

RADIATION TEST REPORT

PRODUCT: AD6645ASQ/QMLR

MASK:

FILE:

DATE CODE:

GAMMA: 0, 100K

GAMMA SOURCE: Co60

DOSE RATE: 64 rad/sec

FACILITIES: Univerity Of Massachusetts
@ Lowell

TESTED: 28-Feb-08

The RADTESTSM 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.

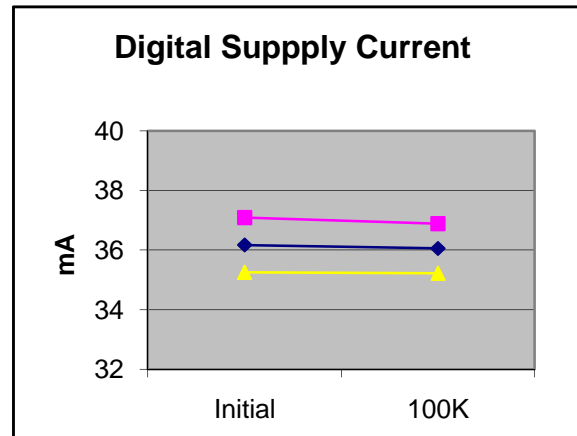
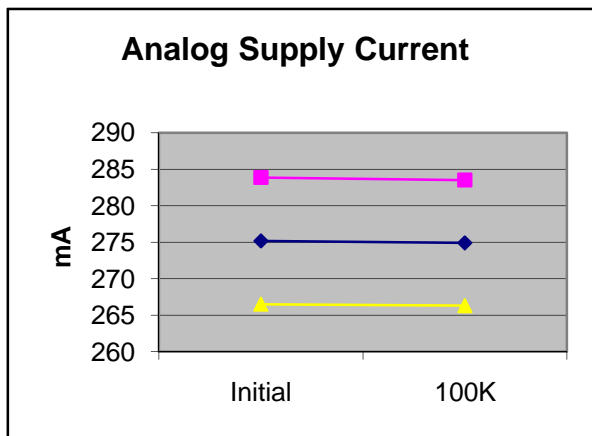
WARNING:

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 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 does not guarantee that wafer manufacturing is the same for all process levels.



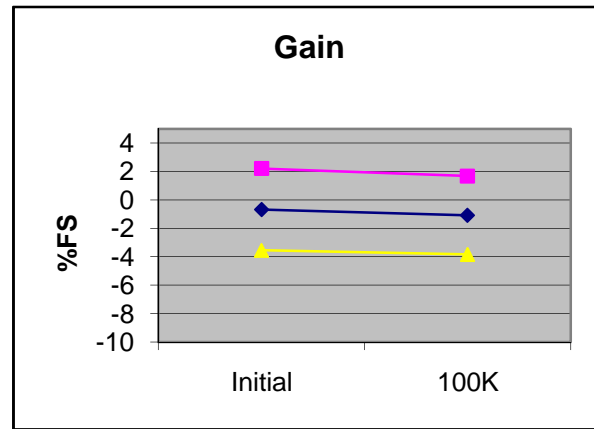
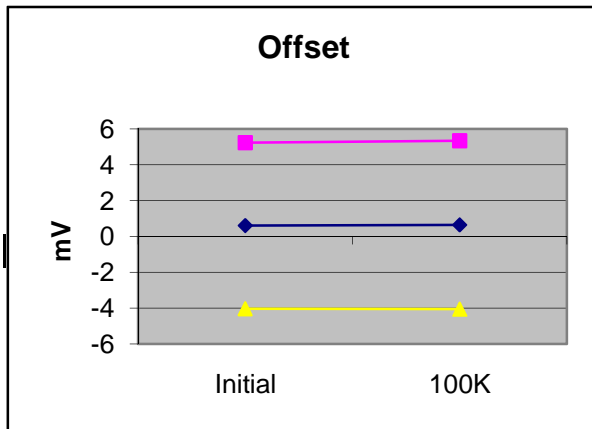
1	AVCCI @5V (mA)	
S/N	Initial	100K
11	277.5651	276.2861
7	275.4764	275.2574
8	280.0278	279.5282
9	277.0975	276.6602
10	276.6922	276.6602
18	271.6421	271.3606
19	271.4551	271.1112
20	273.5748	273.2622
21	275.5388	275.4444
min	271.4551	271.1112
max	280.0278	279.5282
stdev	2.8946	2.8686
average	275.1881	274.9105
+3S	283.8717	283.5165
-3S	266.5044	266.3046

2	DVCCI @3.3V (mA)	
S/N	Initial	100K
11	36.4824	28.1166
7	36.4512	36.3852
8	36.4512	36.3228
9	36.3576	36.2292
10	36.5448	36.2916
18	35.8896	35.7611
19	35.9208	35.8547
20	35.8272	35.7299
21	35.9208	35.8547
min	35.8272	35.7299
max	36.5448	36.3852
stdev	0.3057	0.2776
average	36.1704	36.0537
+3S	37.0876	36.8863
-3S	35.2532	35.2210



3	Offset Error (mV)	
S/N	Initial	100K
11	1.3428	1.3428
7	1.5442	1.6114
8	2.2828	2.2828
9	2.1485	2.3499
10	-1.6114	-1.5442
18	-0.9400	-0.9400
19	0.8057	0.8057
20	1.5442	1.5442
21	-0.9400	-0.9400
min	-1.6114	-1.5442
max	2.2828	2.3499
stdev	1.5440	1.5663
average	0.6043	0.6462
+3S	5.2363	5.3453
-3S	-4.0278	-4.0528

4	Gain Error (%FS)	
S/N	Initial	100K
11	-0.9400	-1.1728
7	-1.2070	-1.6522
8	-2.1179	-2.4055
9	-1.0358	-1.3988
10	-1.0495	-1.4125
18	0.4434	0.0051
19	0.7584	0.2927
20	-0.0702	-0.4948
21	-1.0495	-1.5426
min	-2.1179	-2.4055
max	0.7584	0.2927
stdev	0.9596	0.9192
average	-0.6660	-1.0761
+3S	2.2129	1.6816
-3S	-3.5449	-3.8337



5	DNL min (LSB)	
S/N	Initial	100K
11	-0.6280	-0.6395
7	-0.6853	-0.6412
8	-0.7265	-0.7233
9	-0.7112	-0.6270
10	-0.6730	-0.6792
18	-0.7659	-0.8124
19	-0.7738	-0.7627
20	-0.7073	-0.6681
21	-0.7017	-0.6853
min	-0.7738	-0.8124
max	-0.6730	-0.6270
stdev	0.0359	0.0628
average	-0.7181	-0.6999
+3S	-0.6105	-0.5116
-3S	-0.8257	-0.8882

6	DNL max (LSB)	
S/N	Initial	100K
11	0.5829	0.5245
7	1.2392	0.6811
8	0.5049	0.5191
9	0.4768	0.5910
10	0.4635	0.5248
18	0.4734	0.5133
19	0.5375	0.6830
20	0.6265	0.5329
21	0.5780	0.4938
min	0.4635	0.4938
max	1.2392	0.6830
stdev	0.2595	0.0761
average	0.6125	0.5674
+3S	1.3909	0.7957
-3S	-0.1659	0.3391

