



4/17/2012

**RELIABILITY MONITOR REPORT
FOR**

Epson Silicon Gate 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+	MAX17491GTA+	MAX9695AETM	MAX98304CEW
--------------	--------------	--------------	-------------	-------------

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 59607 QUANTITY: 455 FAILS: 0 FITS: 1.9

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 4/1/2011 and 3/31/2012 .

Process Information:

Process Description: Epson Silicon Gate CMOS (S18)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1108	MAX17491GTA+	135C	1000 HRS	75	0	EZGZIQ001F
HIGH TEMP OP LIFE	1112	MAX17491GTA+	135C	1000 HRS	77	0	EZGZIQ001GG
HIGH TEMP OP LIFE	1112	MAX17491GTA+	135C	1000 HRS	80	0	EZGZIQ002BB
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	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1108	MAX17491GTA+	150C	1000 HRS	80	0	EZGZIQ001FB
STORAGE LIFE	1112	MAX17491GTA+	150C	1000 HRS	80	0	EZGZIQ001GG
STORAGE LIFE	1112	MAX17491GTA+	150C	1000 HRS	80	0	EZGZIQ002BB
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	400 CYS	100	0	EQ2ZDQ001A#
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX98304CEWL+	-40C TO +125C	400 CYS	100	0	EQ2ZDQ003A#
TEMP CYCLE, 5' RAMP, 10' DWELL	1108	MAX17491GTA+	-65C TO 150C	500 CYS	80	0	EZGZIQ001FB

TEMP CYCLE, 5' RAMP, 1112	MAX17491GTA+	-65C TO 150C	500	CYS	80	0	EZGZIQ001GG
10' DWELL							
TEMP CYCLE, 5' RAMP, 1112	MAX17491GTA+	-65C TO 150C	500	CYS	80	0	EZGZIQ002BB
10' DWELL							

Total: 0

FAILURE RATE: **MTTF (YRS): 59607** **QUANTITY: 455** **FAILS: 0** **FITS: 1.9**