

4/17/2013



**RELIABILITY MONITOR REPORT  
FOR**

**San Antonio 0.8 $\mu$ m Silicon Gate CMOS (B8)**

**MAXIM INTEGRATED**

**160 RIO ROBLES  
SAN JOSE, CA 95134**

**This Report was prepared by  
MAXIM INTEGRATED 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:

MAX13432EESD	MAX1781ETM+
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The calculated failure rate for devices using this process is:

**FAILURE RATE:    MTTF (YRS): 14866    QUANTITY: 183    FAILS: 0    FITS: 7.7**

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 4/1/2012 and 3/31/2013 .

**Process Information:**

Process Description:                    San Antonio 0.8µm Silicon Gate CMOS (B8)

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1215	MAX1781ETM+	135°C	1000 HRS	45	0	TML5C3487Q1
HIGH TEMP OP LIFE	1215	MAX1781ETM+	135°C	1000 HRS	45	0	TML5C3487Q2
HIGH TEMP OP LIFE	1215	MAX1781ETM+	135°C	1000 HRS	45	0	TML5C3487Q3
HIGH TEMP OP LIFE	1227	MAX13432EESD+	135°C	192 HRS	48	0	TNUXBA020E
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1215	MAX1781ETM+	150°C	1000 HRS	77	0	TML5C3487Q1
STORAGE LIFE	1215	MAX1781ETM+	150°C	1000 HRS	77	0	TML5C3487Q2
STORAGE LIFE	1215	MAX1781ETM+	150°C	1000 HRS	77	0	TML5C3487Q3
STORAGE LIFE	1227	MAX13432EESD+	150°C	1000 HRS	80	0	TNUXBA020E
<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	1215	MAX1781ETM+	-65C TO 150C	1000 CYS	77	0	TML5C3487Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1215	MAX1781ETM+	-65C TO 150C	1000 CYS	77	0	TML5C3487Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	1215	MAX1781ETM+	-65C TO 150C	1000 CYS	77	0	TML5C3487Q3
TEMP CYCLE, 5' RAMP, 10' DWELL	1227	MAX13432EESD+	-65C TO 150C	500 CYS	80	0	TNUXBA020E
<b>Total:</b>						<b>0</b>	

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**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1227	MAX13432EESD+	130C, 85% R.H.	100 HRS	32	0	TNUXBA020E
<b>Total:</b>						<b>0</b>	

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**UNBIASED MOISTURE RESISTANCE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1227	MAX13432EESD+	130C, 85% R.H.	100 HRS	80	0	TNUXBA020E
<b>Total:</b>						<b>0</b>	

**FAILURE RATE: MTTF (YRS): 14866 QUANTITY: 183 FAILS: 0 FITS: 7.7**