



# Reliability Data Report

## Product Family R503

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LTC4151 / LTC6101 / LTC6102 /  
LTC6103 / LTC6104

# Reliability Data Report

## Report Number: R503

Report generated on: Wed Jun 18 10:28:07 PDT 2014

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C) <sup>1</sup>	No. of FAILURES <sup>2,3</sup>
QFN/DFN	154	0719	0837	154	0
SOIC/SOT/MSOP	682	0502	0744	663	0
Totals	836	-	-	817	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	148	0737	0906	3	0
SOIC/SOT/MSOP	12398	0510	1351	448	0
Totals	12,546	-	-	451	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	146	0737	0906	14	0
SOIC/SOT/MSOP	5385	0501	1352	1065	0
Totals	5,531	-	-	1,079	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	144	0737	0906	14	0
SOIC/SOT/MSOP	7777	0510	1318	1257	0
Totals	7,921	-	-	1,271	0
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	1018	1018	25	0
SOIC/SOT/MSOP	554	0814	0905	554	0
Totals	604	-	-	579	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	77	0905	0905	77	0
Totals	77	-	-	77	0
<p>(1) Assumes Activation Energy = 0.7 Electron Volts</p> <p>(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =14.5 FITS</p> <p>(3) Mean Time Between Failure in Years = 7871.08</p> <p>Note: 1 FIT = 1 Failure in One Billion Hours.</p> <p>Note 2: HAST, Temp Cycle &amp; Thermal Shock are subjected to J-STD-020 MSL1 Preconditioning</p>					