



1/25/2008

**RELIABILITY MONITOR REPORT
FOR**

MFN SiGe HBT CMOS

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:

MAX12000ETB+	MAX2015EUA	MAX2027EUP	MAX2027EUP+	MAX2140ETH+
MAX2160ETL+	MAX2388ETC+	MAX2504AELM	MAX2504ELM	MAX2538ETI
MAX2538ETI+	MAX2540EUT	MAX2582ELM	MAX2640EUT+	MAX2654EXT
MAX2741ETI+	MAX2821ETM+	MAX3738ETG	MAX3747AUEB	MAX3748AETE
MAX3748HETE	MAX3748HETE#	MAX3801UGG	MAX3802UTK+	MAX9234EUM

The calculated failure rate for devices using this process is:

FAILURE RATE: **MTTF (YRS): 534257** **FITS: 0.2**

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 and

Process Information:

Process Description: MFN SiGe HBT CMOS

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0440	MAX3802UTK+	135C, 5.25V	1000 HRS	45	0	
HIGH TEMP OP LIFE	0501	MAX2538ETI	135C, 5.25V	1000 HRS	78	0	
HIGH TEMP OP LIFE	0503	MAX9234EUM	135C, 5.25V	1000 HRS	47	0	
HIGH TEMP OP LIFE	0521	MAX3738ETG	135C, 5.25V	1000 HRS	48	0	
HIGH TEMP OP LIFE	0526	MAX2027EUP	135C, 5.25V	1000 HRS	48	0	
HIGH TEMP OP LIFE	0535	MAX3801UGG	135C, 5.25V	1000 HRS	74	0	
HIGH TEMP OP LIFE	0540	MAX2504ELM	135C, 5.25V	1000 HRS	43	0	
HIGH TEMP OP LIFE	0549	MAX2015EUA	135C, 5.25V	1000 HRS	48	0	
HIGH TEMP OP LIFE	0551	MAX3748HETE	135C, 5.25V	1000 HRS	45	0	
HIGH TEMP OP LIFE	0552	MAX3801UGG	135C, 5.25V	1000 HRS	48	0	
HIGH TEMP OP LIFE	0601	MAX2504AELM	135C, 5.25V	1000 HRS	42	0	
HIGH TEMP OP LIFE	0605	MAX2538ETI+	135C, 5.25V	1000 HRS	45	0	
			135C, 5.25V	1000 HRS	45	0	
			135C, 5.25V	1000 HRS	45	0	
		MAX2821ETM+	135C, 5.25V	1000 HRS	41	0	
			135C, 5.25V	1000 HRS	43	0	
			135C, 5.25V	1000 HRS	45	0	
HIGH TEMP OP LIFE	0606	MAX2821ETM+	135C, 5.25V	1000 HRS	44	0	
		MAX2015EUA	135C, 5.25V	1000 HRS	48	0	
		MAX2821ETM+	135C, 5.25V	1000 HRS	43	0	
HIGH TEMP OP LIFE	0607	MAX2538ETI+	135C, 5.25V	1000 HRS	43	0	

HIGH TEMP OP LIFE	0607	MAX2538ETI+	135C, 5.25V	1000 HRS	45	0
			135C, 5.25V	1000 HRS	45	0
		MAX2027EUP	135C, 5.25V	1000 HRS	47	0
HIGH TEMP OP LIFE	0608	MAX2388ETC+	135C, 5.25V	1000 HRS	43	0
			135C, 5.25V	1000 HRS	45	0
			135C, 5.25V	1000 HRS	45	0
HIGH TEMP OP LIFE	0610	MAX2582ELM	135C, 5.25V	1000 HRS	45	0
HIGH TEMP OP LIFE	0613	MAX12000ETB+	135C, 5.25V	1000 HRS	80	0
HIGH TEMP OP LIFE	0614	MAX2582ELM	135C, 5.25V	1000 HRS	45	0
			135C, 5.25V	1000 HRS	45	0
		MAX2504AELM	135C, 5.25V	1000 HRS	42	0
			135C, 5.25V	1000 HRS	40	0
		MAX2582ELM	135C, 5.25V	1000 HRS	45	0
HIGH TEMP OP LIFE	0621	MAX2027EUP+	135C, 5.25V	1000 HRS	48	0
HIGH TEMP OP LIFE	0622	MAX2582ELM	135C, 5.25V	1000 HRS	45	0
HIGH TEMP OP LIFE	0625	MAX2540EUT	135C, 5.25V	1000 HRS	80	0
		MAX2160ETL+	135C, 5.25V	1000 HRS	80	0
HIGH TEMP OP LIFE	0627	MAX3801UGG	135C, 5.25V	1000 HRS	49	0
		MAX2015EUA	135C, 5.25V	1000 HRS	48	0
HIGH TEMP OP LIFE	0632	MAX2654EXT	135C, 5.25V	1000 HRS	72	0
HIGH TEMP OP LIFE	0633	MAX2140ETH+	135C, 5.25V	1000 HRS	48	0
HIGH TEMP OP LIFE	0634	MAX3748AETE	135C, 5.25V	1000 HRS	45	0
HIGH TEMP OP LIFE	0641	MAX3801UGG	135C, 5.25V	1000 HRS	50	0
		MAX2027EUP+	135C, 5.25V	1000 HRS	48	0
HIGH TEMP OP LIFE	0642	MAX2027EUP+	135C, 5.25V	1000 HRS	45	0
		MAX2741ETI+	135C, 5.25V	1000 HRS	50	0
		MAX2027EUP+	135C, 5.25V	1000 HRS	45	0
			135C, 5.25V	1000 HRS	45	0
HIGH TEMP OP LIFE	0647	MAX3747AU EB+	135C, 5.25V	1000 HRS	45	0
HIGH TEMP OP LIFE	0649	MAX3748HETE#G16	135C, 5.25V	1000 HRS	49	0
HIGH TEMP OP LIFE	0701	MAX2027EUP+	135C, 5.25V	1000 HRS	48	0
HIGH TEMP OP LIFE	0705	MAX2027EUP+	135C, 5.25V	1000 HRS	47	0
HIGH TEMP OP LIFE	0718	MAX2640EUT+	135C, 5.25V	1000 HRS	70	0
HIGH TEMP OP LIFE	0726	MAX3801UGG	135C, 5.25V	1000 HRS	80	0

Total: 0

FAILURE RATE:

MTTF (YRS): 534257

FITS: 0.2