



7/19/2012

**RELIABILITY MONITOR REPORT  
FOR**

**San Antonio Silicon Gate 0.5 $\mu$ m CMOS (E35)**

**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:

DS2704R	DS3232M
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The calculated failure rate for devices using this process is:

**FAILURE RATE: MTTF (YRS): 11656      QUANTITY: 160      FAILS: 0      FITS: 9.8**

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 7/1/2011 and 6/30/2012 .

**Process Information:**

Process Description: San Antonio Silicon Gate 0.5µm CMOS (E35)

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1135	DS2704R	125C, 5.5 VOLTS	1000 HRS	80	0	FJ268977ADA-IME
HIGH TEMP OP LIFE	1150	DS3232M	125C, 4.7 VOLTS (PSA)	240 HRS	80	0	ZX272110AA-NPI
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1135	DS2704R	150C	1000 HRS	80	0	FJ268977ADA-IME
<b>Total:</b>						<b>0</b>	

**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1135	DS2704R	-55C TO 125C	1000 CYS	80	0	FJ268977ADA-IME
<b>Total:</b>						<b>0</b>	

**UNBIASED MOISTURE RESISTANCE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HAST, NO BIAS	1135	DS2704R	130C, 85% R.H.	96 HRS	80	0	FJ268977ADA-IME
<b>Total:</b>						<b>0</b>	

**FAILURE RATE: MTTF (YRS): 11656      QUANTITY: 160      FAILS: 0      FITS: 9.8**