

RELIABILITY DATA
LTC6801 / LTC6802 / LTC6803 / LTC6804 / LTC6820
6/12/2013

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +125°C	NUMBER OF ⁽²⁾ FAILURES
SSOP/TSSOP	4,081 4,081	0831	1304	4,109.23 4,109.23	0 0

• HIGHLY ACCELERATED STRESS TEST AT +131°C/85%RH

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽⁴⁾ AT +85°C	NUMBER OF FAILURES
SSOP/TSSOP	1,396 1,396	0831	1252	3,313.92 3,313.92	0 0

• PRESSURE COOKER TEST AT 15 PSIG, +121°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
SSOP/TSSOP	10,046	0816	1123	431.00	0
QFN/DFN	50	1013	1013	1.00	0
	10,096			432.00	0

• TEMP CYCLE FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
SSOP/TSSOP	3,621	0904	1114	1,118.00	0
QFN/DFN	50	1013	1013	5.00	0
	3,671			1,123.00	0

• THERMAL SHOCK FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
SSOP/TSSOP	10,903	0904	1146	1,614.00	0
QFN/DFN	49	1013	1013	4.00	0
	302			306.00	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 2.87 FITS

(3) Mean Time Between Failures in Years = 39,743

(4) Assumes 20X Acceleration from 85°C to +131°C

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