



AHEAD OF WHAT'S POSSIBLE™

HIGH DOSE RADIATION TEST REPORT ADUM141ES

July 2018
Generic



Radiation Test Report	
Product:	ADuM141ES
Gamma:	0, 50k, 24hr
Gamma Source:	Co60/TM1019 Condition A
Dose Rate:	100 Rad/s
Facilities:	VPT RAD
Tested:	6/27/18

The RADTEST® DATA SERVICE is a compilation of radiation test results on Analog Devices' Space grade products. It is designed to assist customers in selecting the right product for applications where radiation is a consideration. Many products manufactured by Analog Devices, Inc. have been shown to be radiation tolerant to most tactical radiation environments. Analog Devices, Inc. does not make any claim to maintain or guarantee these levels of radiation tolerance without lot qualification test.

It is the responsibility of the Procuring Activity to screen products from Analog Devices, Inc. for compliance to Nuclear Hardness Critical Items (HCI) specifications.

Warning:

Analog Devices, Inc. does not recommend use of this data to qualify other product grades or process levels. Analog Devices, Inc. is not responsible and has no liability for any consequences, and all applicable Warranties are null and void if any Analog Devices product is modified in any way or used outside of normal environmental and operating conditions, including the parameters specified in the corresponding data sheet. Analog Devices, Inc. does not guarantee that wafer manufacturing is the same for all process levels.

SN	IDD1(Q)_VIX=1_VDDX=5.5V			IDD2(Q)_VIX=1_VDDX=5.5V			IDD1(Q)_VIX=0_VDDX=5.5V		
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	1.4690	1.4540	1.4530	1.7350	1.7380	1.7400	8.93700	8.94200	8.94800
33	1.4700	1.4570	1.4540	1.7550	1.7500	1.7520	9.67200	9.68600	9.69300
52	1.4410	1.4190	1.4250	1.7430	1.7440	1.7440	8.87600	8.88900	8.90300
13	1.4510	1.4610	1.4510	1.7310	1.7820	1.7650	9.15200	9.39100	9.36300
14	1.4440	1.4630	1.4510	1.6910	1.7570	1.7420	8.45800	8.60000	8.56700
15	1.4630	1.4580	1.4530	1.7440	1.7560	1.7410	9.05900	8.58900	8.56400
16	1.4810	1.4850	1.4690	1.7050	1.7690	1.7570	9.10000	9.19400	9.17900
29	1.4470	1.4940	1.4840	1.7500	1.7410	1.7320	9.12600	9.23100	9.22100
30	1.4080	1.4440	1.4310	1.7460	1.7730	1.7670	8.86500	9.21300	9.18500
31	1.4210	1.4050	1.3800	1.7660	1.7700	1.7560	9.09100	9.20400	8.91800
32	1.4330	1.4240	1.4160	1.7700	1.7820	1.7810	9.09500	9.18800	9.18000
47	1.4810	1.4740	1.4690	1.7270	1.7510	1.7450	9.39100	9.11000	9.08200
48	1.4410	1.4930	1.4750	1.7230	1.7450	1.7390	8.99100	9.50000	9.48100
49	1.4860	1.4540	1.4340	1.7300	1.7480	1.7400	9.27700	9.08200	9.07200
50	1.4630	1.4510	1.4320	1.7650	1.7470	1.7390	8.92300	9.08300	9.07200
Min	1.4080	1.4050	1.3800	1.6910	1.7410	1.7320	8.45800	8.58900	8.56400
Max	1.4860	1.4940	1.4840	1.7700	1.7820	1.7810	9.39100	9.50000	9.48100
Mean	1.4516	1.4588	1.4454	1.7373	1.7601	1.7503	9.04400	9.11542	9.0737
Std. Dev	0.0244	0.0266	0.0290	0.0244	0.0145	0.0148	0.23241	0.27153	0.2775
Mean - 3 Sigma	1.3784	1.3792	1.3584	1.6642	1.7165	1.7061	8.34678	8.30084	8.2412
Mean + 3 Sigma	1.5248	1.5385	1.5325	1.8104	1.8037	1.7946	9.74122	9.92999	9.9061
Limit: <2.46 mA			Limit: <2.62mA			Limit: <17 mA			

SN	IDD2(Q)_VIX=0_VDDX=5.5V			IDD1(D) F=1MBPS, VDDX=5.5V			IDD2(D) F=1MBPS, VDDX=5.5V		
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	5.4910	5.4950	5.4930	5.2390	5.2320	5.2360	3.68000	3.68100	3.68200
33	5.3810	5.3870	5.3900	5.6080	5.5950	5.6050	3.63400	3.63700	3.63700
52	5.4620	5.4670	5.4730	5.1950	5.1880	5.1970	3.66600	4.30700	3.67300
13	5.5650	5.6900	5.6700	5.3370	5.4520	5.4390	3.70900	4.40800	3.77900
14	5.4340	5.5560	5.5300	4.9920	5.0660	5.0450	3.62000	4.33400	3.69900
15	5.5060	5.5490	5.5300	5.2930	5.0590	5.0440	3.69000	4.33100	3.69800
16	5.2550	5.6020	5.5910	5.3250	5.3690	5.3280	3.54500	4.38100	3.74100
29	5.4870	5.3420	5.3280	5.3250	5.3920	5.3830	3.68000	4.24300	3.59700
30	5.3490	5.5810	5.5680	5.1690	5.3530	5.3380	3.61500	4.38300	3.73200
31	5.4990	5.6680	5.3960	5.2920	5.3350	5.1800	3.70200	3.78600	3.64400
32	5.3970	5.4730	5.4730	5.2930	5.3340	5.3280	3.64700	3.69700	3.69100
47	5.4500	5.4720	5.4660	5.4720	5.3270	5.3060	3.65400	3.67400	3.66700
48	5.4130	5.5320	5.5110	5.2530	5.5230	5.5090	3.63200	3.70100	3.69400
49	5.2850	5.5010	5.4960	5.4150	5.2980	5.2830	3.57700	3.68900	3.68200
50	5.5550	5.4960	5.4920	5.2310	5.2990	5.2850	3.72300	3.68700	3.68500
Min	5.2550	5.3420	5.3280	4.9920	5.0590	5.0440	3.54500	3.67400	3.59700
Max	5.5650	5.6900	5.6700	5.4720	5.5230	5.5090	3.72300	4.40800	3.77900
Mean	5.4329	5.5385	5.5043	5.2831	5.3173	5.2890	3.64950	4.02617	3.6924
Std. Dev	0.0989	0.0937	0.0884	0.1210	0.1353	0.1404	0.05464	0.33821	0.0465
Mean - 3 Sigma	5.1363	5.2574	5.2392	4.9200	4.9115	4.8677	3.48558	3.01154	3.5530
Mean + 3 Sigma	5.7295	5.8196	5.7693	5.6462	5.7230	5.7103	3.81342	5.04079	3.8318
Limit: <10mA			Limit: <10.3 mA			Limit: <6.85mA			

SN	IDD1(D) F=25MBPS, VDDX=5.5V			IDD2(D) F=25MBPS, VDDX=5.5V			IDD1(D) F=100MBPS, VDDX=5.5V		
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	6.6530	6.6430	6.6480	5.4290	5.4380	5.4420	11.36800	11.39300	11.40700
33	6.9550	6.9480	6.9510	5.3740	5.3880	5.3920	11.59000	11.61000	11.62100
52	6.6030	6.5960	6.6040	5.3860	5.3920	5.4000	11.30900	11.34200	11.35400
13	6.7310	6.8430	6.8340	5.3600	5.4550	5.4350	11.40600	11.54800	11.54300
14	6.4310	6.4920	6.4770	5.2810	5.3800	5.3580	11.15200	11.23100	11.23300
15	6.6940	6.4860	6.4800	5.3940	5.3780	5.3580	11.35500	11.23100	11.23200
16	6.7130	6.7550	6.7300	5.2620	5.4500	5.4400	11.36900	11.45000	11.32300
29	6.6980	6.7660	6.7610	5.4160	5.3200	5.3130	11.32500	11.46000	11.45500
30	6.5350	6.7280	6.7100	5.4070	5.4700	5.4700	11.14000	11.39300	11.37700
31	6.6670	6.7010	6.5400	5.4640	5.5400	5.4180	11.29000	11.36400	11.19000
32	6.6450	6.6980	6.6940	5.3850	5.4330	5.4250	11.26500	11.32400	11.32200
47	6.8420	6.7310	6.7160	5.3700	5.3680	5.3640	11.46600	11.47600	11.46900
48	6.6190	6.8920	6.8770	5.3740	5.4240	5.4120	11.20000	11.55700	11.54800
49	6.7860	6.6620	6.6450	5.3320	5.4310	5.4280	11.44200	11.28800	11.27600
50	6.6440	6.6630	6.6490	5.4440	5.4330	5.4270	11.36100	11.29400	11.28200
Min	6.4310	6.4860	6.4770	5.2620	5.3200	5.3130	11.14000	11.23100	11.19000
Max	6.8420	6.8920	6.8770	5.4640	5.5400	5.4700	11.46600	11.55700	11.54800
Mean	6.6671	6.7014	6.6761	5.3741	5.4235	5.4040	11.31425	11.38467	11.3542
Std. Dev	0.1083	0.1200	0.1268	0.0600	0.0567	0.0453	0.10765	0.11427	0.1232
Mean - 3 Sigma	6.3420	6.3415	6.2958	5.1942	5.2533	5.2682	10.99129	11.04186	10.9845
Mean + 3 Sigma	6.9921	7.0613	7.0564	5.5540	5.5937	5.5398	11.63721	11.72747	11.7238
Limit: <10.9mA			Limit: <8.5mA			Limit: <15.9mA			

