

4/17/2013



RELIABILITY MONITOR REPORT
FOR

SSOP Package

MAXIM INTEGRATED

160 RIO ROBLES
SAN JOSE, CA 95134

This Report was prepared by
MAXIM INTEGRATED 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		
ATP (Amkor, PI)	36	SSOP (Pb-Free)	Carsem-S	36 SSOP (Pb-Free)

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 69471 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 4/1/2012 and 3/31/2013.

Assembly Information:

Package Type: SSOP (Pb-Free)

Date Code Range: 1145 to 1225

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	1145	MAX6956AAX/V+	135°C	700 HRS	75	0	
HIGH TEMP OP LIFE	1223	MAX6956AAX/V+	135°C	700 HRS	80	0	
HIGH TEMP OP LIFE	1223	MAX6956AAX/V+	135°C	700 HRS	80	0	
HIGH TEMP OP LIFE	1223	MAX6956AAX/V+	135°C	700 HRS	80	0	
HIGH TEMP OP LIFE	1225	MAX5952AUAX+	135°C	1000 HRS	48	0	
HIGH TEMP OP LIFE	1225	MAX5952AUAX+	135°C	1000 HRS	45	0	
HIGH TEMP OP LIFE	1225	MAX5952AUAX+	135°C	1000 HRS	45	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	1223	MAX6956AAX/V+	150°C	1000 HRS	80	0	
STORAGE LIFE	1225	MAX5952AUAX+	150°C	1000 HRS	80	0	
STORAGE LIFE	1225	MAX5952AUAX+	150°C	1000 HRS	80	0	
STORAGE LIFE	1225	MAX5952AUAX+	150°C	1000 HRS	80	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	1223	MAX6956AAX/V+	-65C TO 150C	500 CYS	80	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	1223	MAX6956AAX/V+	-65C TO 150C	500 CYS	80	0	

TEMP CYCLE, 5' RAMP, 10' DWELL	1223	MAX6956AAX/V+	-65C TO 150C	500	CYS	80	0
TEMP CYCLE, 5' RAMP, 10' DWELL	1225	MAX5952AUAX+	-65C TO 150C	1000	CYS	80	0
TEMP CYCLE, 5' RAMP, 10' DWELL	1225	MAX5952AUAX+	-65C TO 150C	1000	CYS	80	0
TEMP CYCLE, 5' RAMP, 10' DWELL	1225	MAX5952AUAX+	-65C TO 150C	1000	CYS	80	0
Total:						0	0

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
BIASED MOISTURE	1223	MAX6956AAX/V+	130C, 85% R.H.	100	HRS	48	0
BIASED MOISTURE	1223	MAX6956AAX/V+	130C, 85% R.H.	100	HRS	48	0
BIASED MOISTURE	1223	MAX6956AAX/V+	130C, 85% R.H.	100	HRS	48	0
BIASED MOISTURE	1225	MAX5952AUAX+	130C, 85% R.H.	100	HRS	35	0
BIASED MOISTURE	1225	MAX5952AUAX+	130C, 85% R.H.	100	HRS	45	0
BIASED MOISTURE	1225	MAX5952AUAX+	130C, 85% R.H.	100	HRS	45	0
Total:						0	0

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
MOISTURE SOAK	1223	MAX6956AAX/V+	130C, 85% R.H.	100	HRS	80	0
MOISTURE SOAK	1223	MAX6956AAX/V+	130C, 85% R.H.	100	HRS	80	0
MOISTURE SOAK	1223	MAX6956AAX/V+	130C, 85% R.H.	100	HRS	80	0
MOISTURE SOAK	1225	MAX5952AUAX+	130C, 85% R.H.	100	HRS	80	0
MOISTURE SOAK	1225	MAX5952AUAX+	130C, 85% R.H.	100	HRS	80	0
MOISTURE SOAK	1225	MAX5952AUAX+	130C, 85% R.H.	100	HRS	80	0
Total:						0	0

FAILURE RATE: MTTF (YRS): 69471 FITS: 1.6