

1/24/2019



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)	16 SSOP (Pb-Free)	ATP (Amkor, PI)	28 SSOP (Pb-Free)
Carsem-S	36 SSOP (Pb-Free)	Greatek	16 SSOP (Pb-Free)

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 46120 FITS: 2.5

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 10/1/2018 and 12/31/2018.

Assembly Information:

Package Type: SSOP (Pb-Free)

Date Code Range: 1734 to 1829

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	1808	MAX3223EEUP+	135°C	1000 HRS	79	0	
HIGH TEMP OP LIFE	1819	MAX211CAI+	125°C	1000 HRS	79	0	
HIGH TEMP OP LIFE	1829	MAX125CEAX+	125°C	1000 HRS	80	0	
Total:						0	

PACKAGE TESTS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
CONVECTION REFLOW	1808	MAX3223EEUP+	260C +0/-5C	PASS	320	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	1734	MAX4661CAE+	150°C	1000 HRS	90	0	
STORAGE LIFE	1734	MAX4661CAE+	150°C	500 HRS	90	0	
STORAGE LIFE	1808	MAX3223EEUP+	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	1808	MAX3223EEUP+	-65C TO +150C (Condition C)	1000 CYS	80	0	
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
BIASED MOISTURE	1734	MAX4661CAE+	85 C/85% R.H.	96	HRS	79	0
BIASED MOISTURE	1734	MAX4661CAE+	85 C/85% R.H.	96	HRS	80	0
BIASED MOISTURE	1808	MAX3223EEUP+	130C, 85% R.H.	96	HRS	78	0
					Total:		0

FAILURE RATE: MTTF (YRS): 46120 FITS: 2.5