



10/8/10

**RELIABILITY MONITOR REPORT
FOR**

Epson SiGe HBT 0.18 μ m BiCMOS (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:

MAX9830AETA	MAX9832ETG+
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 92240 QUANTITY: 477 FAILS: 0 FITS: 1.2

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 10/1/2009 and 9/30/2010 .

Process Information:

Process Description: Epson SiGe HBT 0.18µm BiCMOS (S18)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1004	MAX9830AETA+T	135C	1000 HRS	80	0	EPYZJA006CG
HIGH TEMP OP LIFE	1010	MAX9830AETA+T	135C	1000 HRS	80	0	EPYZJA008AB
HIGH TEMP OP LIFE	1012	MAX9832ETG+	135C	1000 HRS	79	0	ETHZFA001CG
HIGH TEMP OP LIFE	1017	MAX9832ETG+	135C	1000 HRS	78	0	ETHZGA002AF
HIGH TEMP OP LIFE	1018	MAX9832ETG+	135C	1000 HRS	80	0	ETHZGA005AF
HIGH TEMP OP LIFE	1021	MAX9832ETG+	135C	1000 HRS	80	0	ETHZGA007AF
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1004	MAX9830AETA+T	150C	1000 HRS	80	0	EPYZJA006CG
STORAGE LIFE	1010	MAX9830AETA+T	150C	1000 HRS	80	0	EPYZJA008AB
STORAGE LIFE	1012	MAX9832ETG+	150C	1000 HRS	80	0	ETHZFA001CG
STORAGE LIFE	1017	MAX9832ETG+	150C	1000 HRS	80	0	ETHZGA002AF
STORAGE LIFE	1018	MAX9832ETG+	150C	1000 HRS	80	0	ETHZGA005AF
STORAGE LIFE	1021	MAX9832ETG+	150C	1000 HRS	80	0	ETHZGA007AF
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1004	MAX9830AETA+T	-65C TO 150C	500 CYS	80	0	EPYZJA006CG
TEMP CYCLE, 5' RAMP, 10' DWELL	1010	MAX9830AETA+T	-65C TO 150C	500 CYS	80	0	EPYZJA008AB

TEMP CYCLE, 5' RAMP, 1012	MAX9832ETG+	-65C TO 150C	500	CYS	80	0	ETHZFA001CG
10' DWELL							
TEMP CYCLE, 5' RAMP, 1018	MAX9832ETG+	-65C TO 150C	500	CYS	80	0	ETHZGA005AF
10' DWELL							
TEMP CYCLE, 5' RAMP, 1021	MAX9832ETG+	-65C TO 150C	500	CYS	80	0	ETHZGA007AF
10' DWELL							

Total: 0

FAILURE RATE: MTTF (YRS): 92240 QUANTITY: 477 FAILS: 0 FITS: 1.2