

# RELIABILITY REPORT





NOW PART OF



# Reliability Data Report

## Product Family R523

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LTC3307 \ LTC3308 \ LTC3309 \ LTC3310 \ LTC3315 \ LTC7510 \  
LTC7520

# Reliability Data Report R523

Report generated on: Fri Apr 10, 2020

• OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C)	No. of FAILURES
LQFP	306	1726	1812	486.10	0
	306			486.10	0
• BIASED HIGHLY ACCELERATED STRESS TEST AT +130°C/85%RH					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+85°C)	No. of FAILURES
LQFP	385	1726	1821	739.20	0
	385			739.20	0
• UNBIASED HIGHLY ACCELERATED STRESS TEST AT +130°C/85%RH					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+85°C)	No. of FAILURES
LQFP	456	1726	1821	875.52	0
	456			875.52	0
• TEMPERATURE CYCLE FROM -65°C to +150°C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
LQFP	535	1726	1821	535.00	0
	535			535.00	0
• THERMAL SHOCK FROM -65°C to +150°C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
LQFP	515	1726	1821	515.00	0
	515			515.00	0
• HIGH TEMPERATURE BAKE +150°C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
LQFP	381	1726	1821	381.00	0
	381			381.00	0

(1) Assumes Activation Energy = 0.7 Electron Volts  
(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 78.99 FITS  
(3) Mean Time Between Failure in Years = 1,445.13  
Note 1: 1 FIT = 1 Failure in One Billion Hours  
Note 2: HAST, Temp Cycle & Thermal Shock are subjected to J-STD-020 MSL Preconditioning