



5/9/2009

**RELIABILITY MONITOR REPORT
FOR**

MFN 3 μ 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:

MAX125CEAX	MAX3085ECSA+	MAX3161EEAG	MAX3162EEAI+	MAX3222EEUP+
MAX3223EPP+	MAX3225EUP+	MAX3388ECUG	MAX603ESA	MAX603ESA+
MAX6043BAUT	MAX834EUK+	MXL1543CAI	MXL1544CAI	

The calculated failure rate for devices using this process is:

FAILURE RATE: **MTTF (YRS): 109134** **FITS: 1.0**

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: MFN 3µm Silicon Gate CMOS

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	0733	MAX6043BAUT25	135C	1000 HRS	48	0	NF50B3006E#
HIGH TEMP OP LIFE	0736	MAX3223EPP+	135C	1000 HRS	240	0	NDMBJA2G6A#
HIGH TEMP OP LIFE	0743	MAX3161EEAG+	135C	192 HRS	55	0	NGO1EQ001AQ
HIGH TEMP OP LIFE	0743	MAX3162EEAI+	135C	192 HRS	55	0	NGO2EQ001AQ
HIGH TEMP OP LIFE	0802	MAX3085ECSA+	135C	1000 HRS	77	0	ND9FC25A8C
HIGH TEMP OP LIFE	0803	MAX3388ECUG+	135C	1000 HRS	50	0	N050FA0A2Q1
HIGH TEMP OP LIFE	0803	MAX3388ECUG+	135C	1000 HRS	50	0	N050FA0A2Q2
HIGH TEMP OP LIFE	0803	MAX3388ECUG+	135C	1000 HRS	50	0	N050FA0A2Q3
HIGH TEMP OP LIFE	0804	MAX3222EEUP+	135C	138 HRS	45	0	JO3ALZ054L#
HIGH TEMP OP LIFE	0809	MXL1543CAI	135C	1000 HRS	45	0	N90AF2236B
HIGH TEMP OP LIFE	0817	MAX3222EEUP+	135C	138 HRS	80	0	JO3AMA024#
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	0726	MAX834EUK+	150C	1000 HRS	45	0	NNECDA043H#
STORAGE LIFE	0742	MAX603ESA+	150C	1000 HRS	80	0	NDNAF3768D
STORAGE LIFE	0751	MXL1544CAI	150C	1000 HRS	80	0	N101D2190B
STORAGE LIFE	0802	MAX3085ECSA+	150C	1000 HRS	80	0	ND9FC25A8C
STORAGE LIFE	0802	MAX603ESA	150C	1000 HRS	80	0	NDNAF3779B
STORAGE LIFE	0803	MAX3388ECUG+	150C	1000 HRS	80	0	N050FA0A2Q1

STORAGE LIFE	0803	MAX3388ECUG+	150C	1000 HRS	80	0	N050FA0A2Q2
STORAGE LIFE	0803	MAX3388ECUG+	150C	1000 HRS	80	0	N050FA0A2Q3
STORAGE LIFE	0808	MAX3225EUP+	150C	1000 HRS	77	0	JO3M3011D#
STORAGE LIFE	0809	MXL1543CAI	150C	1000 HRS	80	0	N90AF2236B
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	0606	MAX834EUK+	-65C TO 150C	1000 CYS	79	0	NNECCA033B#
TEMP CYCLE, 5' RAMP, 10' DWELL	0619	MAX834EUK+	-65C TO 150C	1000 CYS	30	0	NNECCA034C#
TEMP CYCLE, 5' RAMP, 10' DWELL	0726	MAX834EUK+	-65C TO 150C	1000 CYS	80	0	NNECDA043H#
TEMP CYCLE, 5' RAMP, 10' DWELL	0751	MXL1544CAI	-65C TO 150C	1000 CYS	79	0	N101D2190B
TEMP CYCLE, 5' RAMP, 10' DWELL	0802	MAX3085ECSA+	-65C TO 150C	1000 CYS	80	0	ND9FC25A8C
TEMP CYCLE, 5' RAMP, 10' DWELL	0802	MAX603ESA	-65C TO 150C	1000 CYS	80	0	NDNAF3779B
TEMP CYCLE, 5' RAMP, 10' DWELL	0803	MAX3388ECUG+	-65C TO 150C	1000 CYS	80	0	N050FA0A2Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	0803	MAX3388ECUG+	-65C TO 150C	1000 CYS	80	0	N050FA0A2Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	0803	MAX3388ECUG+	-65C TO 150C	1000 CYS	80	0	N050FA0A2Q3
TEMP CYCLE, 5' RAMP, 10' DWELL	0804	MAX3222EEUP+	-65C TO 150C	1000 CYS	80	0	JO3ALZ054L#
TEMP CYCLE, 5' RAMP, 10' DWELL	0808	MAX3225EUP+	-65C TO 150C	1000 CYS	80	0	JO3EM3011D#
TEMP CYCLE, 5' RAMP, 10' DWELL	0809	MXL1543CAI	-65C TO 150C	1000 CYS	80	0	N90AF2236B
Total:						0	

FAILURE RATE: **MTTF (YRS): 109134** **FITS: 1.0**