

RADIATION TEST REPORT

PRODUCT:	AD8367R703F
GAMMA:	100k/ TM1019 Condition A
GAMMA SOURCE:	Co60
DOSE RATE:	106 Rad(si)/s
FACILITIES:	University of Massachusetts @ Lowell
TESTED:	7/26/12

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SN	3V Total Supply Current (mA)		3V Disable Current (mA)		3V IIL ENBL @ VIL min (uA)	
	PRE	100k	PRE	100k	PRE	100k
21	21.9581	22.0082	0.7775	0.7726	-0.00218	-0.00288
1	23.3713	23.2863	0.8119	0.8017	-0.00218	0.00034087
2	21.7503	21.6029	0.7682	0.7601	0.00319	-0.00073273
3	21.8854	21.7484	0.7775	0.7736	-0.0011	0.00034087
4	23.3817	23.1304	0.8098	0.8059	-0.00218	0.00034087
41	22.0309	21.9458	0.7827	0.7809	-0.00325	-0.00503
42	22.5608	22.4654	0.7859	0.7882	0.00427	-0.00503
43	21.9581	21.8419	0.7848	0.7820	-0.0054	0.00356
44	22.5089	22.3303	0.7859	0.7830	-0.00432	-0.00073273
Min	21.7503	21.6029	0.7682	0.7601	-0.00540	-0.00503
Max	23.3817	23.2863	0.8119	0.8059	0.00427	0.00356
Mean	22.4309	22.2939	0.7883	0.7844	-0.00137	-0.00087
Std. Dev	0.6498	0.6342	0.0151	0.0147	0.00343	0.00290
Mean - 3 Sigma	20.4815	20.3912	0.7430	0.7404	-0.01167	-0.00955
Mean + 3 Sigma	24.3804	24.1966	0.8336	0.8284	0.00893	0.00782

SN	3V IIL ENBL @ VIL max (uA)		3V IIH ENBL @ VIH min (uA)		3V IIH ENBL @ VIH max (uA)	
	PRE	100k	PRE	100k	PRE	100k
21	3.2103	3.1989	13.4155	13.3280	14.6727	14.5735
1	3.4540	3.4501	14.4493	14.5326	15.81714	15.90154
2	3.1029	3.1001	12.9581	13.0081	14.1649	14.22887
3	3.2532	3.2601	13.5894	13.6469	14.86273	14.93315
4	3.4733	3.4759	14.5663	14.6271	15.93308	15.99924
41	3.2543	3.2633	13.5851	13.6512	14.86058	14.93101
42	3.2865	3.2848	13.6495	13.7167	14.93573	15.00509
43	3.2779	3.2816	13.7204	13.7886	15.01195	15.08453
44	3.3091	3.3127	13.8213	13.8670	15.11716	15.17149
Min	3.1029	3.1001	12.9581	13.0081	14.16490	14.22887
Max	3.4733	3.4759	14.5663	14.6271	15.93308	15.99924
Mean	3.3014	3.3036	13.7924	13.8548	15.08791	15.15687
Std. Dev	0.1181	0.1177	0.5123	0.5184	0.56445	0.56756
Mean - 3 Sigma	2.9472	2.9505	12.2555	12.2996	13.39457	13.45419
Mean + 3 Sigma	3.6556	3.6567	15.3293	15.4099	16.78125	16.85954

