



1/25/2008

**RELIABILITY MONITOR REPORT
FOR**

TSMC 0.18 μ 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:

DS3100	DS32504	DS32512	DS33X162	MAX1437ECQ_
MAX1437ECQ+	MAX5859EXW+			

The calculated failure rate for devices using this process is:

FAILURE RATE: **MTTF (YRS): 66073** **FITS: 1.7**

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: TSMC 0.18µm Silicon Gate CMOS

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0543	MAX1437ECQ_	135C, 5.25V	1000 HRS	32	0	
		MAX1437ECQ+	135C, 5.25V	1000 HRS	32	0	
			135C, 5.25V	1000 HRS	32	0	
HIGH TEMP OP LIFE	0642	DS32504	125C, 2.0V (PSA) & 3.5V (PSB)	1000 HRS	45	0	
HIGH TEMP OP LIFE	0649	DS33X162	125C, 2.0V (PSB) & 3.5V (PSA)	1000 HRS	45	0	
HIGH TEMP OP LIFE	0704	MAX5859EXW+	135C, 5.25V	1000 HRS	44	0	
			135C, 5.25V	1000 HRS	45	0	
			135C, 5.25V	1000 HRS	45	0	
HIGH TEMP OP LIFE	0705	DS3100	125C, 3.5V (PSA) & 2.0V (PSB)	1000 HRS	48	0	
HIGH TEMP OP LIFE	0708	DS32512	125C, 2.0V (PSA) & 3.5V (PSB)	1000 HRS	45	0	
Total:						0	

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