SN	IDD2(D) F=100MBPS, VDDX=5.5V			mA			IDD1(D) F=150MBPS, VDDX=5.5V			mA			IDD2(D) F=150MBPS, VDDX=5.5V			mA		
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	11.2240	11.2850	11.2880	14.4420	14.4480	14.4590	15.68900	15.72300	15.72100									
33	11.0430	11.0930	11.1050	14.4430	14.4310	14.4510	15.38500	15.41500	15.43000									
52	11.0750	11.1430	11.1480	14.1700	14.1770	14.2040	15.38400	15.43200	15.44400									
13	10.6830	10.8240	10.8060	13.9950	14.1140	14.1110	14.59300	14.73900	14.71700									
14	10.6400	10.7700	10.7440	14.1260	14.1490	14.1530	14.70600	14.79200	14.77300									
15	10.9880	10.7450	10.7490	14.1630	14.1350	14.1590	15.16300	14.73100	14.78200									
16	10.8800	11.0330	11.0080	14.1620	14.1550	14.0270	15.15800	15.12300	15.12000									
29	11.0270	10.9250	10.9300	14.0660	14.1530	14.1590	15.12800	15.11000	15.12200									
30	11.3240	11.1040	11.1470	14.1240	14.0740	14.0630	15.92200	15.13000	15.22800									
31	11.2940	11.3680	11.2820	14.2830	14.2430	14.1390	15.76400	15.72300	15.74800									
32	11.0610	11.1030	11.0920	14.2780	14.1400	14.1370	15.40700	15.35900	15.33500									
47	10.9620	10.9180	10.9120	14.1410	14.2950	14.2880	15.17300	15.06700	15.06000									
48	11.0260	11.0450	11.0450	13.8800	14.1580	14.1640	15.27000	15.21700	15.20900									
49	11.0830	11.1220	11.1370	14.2850	13.9610	13.9370	15.47300	15.34900	15.35000									
50	11.0970	11.1250	11.1310	14.3060	13.9600	13.9450	15.42400	15.35100	15.34300									
Min	10.6400	10.7450	10.7440	13.8800	13.9600	13.9370	14.59300	14.73100	14.7170									
Max	11.3240	11.3680	11.2820	14.3060	14.2950	14.2880	15.92200	15.72300	15.7480									
Mean	11.0054	11.0068	10.9986	14.1508	14.1281	14.1068	15.26508	15.14092	15.1489									
Std. Dev	0.2042	0.1787	0.1723	0.1287	0.0969	0.0995	0.37930	0.29198	0.2944									
Mean - 3 Sigma	10.3929	10.4708	10.4818	13.7646	13.8375	13.8083	14.12719	14.26498	14.2657									
Mean + 3 Sigma	11.6179	11.5429	11.5154	14.5369	14.4187	14.4054	16.40298	16.01686	16.0321									
Limit: <14mA			Limit: <17mA			Limit: <17.5mA												

SN	Prop Delay: tPLH(A)_VDDX=5.5V			ns			Prop Delay: tPLH(B)_VDDX=5.5V			ns			Prop Delay: tPLH(C)_VDDX=5.5V			ns		
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	8.0770	8.0770	8.0770	7.8850	7.8850	7.8850	8.07700	8.07700	7.88500									
33	7.8850	7.8850	8.0770	8.0770	7.8850	8.0770	8.07700	7.88500	8.07700									
52	7.8850	7.8850	7.8850	7.8850	7.8850	7.8850	8.07700	7.88500	7.88500									
13	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.50000	7.50000	7.50000									
14	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.50000	7.50000	7.50000									
15	7.6920	7.5000	7.5000	7.6920	7.6920	7.5000	7.88500	7.50000	7.50000									
16	7.8850	7.5000	7.6920	7.6920	7.6920	7.6920	7.88500	7.88500	7.69200									
29	7.6920	7.8850	7.6920	7.8850	7.6920	7.6920	7.69200	7.88500	7.69200									
30	8.0770	7.8850	7.6920	8.0770	7.8850	7.8850	8.26900	7.69200	7.69200									
31	8.2690	8.0770	8.0770	8.0770	8.0770	8.0770	8.26900	8.26900	8.07700									
32	7.8850	7.8850	7.8850	7.8850	7.8850	7.8850	8.07700	7.88500	7.88500									
47	7.8850	7.6920	7.6920	7.6920	7.6920	7.6920	7.69200	7.69200	7.69200									
48	7.6920	7.8850	7.8850	7.6920	7.6920	7.6920	7.69200	7.69200	7.69200									
49	8.0770	7.8850	7.6920	8.0770	7.6920	7.6920	8.07700	7.69200	7.50000									
50	7.6920	7.6920	7.6920	7.8850	7.6920	7.6920	7.88500	7.69200	7.69200									
Min	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.50000	7.50000	7.5000									
Max	8.2690	8.0770	8.0770	8.0770	8.0770	8.0770	8.26900	8.26900	8.0770									
Mean	7.8205	7.7405	7.7083	7.8045	7.7243	7.7083	7.86858	7.74033	7.6762									
Std. Dev	0.2368	0.2031	0.1732	0.2085	0.1607	0.1732	0.26519	0.21893	0.1732									
Mean - 3 Sigma	7.1102	7.1312	7.1885	7.1789	7.2422	7.1885	7.07300	7.08354	7.1566									
Mean + 3 Sigma	8.5308	8.3498	8.2280	8.4301	8.2063	8.2280	8.66416	8.39712	8.1957									
Limit: >4.8ns, <13.5ns			Limit: >4.8ns, <13.5ns			Limit: >4.8ns, <13.5ns												

SN	Prop Delay: tPLH(D)_VDDX=5.5V			ns			Prop Delay: tPHL(A)_VDDX=5.5V			ns			Prop Delay: tPHL(B)_VDDX=5.5V			ns		
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	7.6920	7.8850	7.6920	8.0770	8.0770	8.0770	8.07700	8.07700	8.07700									
33	7.1150	7.3080	7.3080	8.0770	7.8850	7.8850	7.88500	7.88500	7.88500									
52	7.5000	7.5000	7.5000	7.8850	7.8850	7.8850	7.88500	7.88500	7.88500									
13	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.50000	7.69200	7.69200									
14	7.8850	7.8850	7.6920	7.8850	7.8850	7.8850	7.69200	7.88500	7.88500									
15	7.6920	7.8850	7.8850	7.6920	7.8850	7.8850	7.69200	7.88500	7.88500									
16	7.3080	7.5000	7.5000	7.8850	7.6920	7.6920	7.88500	7.88500	7.88500									
29	7.3080	7.3080	7.3080	7.8850	7.8850	7.8850	7.69200	7.88500	7.88500									
30	7.5000	7.3080	7.3080	8.0770	7.8850	7.8850	8.07700	7.88500	7.88500									
31	7.5000	7.5000	7.5000	8.0770	7.8850	8.0770	7.88500	8.07700	8.07700									
32	7.5000	7.6920	7.5000	7.8850	7.8850	7.8850	7.88500	7.88500	7.88500									
47	7.3080	7.6920	7.6920	7.8850	7.8850	7.8850	7.88500	7.88500	7.88500									
48	7.3080	7.5000	7.5000	7.8850	7.8850	7.8850	7.88500	7.88500	7.88500									
49	7.3080	7.3080	7.5000	8.0770	7.8850	7.8850	7.88500	8.07700	8.07700									
50	7.6920	7.3080	7.5000	7.8850	7.8850	7.8850	7.88500	8.07700	7.88500									
Min	7.3080	7.3080	7.3080	7.5000	7.5000	7.5000	7.50000	7.69200	7.6920									
Max	7.8850	7.8850	7.8850	8.0770	7.8850	8.0770	8.07700	8.07700	8.0770									
Mean	7.4841	7.5322	7.5321	7.8848	7.8368	7.8528	7.82067	7.91692	7.9099									
Std. Dev	0.1915	0.2143	0.1605	0.1641	0.1197	0.1381	0.14990	0.11104	0.0991									
Mean - 3 Sigma	6.9097	6.8892	7.0506	7.3927	7.4777	7.4384	7.37097	7.58381	7.6037									
Mean + 3 Sigma	8.0585	8.1751	8.0136	8.3770	8.1960	8.2673	8.27037	8.25002	8.1981									
Limit: >4.8ns, <13.5ns			Limit: >4.8ns, <13.5ns			Limit: >4.8ns, <13.5ns												

		Prop Delay: tPHL(C)_VDDX=5.5V			Prop Delay: tPHL(D)_VDDX=5.5V			Pulse Width Distortion (A)_VDDX=5.5V		
		ns			ns			ns		
SN	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	
17	8.0770	8.0770	8.0770	7.8850	7.8850	7.8850	0.00000	0.00000	0.00000	
33	8.0770	7.8850	7.8850	7.6920	7.6920	7.6920	-0.19200	0.00000	0.19200	
52	7.8850	7.8850	7.8850	7.6920	7.6920	7.6920	0.00000	0.00000	0.00000	
13	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	0.00000	0.00000	0.00000	
14	7.8850	7.6920	7.6920	7.8850	7.8850	7.8850	-0.38500	-0.38500	-0.38500	
15	7.6920	7.6920	7.6920	7.6920	7.8850	7.8850	0.00000	-0.38500	-0.38500	
16	7.8850	7.6920	7.6920	7.6920	7.6920	7.6920	0.00000	-0.19200	0.00000	
29	7.8850	7.6920	7.6920	7.6920	7.6920	7.6920	-0.19200	0.00000	-0.19200	
30	8.0770	7.8850	7.6920	7.8850	7.6920	7.6920	0.00000	0.00000	-0.19200	
31	7.8850	7.8850	8.0770	7.8850	7.6920	7.8850	0.19200	0.19200	0.00000	
32	7.8850	7.8850	7.8850	7.6920	7.6920	7.6920	0.00000	0.00000	0.00000	
47	7.8850	7.8850	7.6920	7.5000	7.6920	7.6920	0.00000	-0.19200	-0.19200	
48	7.8850	7.6920	7.6920	7.6920	7.5000	7.5000	-0.19200	0.00000	0.00000	
49	7.8850	7.8850	7.8850	7.5000	7.6920	7.6920	0.00000	0.00000	-0.19200	
50	7.8850	7.8850	7.8850	7.6920	7.6920	7.6920	-0.19200	-0.19200	-0.19200	
Min	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	-0.38500	-0.38500	-0.38500	
Max	8.0770	7.8850	8.0770	7.8850	7.8850	7.8850	0.19200	0.19200	0.00000	
Mean	7.8528	7.7725	7.7563	7.6923	7.6922	7.7083	-0.06408	-0.09617	-0.1442	
Std. Dev	0.1381	0.1288	0.1499	0.1422	0.1161	0.1287	0.14967	0.17397	0.1450	
Mean - 3 Sigma	7.4384	7.3860	7.3066	7.2657	7.3439	7.3220	-0.51308	-0.61808	-0.5792	
Mean + 3 Sigma	8.2673	8.1590	8.2060	8.1188	8.0404	8.0945	0.38492	0.42575	0.2909	
		Limit: >4.8ns, <13.5ns			Limit: >4.8ns, <13.5ns			Limit: <3ns		

