



Reliability Data Report Product Family R539

LTC3601 / LTC3604 / LTC3605 /
LTC3607 / LTC3621 / LTC3622 /
LTC3624 / LTC3626 / LTC3633 /
LTC3643 / LTC7149

Reliability Data Report

Report Number: R539

Report generated on: Tue Sep 06 11:40:14 PDT 2016

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C) ¹	No. of FAILURES ^{2,3}
SOIC/MSOP	462	1210	1451	1003	0
QFN/DFN	844	0822	1435	768	0
Totals	1,306	-	-	1,771	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	1446	1024	1517	35	0
SOIC/MSOP	403	1233	1513	57	0
QFN/DFN	4014	1021	1533	301	0
Totals	5,863	-	-	393	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	1446	1024	1517	144	0
SOIC/MSOP	402	1233	1513	177	0
QFN/DFN	17972	1021	1533	2418	0
Totals	19,820	-	-	2,739	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	1391	1024	1517	139	0
SOIC/MSOP	401	1233	1513	176	0
QFN/DFN	17571	1021	1533	2336	0
Totals	19,363	-	-	2,651	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/MSOP	234	0936	1214	234	0
Totals	234	-	-	234	0

HIGH TEMPERATURE BAKE AT 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
SOIC/MSOP	100	1241	1304	100	0
QFN/DFN	17028	1217	1515	16279	0
Totals	17,128	-	-	16,379	0

(1) Assumes Activation Energy = 0.7 Electron Volts
 (2) Failure Rate Equivalent to +55 °C, 60% Confidence Level = 6.69 FITS
 (3) Mean Time Between Failure in Years = 17062.03
 Note: 1 FIT = 1 Failure in One Billion Hours.
 Note 2: HAST, Temp Cycle & Thermal Shock are subjected to J-STD-020 MSL1 Preconditioning