



1/25/2008

**RELIABILITY MONITOR REPORT  
FOR**

**MFN 5 $\mu$ m Silicon Gate 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:

MAX1771EPA	MAX222EWN	MAX232ACWE	MAX232ACWE+	MAX232AEPE
MAX232AEWE	MAX312ESE+	MAX313CSE	MAX313CSE+	MAX313ESE
MAX4507EPN				

The calculated failure rate for devices using this process is:

**FAILURE RATE:                    MTTF (YRS): 275945                    FITS: 0.4**

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 5µm Silicon Gate CMOS

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0548	MAX232AEPE	135C, 5.25V	1000 HRS	80	0	
HIGH TEMP OP LIFE	0549	MAX313CSE	135C, 5.25V	1000 HRS	80	0	
HIGH TEMP OP LIFE	0610	MAX4507EPN	135C, 5.25V	1000 HRS	77	0	
HIGH TEMP OP LIFE	0612	MAX232ACWE	135C, 5.25V	1000 HRS	77	0	
HIGH TEMP OP LIFE	0613	MAX1771EPA	135C, 5.25V	1000 HRS	122	0	
			135C, 5.25V	1000 HRS	122	0	
HIGH TEMP OP LIFE	0624	MAX313ESE	135C, 5.25V	1000 HRS	80	0	
HIGH TEMP OP LIFE	0640	MAX313CSE+	135C, 5.25V	1000 HRS	80	0	
		MAX222EWN	135C, 5.25V	1000 HRS	77	0	
		MAX232ACWE+	135C, 5.25V	1000 HRS	80	0	
HIGH TEMP OP LIFE	0650	MAX313CSE+	135C, 5.25V	1000 HRS	80	0	
HIGH TEMP OP LIFE	0701	MAX232ACWE+	135C, 5.25V	1000 HRS	80	0	
HIGH TEMP OP LIFE	0704	MAX313CSE	135C, 5.25V	1000 HRS	80	0	
HIGH TEMP OP LIFE	0717	MAX312ESE+	135C, 5.25V	1000 HRS	50	0	
			135C, 5.25V	1000 HRS	50	0	
			135C, 5.25V	1000 HRS	50	0	
HIGH TEMP OP LIFE	0719	MAX313CSE	135C, 5.25V	1000 HRS	79	0	
HIGH TEMP OP LIFE	0722	MAX232AEWE	135C, 5.25V	1000 HRS	80	0	
				<b>Total:</b>		<b>0</b>	

**FAILURE RATE:                    MTTF (YRS): 275945                    FITS: 0.4**