

RELIABILITY REPORT





Reliability Data Report Product Family R365

LT1317 / LT1766 / LT1940 / LT1941 /
LT1942 / LT1943 / LT1944 / LT1945 /
LT1946 / LT1947 / LT1948 / LT1949 /
LT1952 / LT1956 / LT1961 / LT3010 /
LT3020 / LT3023 / LT3024 / LT3479 /
LT3483 / LT3740 / LT3750 / LT3844 /
LT3845

Reliability Data Report

Report Number: R365

Report generated on: Fri May 02 14:08:19 PDT 2014

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C) ¹	No. of FAILURES _{2,3}
QFN/DFN	512	0102	0710	564	0
SSOP/TSSOP	1101	0233	1313	656	0
SOIC/SOT/MSOP	1512	9740	1225	1643	0
Totals	3,125	-	-	2,863	0

HIGHLY ACCELERATED STRESS TEST AT +130 DEG C / 85% RH					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+85°C) ⁴	No. of FAILURES
QFN/DFN	72	0112	0112	138	0
Totals	72	-	-	138	0

PRESSURE COOKER TEST AT 15 PSIG , +121 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	6824	0102	1310	811	0
SSOP/TSSOP	22479	0114	1323	1976	0
SOIC/SOT/MSOP	36157	9812	1322	2588	0
PLASTIC DIP	921	0823	0926	270	0
Totals	66,381	-	-	5,645	0

TEMP CYCLE FROM -65 TO 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
QFN/DFN	5847	0112	1310	1032	0
SSOP/TSSOP	22209	9144	1323	7022	0
SOIC/SOT/MSOP	61213	9812	1322	9720	0
PLASTIC DIP	693	0823	0926	616	0
Totals	89,962	-	-	18,390	0

THERMAL SHOCK FROM -65 TO 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
QFN/DFN	5938	0112	1310	1151	0
SSOP/TSSOP	24719	9144	1323	7216	0
SOIC/SOT/MSOP	33462	9812	1322	6485	0
PLASTIC DIP	231	0926	0926	115	0
Totals	64,350	-	-	14,967	0

(1) Assumes Activation Energy = 1.0 Electron Volts
 (2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.64 FITS
 (3) Mean Time Between Failure in Years = 178282.14
 (4) Assumes 20X Acceleration from 85 °C to +130 °C
 Note 1: 1 FIT = 1 Failure in One Billion Hours.
 Note 2: HAST, Temp Cycle & Thermal Shock are subjected to J-STD-020 MSL Preconditioning

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HIGH TEMPERATURE BAKE AT 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	50	0837	0837	50	0
SSOP/TSSOP	512	0904	0930	512	0
SOIC/SOT/MSOP	50	1238	1238	50	0
PLASTIC DIP	600	0823	0926	600	0
Totals	1,212	-	-	1,212	0
HIGH TEMPERATURE BAKE AT 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
SSOP/TSSOP	681	0904	1015	639	0
SOIC/SOT/MSOP	2194	0650	1314	2740	0
PLASTIC DIP	600	0823	0926	575	0
Totals	3,475	-	-	3,954	0