



7/19/2012

**RELIABILITY MONITOR REPORT
FOR**

Epson 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:

MAX14593EETX	MAX15092GTL+	MAX77686EWE	MAX9695AETM	MAX98304CEW
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 15037 QUANTITY: 223 FAILS: 0 FITS: 7.6

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: Epson Silicon Gate 0.18µm CMOS (S18)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1114	MAX15092GTL+	135C	1000 HRS	48	0	EM0RDQ001A
HIGH TEMP OP LIFE	1125	MAX14593EETX+	135C	192 HRS	79	0	E1KZCQ003BQ
HIGH TEMP OP LIFE	1152	MAX9695AETM+	135C	192 HRS	48	0	E2RZDQ001DQ
HIGH TEMP OP LIFE	1152	MAX9695AETM+	135C	192 HRS	48	0	E2RZDQ001CQ
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX98304CEWL+	-40C TO +125C	500 CYS	100	0	EQ2ZDQ001A#
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX98304CEWL+	-40C TO +125C	500 CYS	100	0	EQ2ZDQ003A#
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX77686EWE+	-40C TO +125C	250 CYS	77	0	EAEU3A017A#
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX77686EWE+	-40C TO +125C	500 CYS	77	0	EAEU3A017A
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX77686EWE+	-40C TO +125C	250 CYS	77	0	EAEU3A017B
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX77686EWE+	-40C TO +125C	500 CYS	77	0	EAEU3A017B#
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX77686EWE+	-40C TO +125C	500 CYS	77	0	EAEU3A017C
Total:						0	

FAILURE RATE: MTTF (YRS): 15037 QUANTITY: 223 FAILS: 0 FITS: 7.6