

7/10/2017



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) | Carsem-M | 36 SSOP (Pb-Free) |
| UTL (NSEB) UTAC | 20 | SSOP(Pb-Free) | | |

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 30618 FITS: 3.7

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 4/1/2017 and 6/30/2017.

Assembly Information:

Package Type: SSOP (Pb-Free)

Date Code Range: 1641 to 1701

OPERATING LIFE

| DESCRIPTION | DATE CODE | TEST VEHICLE | CONDITION | READPOINT | QUANTITY | FAILS | FA NO |
|-------------------|-----------|--------------|-----------|-----------|----------|----------|-------|
| HIGH TEMP OP LIFE | 1641 | MAX221CAE+ | 135°C | 1000 HRS | 78 | 0 | |
| HIGH TEMP OP LIFE | 1701 | MAX125CEAX+ | 135°C | 1000 HRS | 80 | 0 | |
| Total: | | | | | | 0 | |

STORAGE LIFE

| DESCRIPTION | DATE CODE | TEST VEHICLE | CONDITION | READPOINT | QUANTITY | FAILS | FA NO |
|---------------|-----------|--------------|-----------|-----------|----------|----------|-------|
| STORAGE LIFE | 1641 | MAX221CAE+ | 150°C | 1000 HRS | 80 | 0 | |
| STORAGE LIFE | 1701 | MAX125CEAX+ | 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 | 1641 | MAX221CAE+ | -65C TO +150C (Condition C) | 1000 CYS | 80 | 0 | |
| TEMP CYCLE, 5' RAMP, 10' DWELL | 1701 | MAX125CEAX+ | -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 | 1641 | MAX221CAE+ | 130C, 85% R.H. | 96 HRS | 80 | 0 | |
| BIASED MOISTURE | 1701 | MAX125CEAX+ | 130C, 85% R.H. | 96 HRS | 80 | 0 | |
| Total: | | | | | | 0 | |

Assembly Information:

Package Type: SSOP(Pb-Free)

Date Code Range: 1606 to 1606

STORAGE LIFE

| DESCRIPTION | DATE CODE | TEST VEHICLE | CONDITION | READPOINT | QUANTITY | FAILS | FA NO |
|--------------|-----------|--------------|-----------|---------------|----------|----------|-------|
| STORAGE LIFE | 1606 | MAX14001AAP+ | 150°C | 1000 HRS | 80 | 0 | |
| | | | | Total: | | 0 | |

FAILURE RATE: MTTF (YRS): 30618 FITS: 3.7