

RELIABILITY REPORT





NOW PART OF



Reliability Data Report

Product Family R530

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 /
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 / LT8630 / LT8631 / LT8705 / LT8709 / LT8710 /
LT8714

Reliability Data Report

Report Number: R530

Report generated on: Mon Mar 05 10:58:50 PST 2018

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C) ¹	No. of FAILURES _{2,3}
QFN/DFN	12463	0612	1709	10989	0
SSOP/TSSOP	2358	0638	1646	6484	0
SOIC/MSOP	10208	0526	1709	17901	0
Totals	25,029	-	-	35,374	0

HIGHLY ACCELERATED STRESS TEST AT +130 DEG C / 85% RH					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+85°C) ⁴	No. of FAILURES
QFN/DFN	2518	0617	1707	4883	0
SSOP/TSSOP	152	1249	1646	468	0
SOIC/MSOP	403	0927	1516	923	0
Totals	3,073	-	-	6,274	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	103759	9017	1715	4962	0
SSOP/TSSOP	13827	0738	1715	663	0
SOIC/MSOP	108597	0646	1716	3465	0
SOT	231	0726	0726	77	0
Totals	226,414	-	-	9,167	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	95376	9017	1715	17708	0
SSOP/TSSOP	13949	0738	1714	2712	0
SOIC/MSOP	107989	0646	1716	13948	0
SOT	231	0722	0722	231	0
Totals	217,545	-	-	34,599	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	95128	9017	1715	15797	0
SSOP/TSSOP	13879	0738	1714	2599	0
SOIC/MSOP	107953	0646	1716	13023	0
SOT	228	0726	0726	228	0
Totals	217,188	-	-	31,647	0

(1) Assumes Activation Energy = 1.0 Electron Volts
(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.05 FITS
(3) Mean Time Between Failure in Years = 2202777.75
(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
SSOP/TSSOP	385	1048	1229	385	0
SOIC/MSOP	656	0646	1316	594	0
QFN/DFN	9522	0707	1701	9058	0
SOT	231	0726	0726	231	0
Totals	10,794	-	-	10,268	0

HIGH TEMPERATURE BAKE AT 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
SSOP/TSSOP	512	1211	1428	474	0
SOIC/MSOP	1903	0646	1427	1877	0
QFN/DFN	3128	0707	1551	3035	0
SOT	229	0726	0726	229	0
Totals	5,772	-	-	5,615	0

HIGH TEMPERATURE BAKE AT 125 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	187	1415	1612	140	0
Totals	187	-	-	140	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

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

VIBRATION VARIABLE FREQUENCY (JESD22-B103 CONDITION A - PEAK = 20G)					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE		No. of FAILURES
Totals	0	-	-		0