		Pulse Width Distortion (B)_VDDX=5.5V			Pulse Width Distortion (C)_VDDX=5.5V			Pulse Width Distortion (D)_VDDX=5.5V		
		ns			ns			ns		
SN	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	
17	-0.1920	-0.1920	-0.1920	0.0000	0.0000	-0.1920	-0.19200	0.00000	-0.19200	
33	0.1920	0.0000	0.1920	0.0000	0.0000	0.1920	-0.57700	-0.38500	-0.38500	
52	0.0000	0.0000	0.0000	0.1920	0.0000	0.0000	-0.19200	-0.19200	-0.19200	
13	0.0000	-0.1920	-0.1920	0.0000	0.0000	0.0000	0.00000	0.00000	0.00000	
14	-0.1920	-0.3850	-0.3850	-0.3850	-0.1920	-0.1920	0.00000	0.00000	-0.19200	
15	0.0000	-0.1920	-0.3850	0.1920	0.1920	0.1920	0.00000	0.00000	0.00000	
16	-0.1920	-0.1920	-0.1920	0.0000	0.1920	0.0000	-0.38500	-0.19200	-0.19200	
29	0.1920	-0.1920	-0.1920	-0.1920	0.1920	0.0000	-0.38500	-0.38500	-0.38500	
30	0.0000	0.0000	0.0000	0.1920	-0.1920	0.0000	-0.38500	-0.38500	-0.38500	
31	0.1920	0.0000	0.0000	0.3850	0.3850	0.0000	-0.38500	-0.19200	-0.38500	
32	0.0000	0.0000	0.0000	0.1920	0.0000	0.0000	-0.19200	0.00000	-0.19200	
47	-0.1920	-0.1920	-0.1920	-0.1920	-0.1920	0.0000	-0.19200	0.00000	0.00000	
48	-0.1920	-0.1920	-0.1920	-0.1920	0.0000	0.0000	-0.38500	0.00000	0.00000	
49	0.1920	-0.3850	-0.3850	0.1920	-0.1920	-0.3850	-0.19200	-0.38500	-0.19200	
50	0.0000	-0.3850	-0.1920	0.0000	-0.1920	-0.1920	0.00000	-0.38500	-0.19200	
Min	-0.1920	-0.3850	-0.3850	-0.3850	-0.1920	-0.3850	-0.38500	-0.38500	-0.38500	
Max	0.1920	0.0000	0.0000	0.3850	0.3850	0.0000	0.00000	0.00000	0.00000	
Mean	-0.0160	-0.1923	-0.1923	0.0160	-0.0319	-0.0801	-0.20842	-0.16033	-0.1763	
Std. Dev	0.1522	0.1422	0.1422	0.2239	0.1979	0.1286	0.17333	0.18044	0.1526	
Mean - 3 Sigma	-0.4727	-0.6188	-0.6188	-0.6557	-0.6257	-0.4658	-0.72840	-0.70165	-0.6341	
Mean + 3 Sigma	0.4407	0.2343	0.2343	0.6877	0.5619	0.3057	0.31157	0.38099	0.2816	
		Limit: <3ns			Limit: <3ns			Limit: <3ns		

		Channel Match Codirection_Fall_VDDX=5.5V			Channel Match Opposing Direction_Fall_VDDX=5.5V			Channel Match Codirection_Rise_Fall_VDDX=5.5V		
		ns			ns			ns		
SN	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	
17	0.0000	0.0000	0.0000	0.1920	0.1920	0.1920	0.19200	0.19200	0.19200	
33	0.1920	0.0000	0.0000	0.3850	0.1920	0.1920	0.19200	0.00000	0.19200	
52	0.0000	0.0000	0.0000	0.1920	0.1920	0.1920	0.00000	0.00000	0.00000	
13	0.0000	0.1920	0.1920	0.0000	0.1920	0.1920	0.00000	0.19200	0.19200	
14	0.1920	0.1920	0.1920	0.1920	0.1920	0.1920	0.38500	0.38500	0.38500	
15	0.0000	0.1920	0.1920	0.0000	0.1920	0.1920	0.00000	0.38500	0.38500	
16	0.0000	0.1920	0.1920	0.1920	0.1920	0.1920	0.19200	0.38500	0.19200	
29	0.1920	0.1920	0.1920	0.1920	0.1920	0.1920	0.19200	0.19200	0.19200	
30	0.0000	0.0000	0.1920	0.1920	0.1920	0.1920	0.00000	0.00000	0.19200	
31	0.1920	0.1920	0.0000	0.1920	0.3850	0.1920	0.38500	0.19200	0.00000	
32	0.0000	0.0000	0.0000	0.1920	0.1920	0.1920	0.00000	0.00000	0.00000	
47	0.0000	0.0000	0.1920	0.3850	0.1920	0.1920	0.19200	0.19200	0.19200	
48	0.0000	0.1920	0.1920	0.1920	0.3850	0.3850	0.19200	0.19200	0.19200	
49	0.1920	0.1920	0.1920	0.5770	0.3850	0.3850	0.19200	0.19200	0.38500	
50	0.0000	0.1920	0.0000	0.1920	0.3850	0.1920	0.19200	0.38500	0.19200	
Min	0.0000	0.0000	0.0000	0.0000	0.1920	0.1920	0.00000	0.00000	0.00000	
Max	0.1920	0.1920	0.1920	0.5770	0.3850	0.3850	0.38500	0.38500	0.38500	
Mean	0.0640	0.1440	0.1440	0.2082	0.2563	0.2242	0.16017	0.22433	0.2083	
Std. Dev	0.0945	0.0868	0.0868	0.1526	0.0950	0.0751	0.13810	0.13823	0.1287	
Mean - 3 Sigma	-0.2196	-0.1165	-0.1165	-0.2496	-0.0287	-0.0012	-0.25414	-0.19035	-0.1780	
Mean + 3 Sigma	0.3476	0.4045	0.4045	0.6659	0.5414	0.4495	0.57447	0.63902	0.5945	
		Limit: <3ns			Limit: <3ns			Limit: <3ns		

SN	Channel Match Opposing Direction_Rise_Fall_VDDX=5.5V			ns	Channel Match Codirection_Fall_VDDX=5.5V			ns	Channel Match Opposing Direction_Fall_VDDX=5.5V			ns	
	PRE	50k	24hr		PRE	50k	24hr		PRE	50k	24hr		
17	0.1920	0.1920	0.1920		0.1920	0.1920	0.1920		0.38500	0.19200	0.38500		
33	0.3850	0.1920	0.3850		0.1920	0.0000	0.0000		0.96200	0.57700	0.76900		
52	0.3850	0.1920	0.1920		0.1920	0.0000	0.0000		0.57700	0.38500	0.38500		
13	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.00000	0.00000	0.00000		
14	0.3850	0.3850	0.3850		0.0000	0.0000	0.0000		0.38500	0.38500	0.19200		
15	0.1920	0.3850	0.3850		0.1920	0.1920	0.0000		0.19200	0.38500	0.38500		
16	0.1920	0.1920	0.0000		0.1920	0.3850	0.0000		0.57700	0.38500	0.19200		
29	0.1920	0.1920	0.0000		0.1920	0.1920	0.0000		0.57700	0.57700	0.38500		
30	0.3850	0.1920	0.1920		0.1920	0.1920	0.1920		0.76900	0.57700	0.57700		
31	0.3850	0.5770	0.1920		0.1920	0.1920	0.0000		0.76900	0.76900	0.57700		
32	0.3850	0.1920	0.1920		0.1920	0.0000	0.0000		0.57700	0.19200	0.38500		
47	0.3850	0.0000	0.0000		0.1920	0.0000	0.0000		0.57700	0.00000	0.00000		
48	0.0000	0.3850	0.3850		0.0000	0.1920	0.1920		0.38500	0.38500	0.38500		
49	0.5770	0.1920	0.1920		0.0000	0.1920	0.1920		0.76900	0.57700	0.19200		
50	0.1920	0.0000	0.0000		0.1920	0.0000	0.0000		0.19200	0.38500	0.19200		
Min	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.00000	0.00000	0.0000		
Max	0.5770	0.5770	0.3850		0.1920	0.3850	0.1920		0.76900	0.76900	0.5770		
Mean	0.2725	0.2243	0.1603		0.1280	0.1281	0.0480		0.48075	0.38475	0.2885		
Std. Dev	0.1733	0.1804	0.1607		0.0945	0.1252	0.0868		0.25272	0.23194	0.1925		
Mean - 3 Sigma	-0.2475	-0.3169	-0.3218		-0.1556	-0.2476	-0.2125		-0.27740	-0.31106	-0.2889		
Mean + 3 Sigma	0.7925	0.7656	0.6423		0.4116	0.5038	0.3085		1.23890	1.08056	0.8659		
Limit: <3ns					Limit: <3ns					Limit: <3ns			

