



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	MAX1745EUB	MAX1745EUB+	MAX3081EESA+	MAX3085ECSA+
MAX3222EEUP+	MAX3223EPP+	MAX3225EUP+	MAX3388ECUG	MAX483CSA+
MAX603ESA	MXL1543CAI	MXL1544CAI		

The calculated failure rate for devices using this process is:

FAILURE RATE: **MTTF (YRS): 101863** **FITS: 1.1**

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

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	0736	MAX3223EPP+	135C	1000 HRS	240	0	NDMBJA2G6A#
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	0815	MAX1745EUB+	135C	1000 HRS	23	0	N3KBG3144Q2
HIGH TEMP OP LIFE	0815	MAX1745EUB+	135C	1000 HRS	43	0	N3KBG3144Q3
HIGH TEMP OP LIFE	0817	MAX3222EEUP+	135C	138 HRS	80	0	JO3AMA024#
HIGH TEMP OP LIFE	0823	MAX483CSA+	135C	192 HRS	50	0	JKNCIA007BQ
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
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
STORAGE LIFE	0815	MAX1745EUB+	150C	500	HRS	45	0	N3KBG3144Q#
STORAGE LIFE	0815	MAX1745EUB	150C	1000	HRS	80	0	N3KBG3144Q1
STORAGE LIFE	0815	MAX1745EUB	150C	1000	HRS	80	0	N3KBG3144Q2
STORAGE LIFE	0839	MAX3081EESA+	150C	500	HRS	45	0	ND9BCA9A4G#
STORAGE LIFE	0842	MXL1544CAI	150C	1000	HRS	80	0	N101DA209Q1
STORAGE LIFE	0842	MXL1544CAI	150C	1000	HRS	80	0	N101DA209Q2
Total:							0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
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
TEMP CYCLE, 5' RAMP, 10' DWELL	0815	MAX1745EUB+	-65C TO 150C	1000	CYS	80	0	N3KBG3144Q#
TEMP CYCLE, 5' RAMP, 10' DWELL	0815	MAX1745EUB+	-65C TO 150C	1000	CYS	80	0	N3KBG3144Q
TEMP CYCLE, 5' RAMP, 10' DWELL	0839	MAX3081EESA+	-65C TO 150C	500	CYS	80	0	ND9BCA9A4G#
TEMP CYCLE, 5' RAMP, 10' DWELL	0839	MAX3081EESA+	-65C TO 150C	500	CYS	80	0	ND9BCA0B66#
TEMP CYCLE, 5' RAMP, 10' DWELL	0839	MAX3081EESA+	-65C TO 150C	500	CYS	80	0	ND9BCA0B5A#
Total:							0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	0815	MAX1745EUB+	85 C/85% R.H.	1000	HRS	48	0	N3KBG3144Q1
Total:							0	

FAILURE RATE:

MTTF (YRS): 101863

FITS: 1.1