



Reliability Data Report

Product Family R480

LTC1980 LTC4002/06/07/08/09/12

Reliability Data Report

Report Number: R480

Report generated on: Thu Sep 20 15:12:25 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	615	0321	0851	495	0
SOIC/SOT/MSOP	154	0337	0421	154	0
Totals	769	-	-	649	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	727	0510	1118	42	0
SSOP/TSSOP	7879	0305	1053	487	0
Totals	8,606	-	-	529	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	998	0413	1118	161	0
SSOP/TSSOP	1693	0305	1114	671	0
Totals	2,691	-	-	832	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	695	0510	1118	137	0
SSOP/TSSOP	1398	0513	1053	552	0
Totals	2,093	-	-	689	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	50	1012	1012	25	0
Totals	50	-	-	25	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	154	0648	0722	154	0
Totals	154	-	-	154	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level = 2.82 FITS

(3) Mean Time Between Failure in Years = 40413.94

Note: 1 FIT = 1 Failure in One Billion Hours.

Note 2: HAST, Temp Cycle & Thermal Shock are subjected to J-STD-020 MSL Preconditioning