SN	VOL (A) 20uA_VDDx=5.5V			V	VOL (B) 20uA_VDDx=5.5V			V	VOL(C) 20uA_VDDx=5.5V			V	
	PRE	50k	24hr		PRE	50k	24hr		PRE	50k	24hr		
17	0.0030	0.0030	0.0040		0.0030	0.0040	0.0040		0.00300	0.00400	0.00400		
33	0.0030	0.0030	0.0030		0.0030	0.0030	0.0040		0.00300	0.00400	0.00400		
52	0.0030	0.0030	0.0030		0.0030	0.0040	0.0040		0.00300	0.00400	0.00400		
13	0.0030	0.0030	0.0040		0.0030	0.0040	0.0040		0.00400	0.00400	0.00400		
14	0.0030	0.0040	0.0030		0.0030	0.0040	0.0040		0.00400	0.00400	0.00400		
15	0.0030	0.0030	0.0030		0.0030	0.0040	0.0040		0.00300	0.00400	0.00400		
16	0.0030	0.0030	0.0030		0.0030	0.0030	0.0040		0.00300	0.00400	0.00400		
29	0.0030	0.0040	0.0040		0.0030	0.0040	0.0040		0.00400	0.00400	0.00400		
30	0.0030	0.0030	0.0030		0.0030	0.0030	0.0030		0.00300	0.00400	0.00400		
31	0.0030	0.0030	0.0030		0.0030	0.0030	0.0040		0.00300	0.00400	0.00400		
32	0.0030	0.0030	0.0030		0.0030	0.0030	0.0040		0.00300	0.00400	0.00400		
47	0.0030	0.0030	0.0030		0.0030	0.0030	0.0030		0.00300	0.00400	0.00400		
48	0.0030	0.0030	0.0040		0.0030	0.0030	0.0040		0.00300	0.00400	0.00400		
49	0.0030	0.0030	0.0030		0.0030	0.0030	0.0040		0.00300	0.00400	0.00400		
50	0.0030	0.0030	0.0030		0.0030	0.0030	0.0040		0.00300	0.00400	0.00400		
Min	0.0030	0.0030	0.0030		0.0030	0.0030	0.0030		0.00300	0.00400	0.0040		
Max	0.0030	0.0040	0.0040		0.0030	0.0040	0.0040		0.00400	0.00400	0.0040		
Mean	0.0030	0.0032	0.0033		0.0030	0.0033	0.0038		0.00325	0.00400	0.0040		
Std. Dev	0.0000	0.0004	0.0005		0.0000	0.0005	0.0004		0.00045	0.00000	0.0000		
Mean - 3 Sigma	0.0030	0.0020	0.0019		0.0030	0.0019	0.0027		0.00189	0.00400	0.0040		
Mean + 3 Sigma	0.0030	0.0043	0.0046		0.0030	0.0048	0.0050		0.00461	0.00400	0.0040		
Limit: <0.1V					Limit: <0.1V					Limit: <0.1V			

SN	VOL(D) 20uA_VDDx=5.5V			V	VOL (A) 4mA_VDDx=5.5V			V	VOL(B) 4mA_VDDx=5.5V			V	
	PRE	50k	24hr		PRE	50k	24hr		PRE	50k	24hr		
17	0.0040	0.0040	0.0040		0.1600	0.1620	0.1620		0.16400	0.16400	0.16400		
33	0.0040	0.0040	0.0040		0.1610	0.1620	0.1620		0.16400	0.16400	0.16400		
52	0.0040	0.0040	0.0040		0.1600	0.1620	0.1620		0.16400	0.16400	0.16500		
13	0.0040	0.0040	0.0040		0.1640	0.1650	0.1650		0.16800	0.16800	0.16800		
14	0.0040	0.0040	0.0040		0.1670	0.1680	0.1670		0.17000	0.17000	0.17000		
15	0.0050	0.0040	0.0040		0.1600	0.1680	0.1670		0.16300	0.17000	0.17000		
16	0.0040	0.0050	0.0040		0.1640	0.1610	0.1610		0.16700	0.16300	0.16300		
29	0.0040	0.0040	0.0040		0.1610	0.1650	0.1650		0.16500	0.16700	0.16700		
30	0.0040	0.0040	0.0040		0.1590	0.1620	0.1620		0.16200	0.16400	0.16400		
31	0.0040	0.0040	0.0040		0.1590	0.1600	0.1600		0.16200	0.16200	0.16200		
32	0.0040	0.0040	0.0040		0.1610	0.1620	0.1620		0.16500	0.16400	0.16400		
47	0.0040	0.0040	0.0040		0.1590	0.1610	0.1600		0.16200	0.16400	0.16300		
48	0.0040	0.0040	0.0040		0.1590	0.1600	0.1600		0.16200	0.16300	0.16300		
49	0.0040	0.0050	0.0040		0.1590	0.1600	0.1590		0.16300	0.16200	0.16200		
50	0.0040	0.0040	0.0040		0.1620	0.1600	0.1600		0.16500	0.16200	0.16200		
Min	0.0040	0.0040	0.0040		0.1590	0.1600	0.1590		0.16200	0.16200	0.1620		
Max	0.0050	0.0050	0.0040		0.1670	0.1680	0.1670		0.17000	0.17000	0.1700		
Mean	0.0041	0.0042	0.0040		0.1612	0.1627	0.1623		0.16450	0.16492	0.1648		
Std. Dev	0.0003	0.0004	0.0000		0.0026	0.0031	0.0029		0.00268	0.00303	0.0031		
Mean - 3 Sigma	0.0032	0.0030	0.0040		0.1533	0.1535	0.1536		0.15646	0.15583	0.1556		
Mean + 3 Sigma	0.0049	0.0053	0.0040		0.1690	0.1718	0.1710		0.17254	0.17400	0.1740		
Limit: <0.1V					Limit: <0.4V					Limit: <0.4V			

SN	VOL (C) 4mA_VDDx=5.5V		V	VOL (D) 4mA_VDDx=5.5V		V	VOH (A) 20uA_VDDx=5.5V		V
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	0.1620	0.1630	0.1630	0.1640	0.1630	0.1640	5.49500	5.49600	5.49600
33	0.1620	0.1630	0.1630	0.1720	0.1720	0.1720	5.49500	5.49600	5.49600
52	0.1620	0.1630	0.1630	0.1670	0.1670	0.1670	5.49500	5.49600	5.49600
13	0.1660	0.1670	0.1670	0.1660	0.1660	0.1660	5.49500	5.49600	5.49600
14	0.1690	0.1700	0.1700	0.1670	0.1660	0.1660	5.49500	5.49600	5.49600
15	0.1610	0.1700	0.1700	0.1680	0.1660	0.1660	5.49500	5.49600	5.49600
16	0.1660	0.1620	0.1620	0.1660	0.1680	0.1670	5.49500	5.49600	5.49600
29	0.1630	0.1660	0.1660	0.1740	0.1660	0.1660	5.49500	5.49600	5.49600
30	0.1610	0.1630	0.1630	0.1800	0.1730	0.1730	5.49500	5.49500	5.49600
31	0.1610	0.1620	0.1620	0.1790	0.1770	0.1800	5.49500	5.49700	5.49600
32	0.1630	0.1630	0.1630	0.1750	0.1730	0.1730	5.49500	5.49600	5.49600
47	0.1610	0.1630	0.1620	0.1690	0.1670	0.1660	5.49500	5.49600	5.49600
48	0.1600	0.1610	0.1620	0.1700	0.1680	0.1690	5.49500	5.49600	5.49600
49	0.1610	0.1610	0.1610	0.1690	0.1700	0.1690	5.49500	5.49600	5.49600
50	0.1620	0.1610	0.1610	0.1660	0.1700	0.1690	5.49500	5.49600	5.49600
Min	0.1600	0.1610	0.1610	0.1660	0.1660	0.1660	5.49500	5.49500	5.49600
Max	0.1690	0.1700	0.1700	0.1800	0.1770	0.1800	5.49500	5.49700	5.49600
Mean	0.1628	0.1641	0.1641	0.1708	0.1692	0.1692	5.49500	5.49600	5.49600
Std. Dev	0.0028	0.0033	0.0033	0.0050	0.0036	0.0043	0.00000	0.00043	0.00000
Mean - 3 Sigma	0.1546	0.1541	0.1541	0.1557	0.1585	0.1563	5.49500	5.49472	5.49600
Mean + 3 Sigma	0.1711	0.1741	0.1740	0.1858	0.1799	0.1820	5.49500	5.49728	5.49600
Limit: <0.4V			Limit: <0.4V			Limit: >5.4V			

