



7/19/2012

**RELIABILITY MONITOR REPORT
FOR**

San Antonio Silicon Gate 0.18 μ m CMOS (S18)

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:

MAX8930EWJ+	MAX9832ETG+	MAX98400AET
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 78905 QUANTITY: 501 FAILS: 0 FITS: 1.4

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 7/1/2011 and 6/30/2012 .

Process Information:

Process Description: San Antonio Silicon Gate 0.18µm CMOS (S18)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1142	MAX9832ETG+	135C	1024 HRS	80	0	TTHZKZ005A
HIGH TEMP OP LIFE	1142	MAX9832ETG+	135C	1024 HRS	79	0	TTHZKZ007A
HIGH TEMP OP LIFE	1144	MAX8930EWJ+	135C	1000 HRS	48	0	TWDZIZ001ZD
HIGH TEMP OP LIFE	1145	MAX98400AETX+	135C	500 HRS	72	0	TD7ZFF003A
HIGH TEMP OP LIFE	1151	MAX9832ETG+	135C	1000 HRS	80	0	TTHZJZ015B
HIGH TEMP OP LIFE	1201	MAX98400AETX+	135C	1000 HRS	70	0	TD7ZFF008B
HIGH TEMP OP LIFE	1214	MAX98400AETX+	135C	452 HRS	72	0	TD7ZFF014B
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1142	MAX9832ETG+	150C	1000 HRS	80	0	TTHZKZ005A
STORAGE LIFE	1142	MAX9832ETG+	150C	1000 HRS	80	0	TTHZKZ007A
STORAGE LIFE	1144	MAX8930EWJ+	150C	1000 HRS	80	0	TWDZIZ001ZE
STORAGE LIFE	1145	MAX98400AETX+	150C	24 HRS	500	0	TD7ZFF003B
STORAGE LIFE	1151	MAX9832ETG+	150C	1000 HRS	80	0	TTHZJZ015B
STORAGE LIFE	1201	MAX98400AETX+	150C	500 HRS	80	0	TD8ZFF008B
STORAGE LIFE	1201	MAX98400AETX+	150C	1000 HRS	300	0	TD7ZFF008B
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
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TEMP CYCLE, 5' RAMP, 10' DWELL	1142	MAX9832ETG+	-65C TO 150C	500	CYS	80	0	TTHZKZ005A
TEMP CYCLE, 5' RAMP, 10' DWELL	1142	MAX9832ETG+	-65C TO 150C	500	CYS	80	0	TTHZKZ007A
TEMP CYCLE, 15' RAMP, 15' DWELL	1144	MAX8930EWJ+	-40C TO +125C	500	CYS	80	0	TWDZIZ001ZE
TEMP CYCLE, 15' RAMP, 15' DWELL	1144	MAX8930EWJ+	-40C TO +125C	1000	CYS	80	0	TWDZ8Z001ZD
TEMP CYCLE, 5' RAMP, 10' DWELL	1151	MAX9832ETG+	-65C TO 150C	500	CYS	80	0	TTHZJZ015B
TEMP CYCLE, 5' RAMP, 10' DWELL	1201	MAX98400AETX+	-65C TO 150C	500	CYS	80	0	TD8ZfZ008B
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1201	MAX98400AETX+	130C, 85% R.H.	100	HRS	46	0 TD8ZfZ008B
Total:						0	

FAILURE RATE: MTTF (YRS): 78905 QUANTITY: 501 FAILS: 0 FITS: 1.4