



# Reliability Data Report

## Product Family R530

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LT1912 / LT1913 / LT1938 / LT1939 / LT3480 / LT3481 / LT3482 /  
LT3487 / LT3489 / LT3493 / LT3494 / LT3495 / LT3500 / LT3502 /  
LT3503 / LT3504 / LT3505 / LT3507 / LT3508 / LT3509 / LT3511 /  
LT3512 / LT3513 / LT3514 / LT3570 / LT3571 / LT3572 / LT3573 /  
LT3574 / LT3575 / LT3579 / LT3580 / LT3581 / LT3585 / LT3587 /  
LT3645 / LT3653 / LT3663 / LT3667 / LT3668 / LT3669 / LT3680 /  
LT3681 / LT3682 / LT3684 / LT3685 / LT3686 / LT3688 / LT3689 /  
LT3690 / LT3692 / LT3693 / LT3694 / LT3695 / LT3697 / LT3742 /  
LT3745 / LT3748 / LT3751 / LT3752 / LT3753 / LT3757 / LT3758 /  
LT3759 / LT3798 / LT3799 / LT3840 / LT3957 / LT3958 / LT3959 /  
LT3970 / LT3971 / LT3972 / LT3973 / LT3975 / LT3976 / LT3980 /  
LT3988 / LT3990 / LT3991 / LT3992 / LT3995 / LT3999 / LT8310 /  
LT8311 / LT8312 / LT8410 / LT8415 / LT8471 / LT8494 / LT8495 /  
LT8570 / LT8580 / LT8582 / LT8631 / LT8705 / LT8709 / LT8710 /  
LT8714

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## Report Number: R530

Report generated on: Wed Feb 10 11:00:48 PST 2016

<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 <sub>2,3</sub></b>
QFN/DFN	7018	0612	1450	9476	0
SSOP/TSSOP	1996	0710	1412	5540	0
SOIC/MSOP	6247	0526	1444	16456	0
Totals	15,261	-	-	31,472	0
<b>HIGHLY ACCELERATED STRESS TEST AT +130 DEG C / 85% RH</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS (+85°C)<sup>4</sup></b>	<b>No. of FAILURES</b>
QFN/DFN	664	0617	1350	1316	0
SSOP/TSSOP	92	1249	1313	353	0
SOIC/MSOP	403	0927	1516	923	0
Totals	1,159	-	-	2,592	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>
QFN/DFN	60083	9017	1422	2991	0
SSOP/TSSOP	6247	0738	1419	360	0
SOIC/MSOP	48928	0646	1424	1975	0
SOT	231	0726	0726	77	0
Totals	115,489	-	-	5,403	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>
QFN/DFN	56973	9017	1422	10563	0
SSOP/TSSOP	6402	0738	1419	1573	0
SOIC/MSOP	48443	0646	1424	7528	0
SOT	231	0722	0722	231	0
Totals	112,049	-	-	19,895	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>
QFN/DFN	57904	9017	1422	10550	0
SSOP/TSSOP	6485	0738	1419	1548	0
SOIC/MSOP	48202	0646	1424	6837	0
SOT	228	0726	0726	228	0
Totals	112,819	-	-	19,163	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.06 FITS

(3) Mean Time Between Failure in Years = 1959796

(4) Assumes 20X Acceleration from 85 °C to +130 °C

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

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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	5612	0707	1416	4989	0
SSOP/TSSOP	385	1048	1229	385	0
SOIC/MSOP	656	0646	1316	594	0
SOT	231	0726	0726	231	0
Totals	6,884	-	-	6,199	0
HIGH TEMPERATURE BAKE AT 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	2247	0707	1322	2154	0
SSOP/TSSOP	281	1211	1411	242	0
SOIC/MSOP	1803	0646	1324	1777	0
SOT	229	0726	0726	229	0
Totals	4,560	-	-	4,402	0
MECHANICAL SHOCK (JESD22-B104 CONDITION B - PEAK = 1500G)					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE		No. of FAILURES
QFN/DFN	24	0842	0842		0
Totals	24	-	-		0