

7/10/2017



**RELIABILITY MONITOR REPORT
FOR**

MFN CB30

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 Process Reliability Monitor. The specific products in this process monitor are:

| | | |
|-------------|-------------|-------------|
| MAX4003EUA+ | MAX9144EUD+ | MAX9933EUA+ |
|-------------|-------------|-------------|

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 61429 QUANTITY: 318 FAILS: 0 FITS: 1.9

The parameters used to calculate this failure rate are as follows:

Cf: 60% Ea: 0.7 Tu: 25 °C

The reliability data follows and in this section is the detailed reliability data by stress. The reliability data section includes the latest data available. This report covers data between 4/1/2017 and 6/30/2017 .

Process Information:

Process Description: MFN CB30

OPERATING LIFE

| DESCRIPTION | DATE CODE | TEST VEHICLE | CONDITION | READPOINT | QUANTITY | FAILS | LOT NO. |
|-------------------|-----------|--------------|-----------|-----------|----------|----------|-------------|
| HIGH TEMP OP LIFE | 1620 | MAX9144EUD+ | 135°C | 1000 HRS | 78 | 0 | N21AB3111C |
| HIGH TEMP OP LIFE | 1634 | MAX9933EUA+ | 135°C | 1000 HRS | 80 | 0 | NFSWBA032MA |
| HIGH TEMP OP LIFE | 1641 | MAX4003EUA+ | 135°C | 1000 HRS | 80 | 0 | N9O3EA185AB |
| HIGH TEMP OP LIFE | 1704 | MAX9933EUA+ | 135°C | 1000 HRS | 80 | 0 | NFSWBA035BC |
| Total: | | | | | | 0 | |

STORAGE LIFE

| DESCRIPTION | DATE CODE | TEST VEHICLE | CONDITION | READPOINT | QUANTITY | FAILS | LOT NO. |
|---------------|-----------|--------------|-----------|-----------|----------|----------|-------------|
| STORAGE LIFE | 1620 | MAX9144EUD+ | 150°C | 1000 HRS | 80 | 0 | N21AB3111C |
| STORAGE LIFE | 1634 | MAX9933EUA+ | 150°C | 1000 HRS | 80 | 0 | NFSWBA032MA |
| STORAGE LIFE | 1641 | MAX4003EUA+ | 150°C | 1000 HRS | 80 | 0 | N9O3EA185AB |
| STORAGE LIFE | 1704 | MAX9933EUA+ | 150°C | 1000 HRS | 80 | 0 | NFSWBA035BC |
| Total: | | | | | | 0 | |

TEMPERATURE CYCLE

| DESCRIPTION | DATE CODE | TEST VEHICLE | CONDITION | READPOINT | QUANTITY | FAILS | LOT NO. |
|--------------------------------|-----------|--------------|-----------------------------|-----------|----------|-------|-------------|
| TEMP CYCLE, 5' RAMP, 10' DWELL | 1620 | MAX9144EUD+ | -65C TO +150C (Condition C) | 1000 CYS | 80 | 0 | N21AB31111C |
| TEMP CYCLE, 5' RAMP, 10' DWELL | 1634 | MAX9933EUA+ | -65C TO +150C (Condition C) | 1000 CYS | 80 | 0 | NFSWBA032MA |
| TEMP CYCLE, 5' RAMP, 10' DWELL | 1641 | MAX4003EUA+ | -65C TO +150C (Condition C) | 1000 CYS | 80 | 0 | N9O3EA185AB |

| | | | | | | | | |
|-----------------------------------|------|-------------|-----------------------------------|------|-----|----|----------|-------------|
| TEMP CYCLE, 5' RAMP, 10' DWELL | 1704 | MAX9933EUA+ | -65C TO +150C (Condition C) | 1000 | CYS | 80 | 0 | NFSWBA035BC |
| Total: | | | | | | | 0 | |

TEMPERATURE HUMIDITY BIAS

| DESCRIPTION | DATE CODE | TEST VEHICLE | CONDITION | READPOINT | QUANTITY | FAILS | LOT NO. |
|-----------------|--------------|-----------------|-----------|-----------|----------|-------|---------------|
| BIASED MOISTURE | 1620 | MAX9144EUD+ | 130C, 85% | 100 | HRS | 80 | 0 N21AB3111C |
| BIASED MOISTURE | 1634 | MAX9933EUA+ | 130C, 85% | 96 | HRS | 80 | 0 NFSWBA032MA |
| BIASED MOISTURE | 1641 | MAX4003EUA+ | 130C, 85% | 96 | HRS | 80 | 0 N9O3EA185AB |
| BIASED MOISTURE | 1704 | MAX9933EUA+ | 130C, 85% | 96 | HRS | 80 | 0 NFSWBA035BC |
| Total: | | | | | | | 0 |

FAILURE RATE: MTF (YRS): 61429 QUANTITY: 318 FAILS: 0 FITS: 1.9