



Reliability Data Report Product Family R518

LT3003 / LT3475 / LT3478 / LT3491 /
LT3492 / LT3496 / LT3497 / LT3498 /
LT3517 / LT3518 / LT3519 / LT3590 /
LT3591 / LT3592 / LT3593 / LT3595 /
LT3596 / LT3597 / LT3598 / LT3599 /
LT3745 / LT3746 / LT3754 / LT3755 /
LT3756 / LT3760 / LT3761 / LT3791 /
LT3796 / LT3956

Reliability Data Report

Report Number: R518

Report generated on: Wed Oct 03 17:34:20 PDT 2012

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C)¹	No. of FAILURES _{2,3}
SSOP/TSSOP	535	0640	1150	2090	0
SOIC/SOT/MSOP	384	0710	0917	1087	0
QFN/DFN	1795	0703	1041	2457	0
Totals	2,714	-	-	5,634	0

HIGHLY ACCELERATED STRESS TEST AT +131 DEG C / 85% RH					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+85°C)⁴	No. of FAILURES
SSOP/TSSOP	240	0946	1131	460	0
Totals	240	-	-	460	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	11137	0520	1122	1088	0
SSOP/TSSOP	4406	0550	1122	374	0
SOIC/SOT/MSOP	4757	0721	1122	253	0
TO-220	50	0813	0813	1	0
Totals	20,350	-	-	1,716	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	6184	0552	1122	2177	0
SSOP/TSSOP	4460	0550	1122	975	0
SOIC/SOT/MSOP	2780	0745	1117	678	0
Totals	13,424	-	-	3,830	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	9609	0520	1122	2582	0
SSOP/TSSOP	4027	0550	1122	976	0
SOIC/SOT/MSOP	2856	0646	1117	422	0
TO-220	50	0813	0813	5	0
Totals	16,542	-	-	3,985	0

(1) Assumes Activation Energy = 1.0 Electron Volts
(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.33 FITS
(3) Mean Time Between Failure in Years = 350835.38
(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 1 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	1413	0801	1021	1263	0
SSOP/TSSOP	461	0644	0831	461	0
SOIC/SOT/MSOP	150	0852	0852	75	0
Totals	2,024	-	-	1,799	0
HIGH TEMPERATURE BAKE AT 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	727	0713	1004	727	0
SSOP/TSSOP	415	0644	0831	415	0
SOIC/SOT/MSOP	200	0745	0745	200	0
Totals	1,342	-	-	1,342	0