SN	VOH (B) 20uA_VDDx=5.5V		V	VOH (C) 20uA_VDDx=5.5V		V	VOH (D) 20uA_VDDx=5.5V		V
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	5.4950	5.4970	5.4970	5.4950	5.4970	5.4960	5.49500	5.49600	5.49600
33	5.4950	5.4970	5.4970	5.4950	5.4970	5.4970	5.49500	5.49700	5.49600
52	5.4950	5.4970	5.4970	5.4950	5.4970	5.4970	5.49500	5.49600	5.49600
13	5.4950	5.4960	5.4960	5.4950	5.4960	5.4960	5.49500	5.49600	5.49600
14	5.4960	5.4960	5.4970	5.4950	5.4960	5.4960	5.49500	5.49600	5.49600
15	5.4950	5.4960	5.4970	5.4950	5.4960	5.4960	5.49500	5.49600	5.49600
16	5.4950	5.4970	5.4970	5.4950	5.4960	5.4970	5.49500	5.49600	5.49200
29	5.4950	5.4970	5.4960	5.4950	5.4960	5.4960	5.49500	5.49600	5.49600
30	5.4950	5.4960	5.4970	5.4950	5.4960	5.4970	5.49500	5.49600	5.49600
31	5.4950	5.4970	5.4970	5.4950	5.4970	5.4970	5.49500	5.49600	5.49600
32	5.4950	5.4970	5.4970	5.4950	5.4970	5.4970	5.49500	5.49600	5.49600
47	5.4950	5.4970	5.4970	5.4950	5.4960	5.4970	5.49500	5.49600	5.49600
48	5.4960	5.4970	5.4960	5.4950	5.4970	5.4970	5.49500	5.49600	5.49600
49	5.4950	5.4970	5.4970	5.4950	5.4970	5.4970	5.49500	5.49600	5.49600
50	5.4950	5.4970	5.4970	5.4950	5.4970	5.4970	5.49500	5.49600	5.49600
Min	5.4950	5.4960	5.4960	5.4950	5.4960	5.4960	5.49500	5.49600	5.49200
Max	5.4960	5.4970	5.4970	5.4950	5.4970	5.4970	5.49500	5.49600	5.49600
Mean	5.4952	5.4967	5.4968	5.4950	5.4964	5.4967	5.49500	5.49600	5.4957
Std. Dev	0.0004	0.0005	0.0005	0.0000	0.0005	0.0005	0.00000	0.00000	0.0012
Mean - 3 Sigma	5.4940	5.4952	5.4954	5.4950	5.4949	5.4952	5.49500	5.49600	5.4922
Mean + 3 Sigma	5.4963	5.4981	5.4981	5.4950	5.4980	5.4981	5.49500	5.49600	5.4991
Limit: >5.4V			Limit: >5.4V			Limit: >5.4V			

SN	VOH (A) 4mA_VDDx=5.5V		V	VOH (B) 4mA_VDDx=5.5V		V	VOH (C) 4mA_VDDx=5.5V		V
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	5.3010	5.3040	5.3040	5.2970	5.3020	5.3010	5.29700	5.30100	5.30100
33	5.3010	5.3040	5.3040	5.2970	5.3020	5.3010	5.29700	5.30200	5.30200
52	5.3020	5.3050	5.3050	5.2990	5.3030	5.3030	5.29900	5.30300	5.30300
13	5.3010	5.3030	5.3030	5.2970	5.3010	5.3010	5.29700	5.30100	5.30100
14	5.3000	5.3020	5.3030	5.2970	5.3000	5.3000	5.29700	5.29900	5.30000
15	5.3010	5.2990	5.3030	5.2970	5.2970	5.3010	5.29700	5.29700	5.30000
16	5.3010	5.3040	5.3040	5.2970	5.3010	5.3010	5.29700	5.30100	5.30200
29	5.3010	5.3030	5.3030	5.2970	5.3010	5.3010	5.29700	5.30100	5.30100
30	5.3010	5.2980	5.3040	5.2980	5.2950	5.3020	5.29700	5.29500	5.30100
31	5.3020	5.3040	5.3040	5.2980	5.3020	5.3020	5.29800	5.30100	5.30200
32	5.3000	5.3040	5.3040	5.2960	5.3020	5.3020	5.29600	5.30200	5.30200
47	5.3010	5.3040	5.3050	5.2980	5.3020	5.3020	5.29800	5.30200	5.30200
48	5.3020	5.3040	5.3040	5.2980	5.3020	5.3020	5.29800	5.30200	5.30200
49	5.3010	5.3040	5.3040	5.2970	5.3020	5.3020	5.29700	5.30200	5.30200
50	5.3010	5.3040	5.3040	5.2980	5.3020	5.3020	5.29800	5.30200	5.30200
Min	5.3000	5.2980	5.3030	5.2960	5.2950	5.3000	5.29600	5.29500	5.3000
Max	5.3020	5.3040	5.3050	5.2980	5.3020	5.3020	5.29800	5.30200	5.3020
Mean	5.3010	5.3028	5.3038	5.2973	5.3006	5.3015	5.29725	5.30042	5.3014
Std. Dev	0.0006	0.0021	0.0006	0.0007	0.0023	0.0007	0.00062	0.00227	0.0008
Mean - 3 Sigma	5.2992	5.2965	5.3019	5.2954	5.2938	5.2995	5.29539	5.29359	5.2990
Mean + 3 Sigma	5.3028	5.3090	5.3056	5.2993	5.3074	5.3035	5.29911	5.30724	5.3038
Limit: >5.1V			Limit: >5.1V			Limit: >5.1V			

SN	VOH (D)_4mA_VDDx=5.5V			lin_low (A) VDDx=5.5V			lin_low (B) VDDx=5.5V			
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	
17	5.3190	5.3230	5.3210	-0.0180	-0.0090	-0.0040	0.00035	0.00600	0.00900	
33	5.3170	5.3210	5.3200	-0.0060	-0.0040	-0.0040	-0.02100	-0.00300	-0.00600	
52	5.3180	5.3210	5.3210	0.0060	-0.0010	-0.0130	-0.00900	0.00400	-0.00073	
13	5.3190	5.3220	5.3210	0.0030	-0.0010	-0.0090	-0.01800	0.01100	-0.00300	
14	5.3180	5.3210	5.3210	-0.0110	-0.0110	-0.0090	0.00035	0.00400	0.01800	
15	5.3180	5.3210	5.3210	0.0060	-0.0130	-0.0060	-0.01400	0.01100	0.01600	
16	5.3190	5.3220	5.3090	-0.0060	-0.0010	-0.0110	-0.01600	0.01100	0.01100	
29	5.3170	5.3220	5.3210	-0.0150	-0.0060	-0.0060	0.00035	0.00900	0.00200	
30	5.3150	5.3200	5.3200	-0.0110	-0.0160	-0.0040	-0.00200	0.00600	0.01300	
31	5.3170	5.3200	5.3180	-0.0080	-0.0040	0.0030	-0.01600	0.00200	-0.00073	
32	5.3160	5.3200	5.3190	-0.0180	-0.0130	-0.0090	0.00035	0.00600	0.00900	
47	5.3190	5.3210	5.3210	-0.0060	0.0030	0.0080	-0.01600	0.01100	0.00400	
48	5.3190	5.3220	5.3220	-0.0130	-0.0130	-0.0130	-0.00400	0.01800	0.01100	
49	5.3190	5.3220	5.3220	-0.0060	0.0100	-0.0090	0.00300	0.00400	0.00900	
50	5.3180	5.3220	5.3220	-0.0150	0.0009	-0.0060	-0.00200	0.00900	-0.00073	
Min	5.3150	5.3200	5.3090	-0.0180	-0.0160	-0.0130	-0.01800	0.00200	-0.0030	
Max	5.3190	5.3220	5.3220	0.0060	0.0100	0.0080	0.00300	0.01800	0.0180	
Mean	5.3178	5.3213	5.3198	-0.0083	-0.0053	-0.0059	-0.00700	0.00850	0.0074	
Std. Dev	0.0013	0.0009	0.0036	0.0072	0.0080	0.0060	0.00817	0.00438	0.0069	
Mean - 3 Sigma	5.3138	5.3187	5.3090	-0.0299	-0.0294	-0.0238	-0.03150	-0.00464	-0.0134	
Mean + 3 Sigma	5.3218	5.3238	5.3305	0.0132	0.0187	0.0120	0.01751	0.02164	0.0282	
Limit: >5.1V			Limit: ±10uA			Limit: ±10uA				

SN	lin_low (C) VDDx=5.5V			lin_high (A) VDDx=5.5V			lin_high (B) VDDx=5.5V			
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	
17	-0.0170	0.0100	0.0060	-0.0040	0.0060	0.0060	0.00035	0.00200	0.01800	
33	0.0090	-0.0040	0.0010	-0.0040	-0.0130	0.0030	0.00300	0.01800	0.00900	
52	-0.0030	-0.0010	-0.0010	-0.0110	0.0030	-0.0060	0.00035	0.01600	0.00900	
13	-0.0060	-0.0130	0.0010	-0.0180	-0.0060	-0.0090	0.00300	0.00600	0.01100	
14	-0.0170	0.0080	0.0010	-0.0110	-0.0060	-0.0010	-0.01100	0.00200	0.01300	
15	-0.0009	0.0010	-0.0010	-0.0060	0.0030	-0.0040	0.00035	0.01100	0.00400	
16	0.0060	-0.0040	0.0060	-0.0010	0.0100	-0.0010	-0.01100	-0.00073	0.01100	
29	-0.0200	-0.0080	0.0080	-0.0150	-0.0090	0.0060	-0.00200	0.01800	0.01600	
30	-0.0150	0.0150	-0.0040	-0.0130	0.0009	0.0060	0.00035	0.02000	0.01100	
31	0.0060	-0.0010	-0.0110	-0.0080	-0.0060	0.0130	-0.01600	0.01600	0.01100	
32	-0.0060	0.0060	0.0030	0.0060	0.0030	-0.0040	-0.01100	0.01300	0.02000	
47	-0.0009	-0.0010	-0.0060	0.0100	-0.0040	-0.0010	-0.00700	0.02500	0.00400	
48	-0.0150	-0.0040	0.0060	-0.0110	0.0100	0.0009	-0.00200	0.01600	0.01100	
49	-0.0150	-0.0010	0.0100	-0.0060	0.0100	-0.0090	-0.00700	0.01300	-0.00073	
50	-0.0200	0.0080	0.0010	-0.0200	-0.0010	-0.0090	0.00500	0.02500	0.01600	
Min	-0.0200	-0.0130	-0.0110	-0.0200	-0.0090	-0.0090	-0.01600	-0.00073	-0.0007	
Max	0.0060	0.0150	0.0100	0.0100	0.0100	0.0130	0.00500	0.02500	0.0200	
Mean	-0.0086	0.0005	0.0012	-0.0078	0.0004	-0.0010	-0.00486	0.01369	0.0106	
Std. Dev	0.0096	0.0077	0.0061	0.0091	0.0069	0.0068	0.00658	0.00818	0.0058	
Mean - 3 Sigma	-0.0374	-0.0227	-0.0171	-0.0351	-0.0203	-0.0214	-0.02459	-0.01087	-0.0068	
Mean + 3 Sigma	0.0201	0.0236	0.0194	0.0196	0.0211	0.0194	0.01488	0.03824	0.0280	
Limit: ±10uA			Limit: ±10uA			Limit: ±10uA				