SN	3V IIL MODE @ VIL min (uA)		3V IIL MODE @ VIL max (uA)		3V IIH MODE @ VIH min (uA)	
	PRE	100k	PRE	100k	PRE	100k
21	-0.0018	0.0023	0.0048	0.0014	5.21909	5.1941
1	-0.0008	0.0034	0.0037	0.0035	5.52133	5.61723
2	-0.0039	0.0002	0.0026	0.0024	5.04623	5.14108
3	-0.0008	-0.0009	0.0016	0.0035	5.29332	5.38817
4	-0.0018	0.0023	0.0026	0.0003	5.56587	5.65223
41	0.0014	-0.0009	0.0069	0.0046	5.28272	5.38287
42	0.0003	-0.0009	0.0026	0.0056	5.31241	5.40726
43	-0.0061	-0.0009	0.0048	0.0024	5.32408	5.4168
44	-0.0039	0.0013	0.0016	0.0046	5.38877	5.46452
Min	-0.0061	-0.0009	0.0016	0.0003	5.04623	5.14108
Max	0.0014	0.0034	0.0069	0.0056	5.56587	5.65223
Mean	-0.0020	0.0005	0.0033	0.0034	5.34184	5.43377
Std. Dev	0.0025	0.0017	0.0018	0.0016	0.15992	0.15751
Mean - 3 Sigma	-0.0094	-0.0046	-0.0021	-0.0016	4.86208	4.96125
Mean + 3 Sigma	0.0055	0.0055	0.0087	0.0083	5.82161	5.90629

SN	3V IIH MODE @ VIH max (uA)		3V IGAIN @ 0V (uA)		3V IGAIN @ 1V (uA)	
	PRE	100k	PRE	100k	PRE	100k
21	8.0382	7.9897	-0.0633	-0.0641	-0.05903	-0.04063
1	8.4952	8.5953	-0.0313	-0.0182	-0.05157	-0.03424
2	7.7571	7.8529	-0.0430	-0.0161	-0.0665	-0.04277
3	8.1325	8.2305	-0.0377	-0.0502	-0.02278	-0.06409
4	8.5737	8.6546	-0.0505	-0.0374	-0.0601	-0.05983
41	8.1198	8.2241	-0.0228	-0.0545	-0.02811	-0.01718
42	8.1569	8.2623	-0.0612	-0.0204	-0.06756	-0.04703
43	8.1675	8.2761	-0.0686	-0.0460	-0.0473	-0.01931
44	8.2725	8.3577	-0.0654	-0.0673	-0.04624	-0.04383
Min	7.7571	7.8529	-0.0686	-0.0673	-0.06756	-0.06409
Max	8.5737	8.6546	-0.0228	-0.0161	-0.02278	-0.01718
Mean	8.2094	8.3067	-0.0476	-0.0388	-0.04877	-0.04104
Std. Dev	0.2511	0.2474	0.0167	0.0190	0.01654	0.01698
Mean - 3 Sigma	7.4561	7.5645	-0.0977	-0.0957	-0.09838	-0.09198
Mean + 3 Sigma	8.9627	9.0488	0.0025	0.0181	0.00084	0.00991

SN	3V VGA Up midrange Gain (dB)		3V VGA Down midrange Gain (dB)		3V AGC midrange VOUT Pwr (dBm)	
	PRE	100k	PRE	100k	PRE	100k
21	20.2227	20.1649	20.9690	21.0435	3.98343	3.6011
1	19.8813	19.6060	21.2346	20.9112	4.0001	3.90575
2	20.3603	20.0849	20.9752	20.6555	3.26979	3.18664
3	20.2427	20.0077	21.0143	20.7550	3.9019	3.84251
4	19.9124	19.7433	21.1963	20.9857	3.81239	3.76404
41	20.0084	19.9070	21.1272	20.9863	3.96652	3.94849
42	20.0525	19.9213	21.3055	21.1659	4.03526	4.03044
43	20.1547	20.0077	20.9561	20.7797	3.69269	3.65283
44	20.0506	19.9252	21.2208	21.0638	4.16608	4.12691
Min	19.8813	19.6060	20.9561	20.6555	3.26979	3.18664
Max	20.3603	20.0849	21.3055	21.1659	4.16608	4.12691
Mean	20.0829	19.9004	21.1287	20.9129	3.85559	3.80720
Std. Dev	0.1625	0.1556	0.1320	0.1717	0.27661	0.29124
Mean - 3 Sigma	19.5954	19.4336	20.7328	20.3978	3.02577	2.93347
Mean + 3 Sigma	20.5704	20.3672	21.5247	21.4279	4.68541	4.68093

