



Reliability Data Report Product Family R547

LTC4226 / LTC4231 / LTC4266 /
LTC4270 / LTC4274 / LTC4281 /
LTC4282 / LTC4290 / LTC4359 /
LTC4364 / LTC4365 / LTC4366 /
LTC4367 / LTC4368 / LTC4417 /
LTC4418 / LTC4419 / LTC4420 /
LTC7000 / LTC7860

Reliability Data Report

Report Number: R547

Report generated on: Fri Jan 26 16:48:07 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}
SSOP/TSSOP	488	0848	1646	396	0
QFN/DFN	11009	1047	1701	3596	0
SOIC/MSOP	3182	1210	1707	2302	0
SOT	311	0921	1308	183	0
Totals	14,990	-	-	6,477	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
SSOP/TSSOP	978	1041	1703	2077	0
SOIC/MSOP	974	1343	1707	2737	0
QFN/DFN	2997	1304	1701	6954	0
Totals	4,949	-	-	11,768	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
SSOP/TSSOP	577	0829	1702	74	0
SOIC/MSOP	2398	1351	1713	236	0
QFN/DFN	5295	1013	1714	309	0
SOT	750	1118	1609	18	0
Totals	9,020	-	-	637	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
SSOP/TSSOP	569	0806	1702	222	0
SOIC/MSOP	2449	1152	1713	1264	0
QFN/DFN	5650	1013	1714	1389	0
SOT	747	1118	1609	74	0
Totals	9,415	-	-	2,949	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
SSOP/TSSOP	503	0829	1702	188	0
SOIC/MSOP	1873	1152	1713	263	0
QFN/DFN	4985	1013	1714	1195	0
SOT	745	1118	1609	74	0
Totals	8,106	-	-	1,720	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =1.83 FITS

(3) Mean Time Between Failure in Years = 62400.19

(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 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
SSOP/TSSOP	95	0829	0838	95	0
SOIC/MSOP	145	1506	1549	95	0
QFN/DFN	646	1250	1412	532	0
SOT	100	1240	1602	75	0
Totals	986	-	-	797	0
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	100	0829	0838	100	0
SOIC/MSOP	100	1633	1646	100	0
QFN/DFN	899	1425	1701	899	0
Totals	1,099	-	-	1,099	0