

4/23/2015



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)	28	SSOP (Pb-Free)	ATP (Amkor, PI)	36 SSOP (Pb-Free)
Carsem-M	28	SSOP (Pb-Free)	Carsem-S	28 SSOP (Pb-Free)

The calculated failure rate for this assembly is:

**FAILURE RATE: MTTF (YRS): 49484 FITS: 2.3**

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 4/1/2014 and 3/31/2015.

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### Assembly Information:

Package Type: SSOP (Pb-Free)

Date Code Range: 1342 to 1437

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### OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	1342	MAX3243ECAI+G2X	135°C	192 HRS	80	0	
HIGH TEMP OP LIFE	1424	MAX125CEAX+D	135°C	1000 HRS	80	0	
HIGH TEMP OP LIFE	1425	MAX211CAI+	135°C	1000 HRS	80	0	
HIGH TEMP OP LIFE	1437	MAX3243EAI+	135°C	1000 HRS	80	0	
				<b>Total:</b>		<b>0</b>	

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### STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	1404	MAX128BCAI+	150°C	500 HRS	80	0	
STORAGE LIFE	1424	MAX125CEAX+D	150°C	1000 HRS	80	0	
STORAGE LIFE	1425	MAX211CAI+	150°C	1000 HRS	80	0	
STORAGE LIFE	1437	MAX3243EAI+	150°C	1000 HRS	78	0	
				<b>Total:</b>		<b>0</b>	

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### TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	1424	MAX125CEAX+D	-65C TO +150C (Condition C)	500 CYS	80	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	1425	MAX211CAI+	-65C TO +150C (Condition C)	500 CYS	80	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	1437	MAX3243EAI+	-65C TO +150C (Condition C)	500 CYS	78	0	
				<b>Total:</b>		<b>0</b>	

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**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
BIASED MOISTURE	1424	MAX125CEAX+D	130C, 85% R.H.	96	HRS	80	
BIASED MOISTURE	1437	MAX3243EAI+	130C, 85% R.H.	100	HRS	78	0
					<b>Total:</b>		<b>0</b>

**FAILURE RATE: MTTF (YRS): 49484 FITS: 2.3**