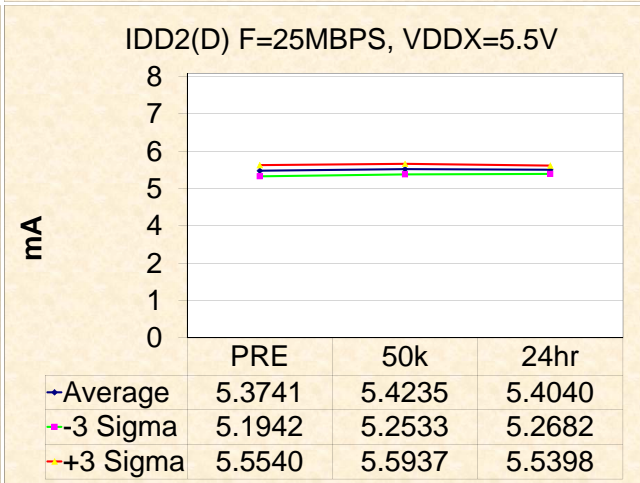
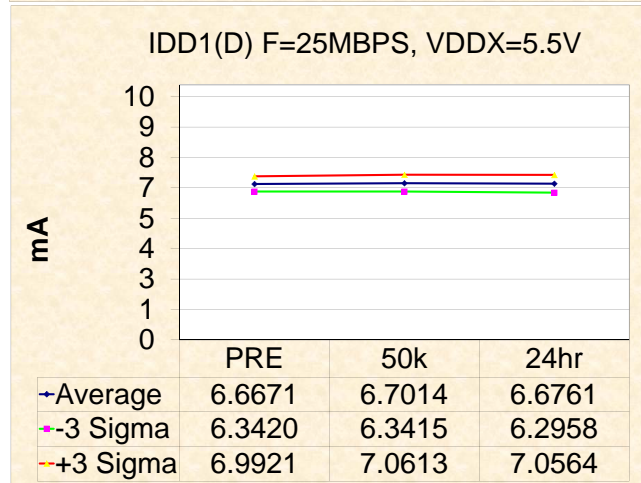
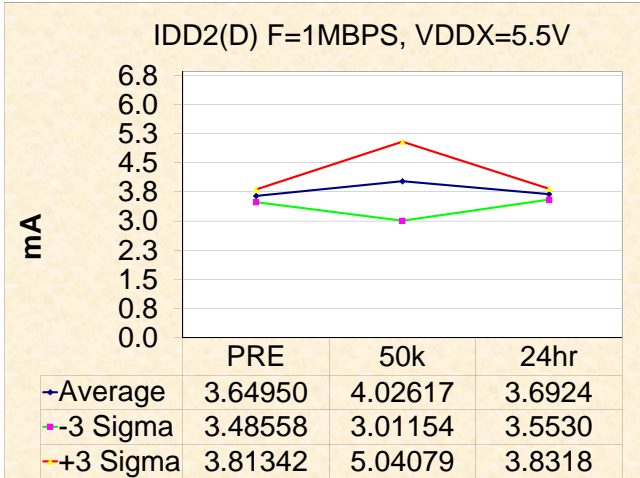
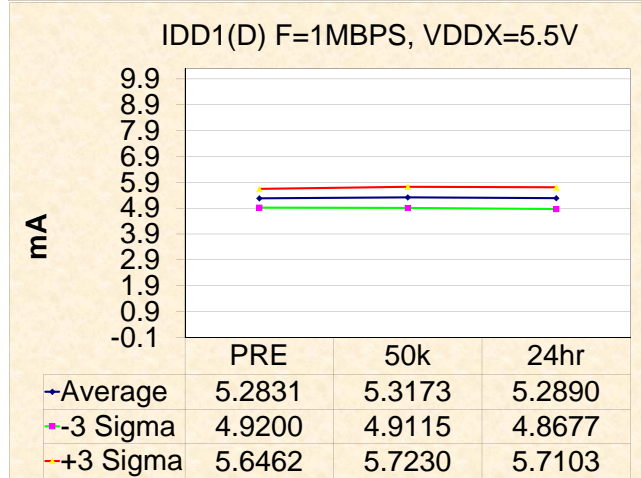
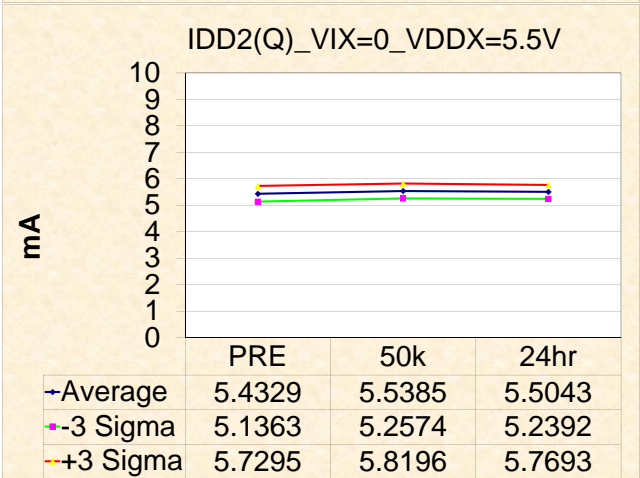
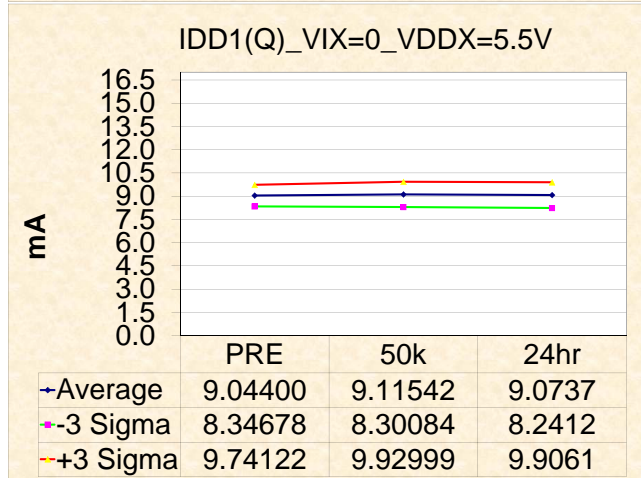
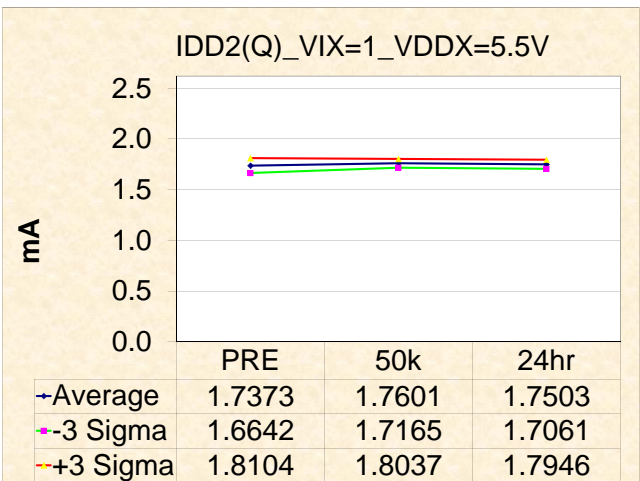
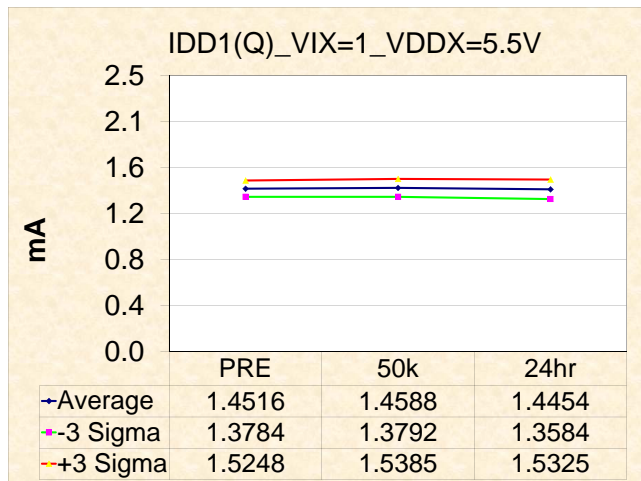
SN	lin_high (C) VDDx=5.5V			lin_low (D) VDDx=5.5V			lin_high (D) VDDx=5.5V			
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr	
17	-0.0130	0.0030	-0.0130	0.0060	0.0010	-0.0250	0.01100	-0.00400	-0.00600	
33	-0.0030	0.0170	-0.0010	-0.0030	-0.0250	-0.0180	0.01800	-0.00400	-0.01100	
52	-0.0200	-0.0010	0.0060	-0.0005	-0.0110	-0.0040	0.00600	-0.01500	-0.01500	
13	-0.0240	0.0010	0.0130	-0.0080	-0.0080	-0.0130	0.00200	-0.01300	-0.00100	
14	-0.0009	0.0130	0.0080	0.0040	-0.0230	-0.0060	0.00200	-0.00400	0.00099	
15	-0.0009	-0.0040	0.0170	0.0060	-0.0180	-0.0110	0.02100	-0.00100	-0.00100	
16	0.0060	-0.0040	0.0150	0.0060	-0.0180	-0.0060	-0.00054	-0.00400	-0.00400	
29	-0.0030	0.0170	0.0010	0.0060	-0.0130	-0.0150	0.00400	0.00099	-0.00800	
30	-0.0150	0.0030	-0.0010	-0.0050	-0.0180	-0.0200	-0.00054	0.00300	-0.01100	
31	0.0060	0.0030	-0.0060	0.0020	-0.0130	-0.0230	0.01100	-0.00400	0.00600	
32	-0.0009	0.0010	0.0080	0.0090	-0.0150	-0.0250	-0.00500	-0.02000	-0.01300	
47	0.0060	0.0030	0.0010	-0.0050	-0.0230	-0.0010	-0.00300	0.00099	-0.00600	
48	-0.0080	0.0060	0.0080	0.0060	-0.0150	-0.0130	0.01100	-0.00400	-0.00400	
49	-0.0009	-0.0040	0.0100	-0.0030	-0.0270	-0.0080	-0.00054	-0.01300	-0.02300	
50	-0.0100	0.0060	0.0060	-0.0005	-0.0010	-0.0250	0.01100	-0.00400	-0.01800	
Min	-0.0240	-0.0040	-0.0060	-0.0080	-0.0270	-0.0250	-0.00500	-0.02000	-0.0230	
Max	0.0060	0.0170	0.0170	0.0090	-0.0010	-0.0010	0.02100	0.00300	0.0060	
Mean	-0.0038	0.0034	0.0067	0.0015	-0.0160	-0.0138	0.00436	-0.00517	-0.0068	
Std. Dev	0.0091	0.0065	0.0069	0.0056	0.0070	0.0080	0.00759	0.00681	0.0083	
Mean - 3 Sigma	-0.0311	-0.0161	-0.0139	-0.0153	-0.0370	-0.0378	-0.01842	-0.02558	-0.0317	
Mean + 3 Sigma	0.0235	0.0230	0.0272	0.0182	0.0050	0.0102	0.02715	0.01525	0.0180	
Limit: ±10uA			Limit: ±10uA			Limit: ±10uA				

