



Reliability Data Report

Product Family R526

LTC3103 / LTC3104 / LTC3112 / LTC3115 / LTC3260 /
LTC3261 / LTC3388 / LTC3582 / LTC3600 / LTC3602 /
LTC3603 / LTC3618 / LTC3630 / LTC3631 / LTC3632 /
LTC3642 / LTC3775 / LTC3676 / LTC3786 / LTC3787 /
LTC3788 / LTC3789 / LTC3829 / LTC3833 / LTC3838 /
LTC3839 / LTC3850 / LTC3851 / LTC3852 / LTC3853 /
LTC3854 / LTC3855 / LTC3856 / LTC3857 / LTC3585 /
LTC3859 / LTC3862 / LTC3865 / LTC3866 / LTC3867 /
LTC3868 / LTC3869 / LTC3876 / LTC3878 / LTC3879 /
LTC3880 / LTC3883 / LTC3890 / LTC3891 / LTC4000 /
LTC4010

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Report Number: R526

Report generated on: Wed Oct 03 18:23:47 PDT 2012

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	2806	0645	1148	3146	0
SOIC/SOT/MSOP	462	0816	1143	693	0
QFN/DFN	2378	0816	1151	2895	0
Totals	5,646	-	-	6,734	0

HIGHLY ACCELERATED STRESS TEST AT +131 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	3220	0911	1124	3960	0
SOIC/SOT/MSOP	229	1040	1048	547	0
QFN/DFN	132	1043	1053	233	0
Totals	3,581	-	-	4,740	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	14888	0652	1124	775	0
SOIC/SOT/MSOP	2517	0908	1118	333	0
QFN/DFN	9153	0649	1124	370	0
Totals	26,558	-	-	1,478	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	15977	0652	1146	3191	0
SOIC/SOT/MSOP	2504	0908	1118	1157	0
QFN/DFN	9189	0639	1211	1984	0
Totals	27,670	-	-	6,332	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	9579	0652	1211	1938	0
SSOP/TSSOP	14591	0652	1123	2906	0
SOIC/SOT/MSOP	2477	0908	1118	1089	0
Totals	26,647	-	-	5,933	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.27 FITS

(3) Mean Time Between Failure in Years = 419333.53

(4) Assumes 20X Acceleration from 85 °C to +131 °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 3/4 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	923	0812	1048	872	0
SOIC/SOT/MSOP	458	0908	1040	438	0
QFN/DFN	721	0807	1101	605	0
UTQFN	231	0726	0726	115	0
Totals	2,333	-	-	2,030	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	998	0812	1018	911	0
SOIC/SOT/MSOP	372	0905	1040	436	0
QFN/DFN	1094	0822	1211	1150	0
UTQFN	231	0726	0726	115	0
Totals	2,695	-	-	2,612	0