SN	5.25V Total Supply Current (mA)		5V Total Supply Current (mA)		5V Disable Current (mA)	
	PRE	100k	PRE	100k	PRE	100k
21	25.8941	25.9419	25.6649	25.7064	1.28178	1.28103
1	27.7752	27.7096	27.4888	27.4346	1.35361	1.34453
2	25.8337	25.7305	25.5785	25.4888	1.27033	1.27374
3	25.7223	25.6295	25.5181	25.4357	1.29115	1.2904
4	27.7804	27.5555	27.4794	27.2721	1.3609	1.3539
41	26.0076	25.9679	25.7836	25.7532	1.3078	1.30497
42	26.7186	26.6591	26.4852	26.4424	1.30885	1.30497
43	25.8483	25.7857	25.6274	25.5700	1.30468	1.30809
44	26.6416	26.4749	26.3915	26.2457	1.31093	1.30913
Min	25.7223	25.6295	25.5181	25.4357	1.27033	1.27374
Max	27.7804	27.7096	27.4888	27.4346	1.36090	1.35390
Mean	26.5410	26.4391	26.2941	26.2053	1.31353	1.31122
Std. Dev	0.8482	0.8209	0.8192	0.7947	0.03014	0.02635
Mean - 3 Sigma	23.9964	23.9765	23.8365	23.8213	1.22312	1.23215
Mean + 3 Sigma	29.0856	28.9016	28.7517	28.5894	1.40394	1.39028

SN	5V IIL ENBL @ VIL min (uA)		5V IIL ENBL @ VIL max (uA)		5V IIH ENBL @ VIH min (uA)	
	PRE	100k	PRE	100k	PRE	100k
21	0.0053	0.0014	3.2124	3.1946	13.41332	13.33234
1	0.0010	0.0057	3.4540	3.4544	14.4579	14.5337
2	-0.0043	0.0057	3.0986	3.1044	12.96027	13.01348
3	-0.0011	0.0057	3.2543	3.2580	13.58616	13.64798
4	0.0032	0.0068	3.4744	3.4770	14.56741	14.62817
41	0.0043	0.0025	3.2575	3.2526	13.58616	13.64476
42	-0.0011	-0.0040	3.2844	3.2837	13.65058	13.71347
43	0.0021	0.0046	3.2790	3.2827	13.72358	13.78647
44	-0.0043	0.0068	3.3123	3.3159	13.81698	13.8627
Min	-0.0043	-0.0040	3.2575	3.2526	13.58616	13.64476
Max	0.0043	0.0068	3.3123	3.3159	13.81698	13.86270
Mean	0.0002	0.0025	3.2833	3.2837	13.69433	13.75185
Std. Dev	0.0038	0.0046	0.0225	0.0259	0.09919	0.09386
Mean - 3 Sigma	-0.0110	-0.0114	3.2157	3.2061	13.39677	13.47028
Mean + 3 Sigma	0.0115	0.0164	3.3509	3.3613	13.99188	14.03342

SN	5V IIH ENBL @ VIH max (uA)		5V IIL MODE @ VIL min (uA)		5V IIL MODE @ VIL max (uA)	
	PRE	100k	PRE	100k	PRE	100k
21	27.8624	27.6636	-0.0008	-0.0019	-0.00054777	0.00031882
1	30.0557	30.1490	0.0014	0.0013	0.0005127	0.00244
2	26.8951	26.9636	-0.0050	0.0034	0.00263	0.00244
3	28.2285	28.3035	0.0003	0.0013	0.00157	0.00244
4	30.2737	30.3562	-0.0008	0.0023	0.00688	0.0035
41	28.2188	28.2970	-0.0029	-0.0009	0.00369	0.00562
42	28.3563	28.4377	-0.0029	-0.0019	0.00263	0.00668
43	28.4926	28.5740	0.0003	-0.0009	-0.00054777	0.0035
44	28.6987	28.7662	-0.0050	0.0013	0.00369	0.00668
Min	28.2188	28.2970	-0.0050	-0.0019	-0.00055	0.00350
Max	28.6987	28.7662	0.0003	0.0013	0.00369	0.00668
Mean	28.4416	28.5187	-0.0026	-0.0006	0.00237	0.00562
Std. Dev	0.2046	0.2000	0.0022	0.0013	0.00201	0.00150
Mean - 3 Sigma	27.8277	27.9187	-0.0092	-0.0046	-0.00365	0.00112
Mean + 3 Sigma	29.0555	29.1188	0.0039	0.0034	0.00838	0.00812

