



10/8/10

**RELIABILITY MONITOR REPORT
FOR**

MFN SiGe HBT 0.5 μ m CMOS (GST40)

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:

MAX2140ETH+	MAX2821ETM+	MAX3806GTC+	MAX4951AECT
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 9432 QUANTITY: 288 FAILS: 0 FITS: 12.1

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

Process Information:

Process Description: MFN SiGe HBT 0.5µm CMOS (GST40)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	0842	MAX2140ETH+	135C	192 HRS	143	0	NEZ0E3756AY
HIGH TEMP OP LIFE	0912	MAX3806GTC+	135C	240 HRS	50	0	NLZZBQ001CQ
HIGH TEMP OP LIFE	0925	MAX4951AECTP+	135C	192 HRS	50	0	NXFYAQ001DQ
HIGH TEMP OP LIFE	1019	MAX2821ETM+	135C	1000 HRS	45		N7N1CA6D4Q2
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1019	MAX2821ETM+	150C	500 HRS	77	0	N7N1CA6D4Q1
STORAGE LIFE	1019	MAX2821ETM+	150C	500 HRS	77	0	N7N1CA6D4Q2
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1019	MAX2821ETM+	-65C TO 150C	1000 CYS	77	0	N7N1CA6D4Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1019	MAX2821ETM+	-65C TO 150C	1000 CYS	77	0	N7N1CA6D4Q2
Total:						0	

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