

# RELIABILITY REPORT





# 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

<b>OPERATING LIFE TEST</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS (+125°C)<sup>1</sup></b>	<b>No. of FAILURES<sup>2,3</sup></b>
QFN/DFN	308	0924	1005	243	0
Totals	308	-	-	243	0

<b>PRESSURE COOKER TEST AT 15 PSIG , +121 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS</b>	<b>No. of FAILURES</b>
SSOP/TSSOP	50	1016	1016	2	0
SOIC/SOT/MSOP	153	1015	1015	51	0
Totals	203	-	-	53	0

<b>TEMP CYCLE FROM -65 TO 150 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE CYCLES</b>	<b>No. of FAILURES</b>
SSOP/TSSOP	49	1016	1016	4	0
SOIC/SOT/MSOP	153	1015	1015	153	0
Totals	202	-	-	157	0

<b>THERMAL SHOCK FROM -65 TO 150 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE CYCLES</b>	<b>No. of FAILURES</b>
SSOP/TSSOP	50	1016	1016	5	0
SOIC/SOT/MSOP	153	1015	1015	153	0
Totals	203	-	-	158	0

<b>HIGH TEMPERATURE BAKE AT 175 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS</b>	<b>No. of FAILURES</b>
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