SN	5V IIH MODE @ VIH min (uA)		5V IIH MODE @ VIH max (uA)		5V IGAIN @ 0V (uA)	
	PRE	100k	PRE	100k	PRE	100k
21	5.2085	5.1793	17.7627	17.6375	-0.04197	-0.06195
1	5.5065	5.5897	18.7723	18.8656	-0.01424	-0.03316
2	5.0346	5.1199	17.1243	17.2165	-0.0377	-0.03956
3	5.2753	5.3606	17.9907	18.0787	-0.06436	-0.03956
4	5.5553	5.6268	18.9525	19.0300	-0.03237	-0.02143
41	5.2668	5.3585	17.9504	18.0458	-0.01958	-0.04595
42	5.2954	5.3818	18.0395	18.1349	-0.07289	-0.02037
43	5.3071	5.3988	18.0575	18.1540	-0.03877	-0.05982
44	5.3676	5.4454	18.2707	18.3470	-0.03877	-0.06408
Min	5.2668	5.3585	17.9504	18.0458	-0.07289	-0.06408
Max	5.3676	5.4454	18.2707	18.3470	-0.01958	-0.02037
Mean	5.3092	5.3961	18.0795	18.1704	-0.04250	-0.04756
Std. Dev	0.0424	0.0368	0.1358	0.1268	0.02219	0.01971
Mean - 3 Sigma	5.1820	5.2857	17.6722	17.7900	-0.10906	-0.10668
Mean + 3 Sigma	5.4365	5.5065	18.4868	18.5508	0.02406	0.01157

SN	5V IGAIN @ 1V (uA)		5V VGA Up midrange Gain (dB)		5V VGA Down midrange Gain (dB)	
	PRE	100k	PRE	100k	PRE	100k
21	-0.0377	-0.0225	20.3170	20.2366	21.13389	21.21959
1	-0.0590	-0.0502	20.0147	19.8174	21.37216	21.17523
2	-0.0388	-0.0545	20.4441	20.3380	21.10575	20.96185
3	-0.0217	-0.0620	20.3216	20.2235	21.16794	21.05743
4	-0.0569	-0.0588	19.9660	19.9294	21.35036	21.25561
41	-0.0644	-0.0300	20.0928	20.1265	21.29338	21.28963
42	-0.0249	-0.0598	20.1390	20.1553	21.47634	21.47285
43	-0.0356	-0.0321	20.2538	20.2556	21.12027	21.10241
44	-0.0366	-0.0246	20.1151	20.1226	21.38357	21.35307
Min	-0.0644	-0.0598	20.0928	20.1226	21.12027	21.10241
Max	-0.0249	-0.0246	20.2538	20.2556	21.47634	21.47285
Mean	-0.0404	-0.0366	20.1502	20.1650	21.31839	21.30449
Std. Dev	0.0168	0.0158	0.0716	0.0621	0.15174	0.15466
Mean - 3 Sigma	-0.0909	-0.0840	19.9353	19.9786	20.86317	20.84050
Mean + 3 Sigma	0.0102	0.0107	20.3650	20.3515	21.77361	21.76848

SN	5V AGC midrange VOUT Pwr (dBm)	
	PRE	100k
21	4.0132	3.6176
1	4.0114	3.9280
2	3.2630	3.1810
3	3.9463	3.8837
4	3.8302	3.7770
41	3.9978	3.9777
42	4.1035	4.0782
43	3.7060	3.6820
44	4.2070	4.1725
Min	3.7060	3.6820
Max	4.2070	4.1725
Mean	4.0036	3.9776
Std. Dev	0.2160	0.2125
Mean - 3 Sigma	3.3556	3.3400
Mean + 3 Sigma	4.6516	4.6152







