

# RELIABILITY REPORT



## RELIABILITY DATA

**LT1130/31/32/33/34/35/36/37/38/39/40/41 / LT1237 / LT1330/31/32/36/41/42**

**8/21/2006**

**• OPERATING LIFE TEST**

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS <sup>(1)</sup> AT +125°C	NUMBER OF <sup>(2)</sup> FAILURES
CERDIP	145	8831	9526	631.57	0
PLASTIC DIP	3,224	8847	0421	9,083.97	0
SOIC/SOT/MSOP	345	9213	9530	816.64	0
SSOP/TSSOP	866	9232	9939	1,449.78	1
	4,580			11,981.96	1

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

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS <sup>(4)</sup> AT +85°C	NUMBER OF FAILURES
PLASTIC DIP	356	8847	9726	807.16	1
SOIC/SOT/MSOP	837	8948	9644	1,503.06	0
SSOP/TSSOP	139	9232	9427	239.52	0
	1,332			2,549.74	1

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

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
PLASTIC DIP	14,902	8847	0514	904.95	0
SOIC/SOT/MSOP	28,938	8948	0607	1,906.03	0
SSOP/TSSOP	10,678	9232	0315	866.68	0
	54,518			3,677.66	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
CERDIP	40	9219	9219	4.00	0
PLASTIC DIP	10,954	9109	0623	1,973.75	0
SOIC/SOT/MSOP	12,308	8948	0549	2,696.25	0
SSOP/TSSOP	5,036	9232	0315	1,297.23	0
	28,338			5,971.23	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
CERDIP	40	9219	9219	0.60	0
PLASTIC DIP	4,117	8847	0303	1,262.66	0
SOIC/SOT/MSOP	9,314	8948	0549	2,089.12	0
SSOP/TSSOP	2,598	9402	0315	898.23	0
	16,069			4,250.61	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.34 FITS

(3) Mean Time Between Failures in Years = 335,521

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

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