



4/20/2008

RELIABILITY MONITOR REPORT
FOR

LQFP Package

MAXIM Integrated Products

120 San Gabriel Dr.
Sunnyvale, CA 94086

This Report was prepared by
Maxim Reliability Engineering

Summary:

The data in the tables that follow was generated as the result of an on-going Package Reliability Monitor. The specific assemblies included in this package monitor are:

ASSY SITE	PINS	PACKAGE		
ATK (Amkor, K)	48	LQFP (Pb-Free)	ATP (Amkor, PI)	100 LQFP
SCS (StatsChipPac Si	128	LQFP (Pb-Free)	UNK	48 LQFP

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 71123 FITS: 1.6

The parameters used to calculate this failure rate are as follows:

Cf: 60% Ea: 0.7 Tu: 25 °C

The reliability data follows. At the start of this data is a description of the assembly vehicle used to generate this reliability data. The next section is the detailed reliability data for each stress. The reliability data section includes the latest data available. This report covers data between 4/1/2007 and 3/31/2008

Assembly Information:

Package Type: LQFP
 Flammability: UL 94-V0
 Date Code Range: 0709 to 0712

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE		MAX2208ECM+	135C, 5.25V	1000 HRS	79	0	
HIGH TEMP OP LIFE	0709	DS2155	125C, 3.5 VOLTS	1000 HRS	77	0	
			125C, 3.5 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0712	DS2155	125C, 3.5 VOLTS	1000 HRS	77	0	
			125C, 3.5 VOLTS	1000 HRS	77	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0709	DS2155	-55C TO 125C	1000 CYS	77	0	
			-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0712	DS2155	-55C TO 125C	1000 CYS	75	0	
			-55C TO 125C	1000 CYS	75	0	
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HAST	0709	DS2155	130C, 85%R.H.,3.5V	96 HRS	45	0	
			130C, 85%R.H.,3.5V	96 HRS	45	0	
HAST	0712	DS2155	130C, 85%R.H.,3.5V	96 HRS	45	0	
			130C, 85%R.H.,3.5V	96 HRS	45	0	
Total:						0	

Assembly Information:

Package Type: LQFP (Pb-Free)
Flammability: UL 94-V0
Date Code Range: 0710 to 0724

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0710	DS21448	125C, 3.5 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0724	DS8007	125C, 6.0 VOLTS	1000 HRS	45	0	
			125C, 6.0 VOLTS	1000 HRS	45	0	
				Total:		0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0710	DS21448	150C	1000 HRS	77	0	
				Total:		0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0710	DS21448	-55C TO 125C	1000 CYS	77	0	
				Total:		0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
BIASED MOISTURE	0710	DS21448	85/85, 3.5 VOLTS	1000 HRS	45	0	
				Total:		0	

FAILURE RATE: MTTF (YRS): 71123 FITS: 1.6