



10/8/2010

**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	ATK (Amkor, K)	32 LQFP (Pb-Free)
ATK (Amkor, K)	64	LQFP (Pb-Free)	Carsem-S	32 LQFP (Pb-Free)
Carsem-S	48	LQFP (Pb-Free)		

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 5086 FITS: 22.4

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 10/1/2009 and 9/30/2010.

Assembly Information:

Package Type: LQFP
Date Code Range: 0944 to 0944

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0944	WV19	135C, 3.6 VOLTS	192 HRS	48	0	
Total:						0	

Assembly Information:

Package Type: LQFP (Pb-Free)
Date Code Range: 0918 to 1026

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0918	MAX2981GCB/V+	135C	192 HRS	48	0	
HIGH TEMP OP LIFE	0946	MAXQ622	125C, 3.6V (PSA) & 5.5V (PSB)	192 HRS	77	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0948	MAX4968CCM+	150C	1000 HRS	80	0	
STORAGE LIFE	1026	MAX3420EECJ+	150C	500 HRS	50	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0948	MAX4968CCM+	-65C TO 150C	1000 CYS	80	0	

TEMP CYCLE, 5' RAMP, 1023 MAX3420EECJ+ -65C TO 150C
10' DWELL

500 CYS 80 0

Total: 0

FAILURE RATE: MTTF (YRS): 5086 FITS: 22.4