SN	IPD_ENH_VDD1_VDDx=5.5V			IPD_ENH_VDD2_VDDx=5.5V			IPU_ENL_VDD1_VDDx=5.5V		
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	0.0550	0.0680	0.0700	0.0580	0.0380	0.0450	-6.29200	-6.29200	-6.27100
33	0.0360	0.0660	0.0660	0.0530	0.0270	0.0340	-6.30600	-6.27800	-6.26900
52	0.0500	0.0680	0.0700	0.0530	0.0380	0.0450	-6.33900	-6.31100	-6.28800
13	0.0520	0.0680	0.0680	0.0390	0.0360	0.0310	-6.28900	-6.15000	-6.20900
14	0.0360	0.0590	0.0610	0.0490	0.0290	0.0380	-6.30100	-6.15700	-6.20900
15	0.0500	0.0680	0.0610	0.0580	0.0290	0.0410	-6.25200	-6.18800	-6.19300
16	0.0290	0.0780	0.1610	0.0440	0.0290	0.0380	-6.29400	-6.15500	-6.10500
29	0.0450	0.0780	0.0730	0.0600	0.0270	0.0240	-6.30100	-6.17600	-6.18600
30	0.0340	0.0700	0.0660	0.0580	0.0380	0.0340	-6.32900	-6.17400	-6.21600
31	0.0430	0.0780	0.0750	0.0420	0.0240	0.0240	-6.32000	-6.22800	-6.24500
32	0.0550	0.0610	0.0730	0.0490	0.0270	0.0310	-6.27500	-6.18800	-6.19500
47	0.0310	0.0630	0.0700	0.0510	0.0220	0.0310	-6.35500	-6.24000	-6.26100
48	0.0550	0.0730	0.0660	0.0490	0.0480	0.0410	-6.36900	-6.23500	-6.24500
49	0.0550	0.0750	0.0660	0.0490	0.0310	0.0380	-6.34800	-6.25000	-6.28000
50	0.0550	0.0750	0.0750	0.0390	0.0240	0.0360	-6.31000	-6.25000	-6.26600
Min	0.0290	0.0590	0.0610	0.0390	0.0220	0.0240	-6.36900	-6.25000	-6.2800
Max	0.0550	0.0780	0.1610	0.0600	0.0480	0.0410	-6.25200	-6.15000	-6.1050
Mean	0.0450	0.0705	0.0763	0.0489	0.0303	0.0339	-6.31192	-6.19925	-6.2175
Std. Dev	0.0101	0.0068	0.0271	0.0071	0.0073	0.0059	0.03413	0.03875	0.0473
Mean - 3 Sigma	0.0146	0.0501	-0.0051	0.0275	0.0085	0.0164	-6.41431	-6.31550	-6.3593
Mean + 3 Sigma	0.0754	0.0909	0.1576	0.0703	0.0521	0.0515	-6.20952	-6.08300	-6.0757
Limit: <15uA			Limit: <15uA			Limit: >-10uA			

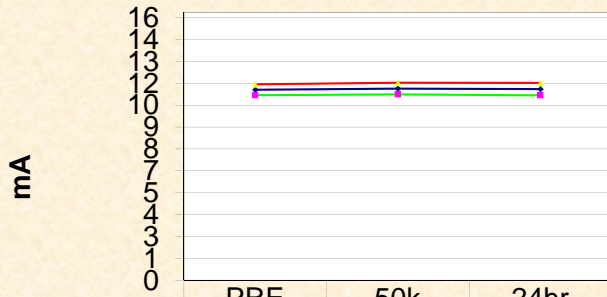
SN	IPU_ENL_VDD2_VDDx=5.5V			Ioz_low (D)_VDDx=5.5V			Ioz_high (D)_VDDx=5.5V		
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	-6.4120	-6.4270	-6.4290	0.0050	-0.0100	-0.0100	-0.00400	0.00400	-0.00300
33	-6.3720	-6.3840	-6.3580	-0.0090	-0.0100	-0.0030	0.00500	-0.00800	-0.01500
52	-6.3860	-6.3980	-6.3820	0.0050	-0.0150	-0.0150	0.00300	-0.00046	-0.00800
13	-6.3820	-6.2900	-6.3000	0.0030	0.0680	0.0730	0.01200	7.11700	5.24800
14	-6.4260	-6.2920	-6.3540	0.0100	0.0990	0.0400	-0.00200	8.42800	6.15900
15	-6.4210	-6.3280	-6.3610	0.0030	0.0870	0.0420	-0.00900	8.39000	6.18000
16	-6.3700	-6.3470	-6.3630	-0.0110	0.0590	0.0330	0.00500	8.30000	5.76400
29	-6.3820	-6.3020	-6.3020	-0.0040	0.0730	0.0540	-0.00900	6.90700	5.24600
30	-6.3720	-6.2880	-6.3280	0.0050	0.0630	0.0470	0.00500	4.77100	2.57100
31	-6.3890	-6.3160	-6.3230	-0.0090	-0.0080	0.0300	-0.00400	0.00200	2.43600
32	-6.3650	-6.3040	-6.3000	0.0120	0.0420	0.0020	0.00077	2.93700	1.46800
47	-6.4350	-6.3020	-6.3350	-0.0020	0.1150	0.0520	-0.00600	7.56900	5.77600
48	-6.4330	-6.3510	-6.3840	0.0120	0.1080	0.0470	-0.00200	8.99500	5.84900
49	-6.4400	-6.3560	-6.3750	0.0050	0.0470	0.0520	0.00500	8.23600	4.39900
50	-6.4050	-6.3610	-6.3790	-0.0110	0.0780	0.0420	-0.00200	8.23800	4.42500
Min	-6.4400	-6.3610	-6.3840	-0.0110	-0.0080	0.0020	-0.00900	0.00200	1.4680
Max	-6.3650	-6.2880	-6.3000	0.0120	0.1150	0.0730	0.01200	8.99500	6.1800
Mean	-6.4017	-6.3198	-6.3420	0.0011	0.0693	0.0428	-0.00052	6.65750	4.6268
Std. Dev	0.0281	0.0276	0.0315	0.0084	0.0334	0.0170	0.00634	2.73177	1.6162
Mean - 3 Sigma	-6.4860	-6.4024	-6.4364	-0.0243	-0.0308	-0.0081	-0.01954	-1.53782	-0.2219
Mean + 3 Sigma	-6.3173	-6.2371	-6.2476	0.0264	0.1693	0.0938	0.01851	14.85282	9.4754
Limit: >-10uA			Limit: ±20uA			Limit: ±20uA			

SN	Ioz_low (A)_VDDx=5.5V			Ioz_low (B)_VDDx=5.5V			Ioz_low (C)_VDDx=5.5V		
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	0.0240	0.0180	-0.0005	0.0020	0.0160	-0.0007	0.01300	0.00600	-0.00066
33	0.0170	0.0090	0.0040	0.0090	-0.0007	0.0040	0.01500	0.01300	0.00600
52	0.0100	0.0070	0.0070	0.0130	0.0110	0.0130	0.01100	0.01100	0.00900
13	0.0190	0.1100	0.0960	-0.0030	0.1450	0.0820	0.01100	0.15200	0.10200
14	0.0100	0.2160	0.1500	0.0090	0.2180	0.1450	0.00600	0.18200	0.10900
15	0.0120	0.1740	0.1310	0.0110	0.2320	0.1660	0.01100	0.15400	0.08800
16	0.0030	0.1240	0.0610	0.0200	0.1080	0.0440	-0.00600	0.09500	0.05100
29	0.0070	0.1130	0.0770	0.0180	0.1050	0.0960	0.01100	0.13500	0.09300
30	-0.0020	0.0870	0.0580	0.0230	0.0980	0.0650	0.00600	0.07200	0.05600
31	-0.0050	0.0110	0.0840	0.0230	0.0130	0.0600	-0.00600	0.00600	0.05600
32	0.0140	0.0910	0.0540	0.0060	0.0860	0.0750	0.01100	0.07900	0.05100
47	0.0190	0.1290	0.0840	0.0040	0.1330	0.0580	0.00400	0.10200	0.05600
48	0.0170	0.1150	0.0580	0.0040	0.0960	0.0650	0.02200	0.10500	0.04600
49	0.0170	0.0980	0.0470	0.0090	0.1310	0.0750	0.01800	0.09500	0.03900
50	0.0190	0.0960	0.0630	0.0040	0.1310	0.0630	0.00800	0.08800	0.03700
Min	-0.0050	0.0110	0.0470	-0.0030	0.0130	0.0440	-0.00600	0.00600	0.0370
Max	0.0190	0.2160	0.1500	0.0230	0.2320	0.1660	0.02200	0.18200	0.1090
Mean	0.0108	0.1137	0.0803	0.0107	0.1247	0.0828	0.00800	0.10542	0.0653
Std. Dev	0.0084	0.0494	0.0319	0.0085	0.0580	0.0366	0.00825	0.04622	0.0254
Mean - 3 Sigma	-0.0144	-0.0344	-0.0154	-0.0148	-0.0492	-0.0270	-0.01674	-0.03325	-0.0107
Mean + 3 Sigma	0.0361	0.2617	0.1759	0.0361	0.2986	0.1927	0.03274	0.24408	0.1414
Limit: ±20uA			Limit: ±20uA			Limit: ±20uA			

