4.664	4.399
10	13	7.772	-1.415	9.187
10	14	6.643	1.384	5.259
10	15	3.547	4.066	-0.519
10	16	8.652	6.778	1.874
10	17	5.630	1.836	3.794
10	18	7.464	3.425	4.039
10	19	6.217	-0.132	6.349
10	20	6.496	2.317	4.179
30	21	5.073	-6.027	11.100
30	22	9.063	0.995	8.068
30	23	7.772	-6.160	13.932
30	24	6.643	-1.341	7.984
30	25	3.547	0.611	2.936
30	26	8.652	-2.124	10.776
30	27	5.630	-1.917	7.547
30	28	7.464	-2.656	10.120
30	29	6.217	0.492	5.725
30	30	6.496	0.773	5.723
50	31	5.073	1.061	4.012
50	32	9.063	1.120	7.943
50	33	7.772	-0.586	8.358
50	34	6.643	1.805	4.838
50	35	3.547	-5.221	8.768
50	36	8.652	0.872	7.780
50	37	5.630	-3.020	8.650
50	38	7.464	2.009	5.455
50	39	6.217	-4.070	10.287
50	40	6.496	-3.705	10.201
100	41	0.040	1.538	-1.498
100	42	-2.529	6.600	-9.129
100	43	-2.131	0.829	-2.960
100	44	0.306	-0.180	0.486
100	45	-2.116	5.496	-7.612
100	46	5.029	2.311	2.718
100	47	4.281	8.665	-4.384
100	48	3.137	1.192	1.945
100	49	2.961	3.446	-0.485



5.4_Leakage High @ 3.6V - SCL

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	150 nA
Min Limit	-150 nA

krad	0	3	10	30	50	100
LL	-150.000	-150.000	-150.000	-150.000	-150.000	-150.000
Min	2.129	-3.239	-1.415	-6.160	-5.221	-0.180
Average	4.263	1.462	2.405	-1.735	-0.974	3.568
Max	6.210	5.441	6.778	0.995	2.009	8.665
UL	150.000	150.000	150.000	150.000	150.000	150.000



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100	50	1.978	5.780	-3.802
0	51	2.491	3.878	-1.387
0	52	5.763	2.989	2.774
0	53	4.120	2.129	1.991
0	54	5.528	6.108	-0.580
0	55	4.281	6.210	-1.929
Max		9.063	8.665	13.932
Average		5.443	1.247	4.196
Min		-2.529	-6.160	-9.129
Std Dev		2.821	3.353	4.861

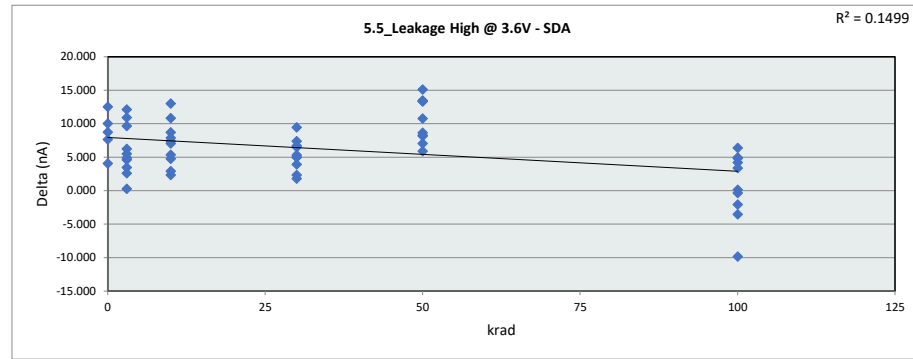
TID Report

TMP9R01-SP

5.5_Leakage High @ 3.6V - SDA

Test Site	J2S	J2S
Tester	FETS36405	FETS36406
Test Number	EE131301	EE131301
Unit	nA	nA
Max Limit	150	150
Min Limit	-150	-150

