



10/8/2010

RELIABILITY MONITOR REPORT
FOR

CSBGA 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		
ASE Tawain	81	CSBGA (Pb-Free)	Signetics, Korea	256 CSBGA (Pb-Free)
UDG (formerly ASA)	16	CSBGA (Pb-Free)		

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 29547 FITS: 3.9

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: CSBGA (Pb-Free)

Date Code Range: 1006 to 1018

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	1006	806-0714-20+	135C	1000 HRS	47	0	
HIGH TEMP OP LIFE	1006	806-0714-20+	135C	500 HRS	44		
HIGH TEMP OP LIFE	1010	806-0714-20+	135C	1000 HRS	48	0	
HIGH TEMP OP LIFE	1012	MAX36051	125C, 3.6 VOLTS	192 HRS	45	0	
HIGH TEMP OP LIFE	1014	806-0714-20+	135C	1000 HRS	47	0	
HIGH TEMP OP LIFE	1018	DS31400	125C, 2.0V (PSA) & 3.5V (PSB)	192 HRS	45	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	1006	806-0714-20+	150C	1000 HRS	76	0	
STORAGE LIFE	1006	806-0714-20+	150C	1000 HRS	77	0	
STORAGE LIFE	1006	806-0714-20+	150C	1000 HRS	77	0	
STORAGE LIFE	1006	806-0714-20+	150C	500 HRS	77	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	1006	806-0714-20+	-65C TO 150C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	1006	806-0714-20+	-65C TO 150C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	1006	806-0714-20+	-65C TO 150C	1000 CYS	77	0	

FAILURE RATE: MTTF (YRS): 29547 FITS: 3.9

Total: 0