SN	loz_high (A)_VDDx=5.5V			loz_high (B)_VDDx=5.5V			loz_high (C)_VDDx=5.5V		
	PRE	50k	24hr	PRE	50k	24hr	PRE	50k	24hr
17	0.0120	0.0180	0.0300	0.0270	0.0230	0.0180	-0.00100	0.02000	0.00200
33	0.0100	0.0280	0.0180	0.0160	0.0300	0.0110	0.00100	0.00900	0.01300
52	0.0100	0.0300	0.0250	0.0200	0.0130	0.0130	-0.00400	0.00600	0.01100
13	0.0120	7.6560	5.8720	0.0250	7.5740	5.7270	-0.01300	10.24100	7.92200
14	0.0100	13.2040	10.6950	0.0270	12.7720	10.3120	-0.00100	14.51500	11.43100
15	0.0260	13.1590	10.7160	0.0160	12.7090	10.3260	0.00800	14.49000	11.41900
16	0.0140	4.9420	3.8220	0.0200	4.1230	2.9820	0.01100	3.74000	2.79300
29	0.0190	8.0070	6.0300	0.0230	7.0680	5.7300	0.00400	9.11000	7.29500
30	0.0280	2.9680	2.3230	0.0160	3.8620	3.0290	0.01300	3.20600	2.55200
31	0.0170	0.0940	4.1000	0.0090	0.0160	3.7350	0.00800	0.02300	3.59400
32	0.0140	4.2480	3.4450	0.0180	3.2450	2.6200	0.00800	3.15400	2.43500
47	0.0240	4.8760	3.6810	0.0090	3.8120	2.8690	0.01500	4.32000	3.15400
48	0.0210	5.4340	3.8310	0.0180	2.9330	2.1560	0.01100	5.90800	4.26000
49	0.0140	4.6180	3.5140	0.0110	5.9340	4.2500	0.01300	4.75400	3.38400
50	0.0140	4.6250	3.5020	0.0130	5.9080	4.2500	0.00800	4.76300	3.40500
Min	0.0100	0.0940	2.3230	0.0090	0.0160	2.1560	-0.01300	0.02300	2.4350
Max	0.0280	13.2040	10.7160	0.0270	12.7720	10.3260	0.01500	14.51500	11.4310
Mean	0.0178	6.1526	5.1276	0.0171	5.8297	4.8322	0.00708	6.51867	5.3037
Std. Dev	0.0058	3.8528	2.7973	0.0060	3.8119	2.8007	0.00766	4.58919	3.3546
Mean - 3 Sigma	0.0003	-5.4059	-3.2642	-0.0008	-5.6062	-3.5699	-0.01589	-7.24890	-4.7603
Mean + 3 Sigma	0.0352	17.7111	13.5194	0.0350	17.2655	13.2343	0.03005	20.28623	15.3676
Limit: ±20uA			Limit: ±20uA			Limit: ±20uA			

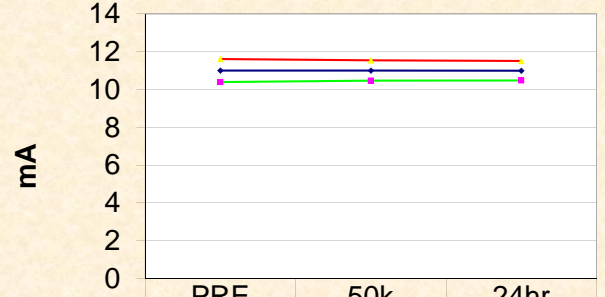


IDD1(D) F=100MBPS, VDDX=5.5V



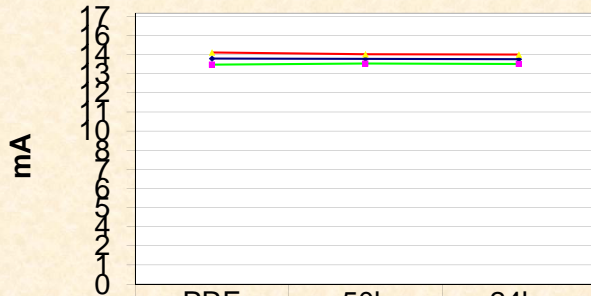
	PRE	50k	24hr
→Average	11.31425	11.38467	11.3542
→-3 Sigma	10.99129	11.04186	10.9845
→+3 Sigma	11.63721	11.72747	11.7238

IDD2(D) F=100MBPS, VDDX=5.5V



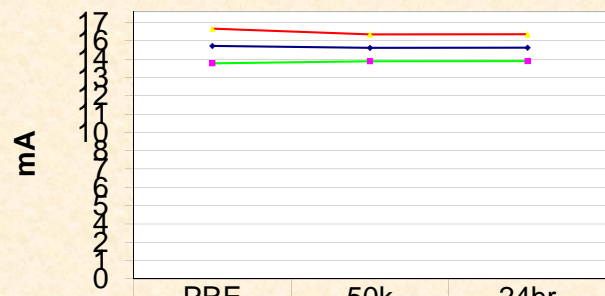
	PRE	50k	24hr
→Average	11.0054	11.0068	10.9986
→-3 Sigma	10.3929	10.4708	10.4818
→+3 Sigma	11.6179	11.5429	11.5154

IDD1(D) F=150MBPS, VDDX=5.5V



	PRE	50k	24hr
→Average	14.1508	14.1281	14.1068
→-3 Sigma	13.7646	13.8375	13.8083
→+3 Sigma	14.5369	14.4187	14.4054

IDD2(D) F=150MBPS, VDDX=5.5V



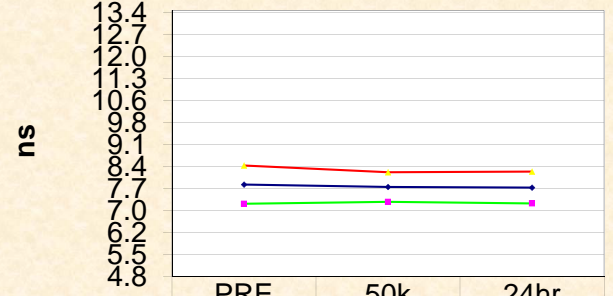
	PRE	50k	24hr
→Average	15.26508	15.14092	15.1489
→-3 Sigma	14.12719	14.26498	14.2657
→+3 Sigma	16.40298	16.01686	16.0321

Prop Delay: tPLH(A)_VDDX=5.5V



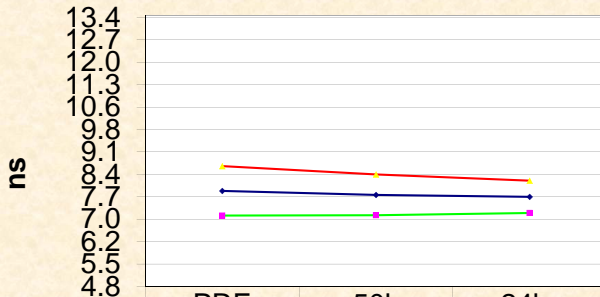
	PRE	50k	24hr
→Average	7.8205	7.7405	7.7083
→-3 Sigma	7.1102	7.1312	7.1885
→+3 Sigma	8.5308	8.3498	8.2280

Prop Delay: tPLH(B)_VDDX=5.5V



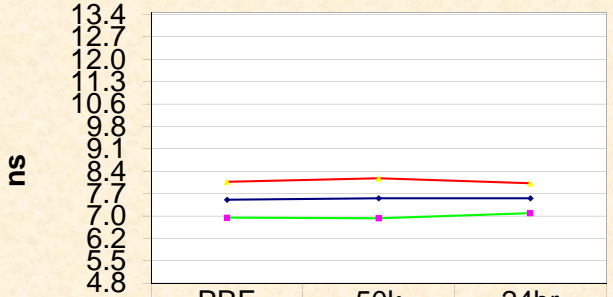
	PRE	50k	24hr
→Average	7.8045	7.7243	7.7083
→-3 Sigma	7.1789	7.2422	7.1885
→+3 Sigma	8.4301	8.2063	8.2280

Prop Delay: tPLH(C)_VDDX=5.5V



	PRE	50k	24hr
→Average	7.86858	7.74033	7.6762
→-3 Sigma	7.07300	7.08354	7.1566
→+3 Sigma	8.66416	8.39712	8.1957

Prop Delay: tPLH(D)_VDDX=5.5V



	PRE	50k	24hr
→Average	7.4841	7.5322	7.5321
→-3 Sigma	6.9097	6.8892	7.0506
→+3 Sigma	8.0585	8.1751	8.0136