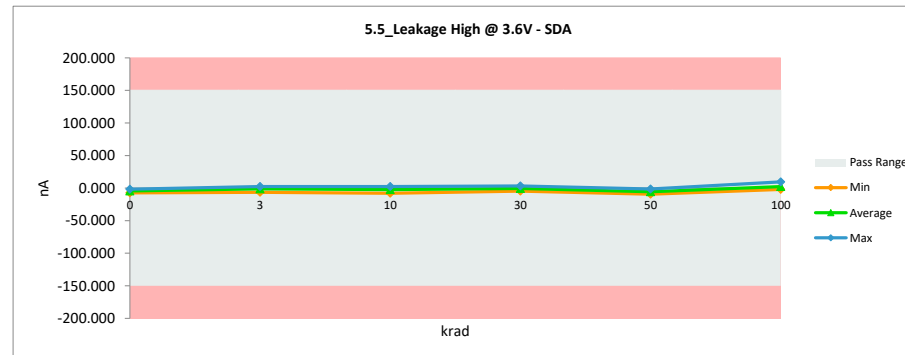
krad	Serial #	LDR pre (all)	LDR post 100k	Delta
3	1	3.771	-5.905	9.676
3	2	4.842	0.227	4.615
3	3	5.223	-0.297	5.520
3	4	4.578	-6.354	10.932
3	5	1.952	1.677	0.275
3	6	4.871	-0.043	4.914
3	7	5.223	1.737	3.486
3	8	6.587	-5.546	12.133
3	9	5.164	2.545	2.619
3	10	5.766	-0.476	6.242
10	11	3.771	-4.946	8.717
10	12	4.842	2.480	2.362
10	13	5.223	-5.608	10.831
10	14	4.578	-3.299	7.877
10	15	1.952	-3.417	5.369
10	16	4.871	1.950	2.921
10	17	5.223	-2.181	7.404
10	18	6.587	-0.461	7.048
10	19	5.164	-7.857	13.021
10	20	5.766	0.995	4.771
30	21	3.771	-3.618	7.389
30	22	4.842	3.047	1.795
30	23	5.223	1.299	3.924
30	24	4.578	-1.929	6.507
30	25	1.952	-4.758	6.710
30	26	4.871	-0.478	5.349
30	27	5.223	0.218	5.005
30	28	6.587	-2.892	9.479
30	29	5.164	0.129	5.035
30	30	5.766	3.417	2.349
50	31	3.771	-3.294	7.065
50	32	4.842	-3.456	8.298
50	33	5.223	-3.441	8.664
50	34	4.578	-1.338	5.916
50	35	1.952	-8.823	10.775
50	36	4.871	-8.602	13.473
50	37	5.223	-8.132	13.355
50	38	6.587	-1.603	8.190
50	39	5.164	-8.176	13.340
50	40	5.766	-9.338	15.104
100	41	4.158	0.777	3.381
100	42	-0.244	9.592	-9.836
100	43	0.613	0.475	0.138
100	44	4.321	-0.655	4.976
100	45	2.858	3.196	-0.338
100	46	4.754	0.523	4.231
100	47	2.803	6.331	-3.528
100	48	3.609	-1.228	4.837
100	49	4.387	-2.007	6.394



5.5_Leakage High @ 3.6V - SDA

Test Site	J2S
Tester	FETS36405
Test Number	EE131301
Max Limit	150 nA
Min Limit	-150 nA

krad	0	3	10	30	50	100
LL	-150.000	-150.000	-150.000	-150.000	-150.000	-150.000
Min	-7.397	-6.354	-7.857	-4.758	-9.338	-2.007
Average	-4.488	-1.244	-2.234	-0.557	-5.620	2.322
Max	-1.633	2.545	2.480	3.417	-1.338	9.592
UL	150.000	150.000	150.000	150.000	150.000	150.000



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100	50	4.167	6.219	-2.052
0	51	6.015	-4.030	10.045
0	52	5.135	-7.397	12.532
0	53	3.668	-4.000	7.668
0	54	2.436	-1.633	4.069
0	55	3.360	-5.382	8.742
Max		6.587	9.592	15.104
Average		4.435	-1.741	6.177
Min		-0.244	-9.338	-9.836
Std Dev		1.440	4.074	4.606

5 Revision History

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

Changes from Revision * (June 2026) to Revision A (July 2026)	Page
• Updated Die Lot Number from 5067316 to 7411803.....	2
• Changed HDR to LDR.....	2
• Changed HDR to LDR.....	5

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