



5/9/2009

**RELIABILITY MONITOR REPORT  
FOR**

**MFN Dual Poly 0.8 $\mu$ m CMOS**

**MAXIM Integrated Products**

**120 San Gabriel Dr.  
Sunnyvale, CA 94086**

**This Report was prepared by  
Maxim 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:

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| MAX2070GTM+ | MAX2116UTL+ | MAX2606EUT+ | MAX2607EUT+ |
|-------------|-------------|-------------|-------------|

The calculated failure rate for devices using this process is:

**FAILURE RATE:**                      **MTTF (YRS): 20021**                      **FITS: 5.7**

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 and

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**Process Information:**

Process Description:                      MFN Dual Poly 0.8µm CMOS

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**OPERATING LIFE**

| DESCRIPTION       | DATE CODE | TEST VEHICLE | CONDITION | READPOINT | QUANTITY | FAILS    | LOT NO.     |
|-------------------|-----------|--------------|-----------|-----------|----------|----------|-------------|
| HIGH TEMP OP LIFE | 0745      | MAX2070GTM+  | 135C      | 408 HRS   | 47       | 0        | NAJYBQ002E# |
| HIGH TEMP OP LIFE | 0803      | MAX2116UTL+  | 135C      | 1000 HRS  | 80       | 0        | ND71L35C0A  |
| HIGH TEMP OP LIFE | 0811      | MAX2606EUT+  | 135C      | 138 HRS   | 30       | 0        | N7DCFA058E# |
| <b>Total:</b>     |           |              |           |           |          | <b>0</b> |             |

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**STORAGE LIFE**

| DESCRIPTION   | DATE CODE | TEST VEHICLE | CONDITION | READPOINT | QUANTITY | FAILS    | LOT NO.    |
|---------------|-----------|--------------|-----------|-----------|----------|----------|------------|
| STORAGE LIFE  | 0803      | MAX2116UTL+  | 150C      | 1000 HRS  | 80       | 0        | ND71L35C0A |
| <b>Total:</b> |           |              |           |           |          | <b>0</b> |            |

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**TEMPERATURE CYCLE**

| DESCRIPTION                    | DATE CODE | TEST VEHICLE | CONDITION    | READPOINT | QUANTITY | FAILS    | LOT NO.     |
|--------------------------------|-----------|--------------|--------------|-----------|----------|----------|-------------|
| TEMP CYCLE, 5' RAMP, 10' DWELL | 074       | MAX2606EUT+  | -65C TO 150C | 1000 CYS  | 80       | 0        | N7DCFA058C# |
| TEMP CYCLE, 5' RAMP, 10' DWELL | 0735      | MAX2607EUT+  | -65C TO 150C | 500 CYS   | 77       | 0        | N7DDFA062B# |
| TEMP CYCLE, 5' RAMP, 10' DWELL | 0745      | MAX2070GTM+  | -65C TO 150C | 1000 CYS  | 77       | 0        | NAJYBQ002E# |
| TEMP CYCLE, 5' RAMP, 10' DWELL | 0803      | MAX2116UTL+  | -65C TO 150C | 1000 CYS  | 80       | 0        | ND71L35C0   |
| <b>Total:</b>                  |           |              |              |           |          | <b>0</b> |             |

**FAILURE RATE:**                      **MTTF (YRS): 20021**                      **FITS: 5.7**