



5/18/2009

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		
ASAT-DongGuan (C	128	LQFP (Pb-Free)	ATK (Amkor, K)	144 LQFP (Pb-Free)

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 21151 FITS: 5.4

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 and

Assembly Information:

Package Type: LQFP (Pb-Free)

Date Code Range: 0811 to 0819

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0811	DS26303	125C, 3.5 VOLTS	1000 HRS	45	0	
HIGH TEMP OP LIFE	0819	DS21448	125C, 3.5 VOLTS	1000 HRS	45	0	
HIGH TEMP OP LIFE	0819	DS21448	125C, 3.5 VOLTS	1000 HRS	45	0	
HIGH TEMP OP LIFE	0819	DS21448	125C, 3.5 VOLTS	1000 HRS	45	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0819	DS21448	150C	1000 HRS	74	0	
STORAGE LIFE	0819	DS21448	150C	1000 HRS	77	0	
STORAGE LIFE	0819	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	0819	DS21448	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0819	DS21448	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0819	DS21448	-55C TO 125C	1000 CYS	77	0	
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
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BIASED MOISTURE	0819	DS21448	85/85, 3.5 VOLTS	1000 HRS	45	0
BIASED MOISTURE	0819	DS21448	85/85, 3.5 VOLTS	1000 HRS	45	0
BIASED MOISTURE	0819	DS21448	85/85, 3.5 VOLTS	1000 HRS	45	0
				Total:		0

FAILURE RATE: MTTF (YRS): 21151 FITS: 5.4