



Reliability Data Report

Product Family R550

LTC3108 / LTC3109 / LTC3588

Reliability Data Report

Report Number: R551

Report generated on: Wed Oct 03 18:56:44 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}
QFN/DFN	308	0924	1005	243	0
Totals	308	-	-	243	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
SSOP/TSSOP	50	1016	1016	2	0
SOIC/SOT/MSOP	153	1015	1015	51	0
Totals	203	-	-	53	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
SSOP/TSSOP	49	1016	1016	4	0
SOIC/SOT/MSOP	153	1015	1015	153	0
Totals	202	-	-	157	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
SSOP/TSSOP	50	1016	1016	5	0
SOIC/SOT/MSOP	153	1015	1015	153	0
Totals	203	-	-	158	0

HIGH TEMPERATURE BAKE AT 175 DEG C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
SOIC/SOT/MSOP	95	1015	1015	95	0
Totals	95	-	-	95	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level = 7.54 FITS

(3) Mean Time Between Failure in Years = 15131.88

Note: 1 FIT = 1 Failure in One Billion Hours.

Note 2: HAST, Temp Cycle & Thermal Shock are subjected to J-STD-020 Preconditioning