



5/9/2009

**RELIABILITY MONITOR REPORT  
FOR**

**X3 0.8 $\mu$ m Silicon Gate 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:

MAX3301EETJ+	MAX4358ECE+	MAX7500MSA+	MAX7500MUA+
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The calculated failure rate for devices using this process is:

**FAILURE RATE:**                      **MTTF (YRS): 46508**                      **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 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 1/1/2008 and 12/31/2008.

**Process Information:**

Process Description:                      X3 0.8µm Silicon Gate CMOS

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	0727	MAX7500MSA+	135C	1000 HRS	48	0	SRT0CA006N#
HIGH TEMP OP LIFE	0731	MAX4358ECE+	135C	1000 HRS	50	0	S9LADQ001Q1
HIGH TEMP OP LIFE	0731	MAX4358ECE+	135C	1000 HRS	50	0	S9LADQ001Q2
HIGH TEMP OP LIFE	0731	MAX4358ECE+	135C	1000 HRS	47	0	S9LADQ001Q3
HIGH TEMP OP LIFE	0733	MAX3301EETJ+	135C	1000 HRS	48	0	SQW0CA005B#
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	0724	MAX7500MUA+	150C	1000 HRS	72	0	SRT0CQ003F#
STORAGE LIFE	0731	MAX4358ECE+	150C	1000 HRS	77	0	S9LADQ001Q1
STORAGE LIFE	0731	MAX4358ECE+	150C	1000 HRS	77	0	S9LADQ001Q2
STORAGE LIFE	0733	MAX3301EETJ+	150C	500 HRS	80	0	SQW0CA005B#
STORAGE LIFE	0735	MAX7500MUA+	150C	500 HRS	80	0	SRT0CA006O#
STORAGE LIFE	0735	MAX7500MUA+	150C	1000 HRS	80	0	SRT0CA006C#
STORAGE LIFE	0741	MAX7500MUA+	150C	1000 HRS	48	0	SRT0CQ003J#
<b>Total:</b>						<b>0</b>	

**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	0724	MAX7500MUA+	-65C TO 150C	500 CYS	76	0	SRT0CQ003F#
TEMP CYCLE, 5' RAMP, 10' DWELL	0733	MAX3301EETJ+	-65C TO 150C	1000 CYS	80	0	SQW0CA005B#

TEMP CYCLE, 5' RAMP, 10' DWELL	0735	MAX7500MUA+	-65C TO 150C	500	CYS	80	0	SRT0CA006O#
TEMP CYCLE, 5' RAMP, 10' DWELL	0741	MAX7500MUA+	-65C TO 150C	500	CYS	77	0	SRT0CQ003J#
<b>Total:</b>							<b>0</b>	

**FAILURE RATE:**                      **MTTF (YRS): 46508**                      **FITS: 2.5**