

4/17/2013



**RELIABILITY MONITOR REPORT
FOR**

San Antonio 0.8 μ m Silicon Gate CMOS (EC8)

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:

DS1992	DS75
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 18801 QUANTITY: 160 FAILS: 0 FITS: 6.1

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 (EC8)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1225	DS75	125C, 5.5 VOLTS	1000 HRS	80	0	FK277512AAA
HIGH TEMP OP LIFE	1234	DS75	125C, 5.5 VOLTS	1000 HRS	80	0	FK380548AF
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1214	DS1992	85°C	1000 HRS	77	0	ZH273560ACD-ENG
STORAGE LIFE	1214	DS1992	85°C	1000 HRS	77	0	ZH273560ACE-ENG
STORAGE LIFE	1215	DS1992	85°C	1000 HRS	77	0	ZH273560ACF-ENG
STORAGE LIFE	1225	DS75	150°C	1000 HRS	80	0	FK277512AAA
STORAGE LIFE	1234	DS75	150°C	1000 HRS	80	0	FK380548AF
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1214	DS1992	-40 TO 85C	1000 CYS	77	0	ZH273560ACD-ENG
TEMP CYCLE, 5' RAMP, 10' DWELL	1214	DS1992	-40 TO 85C	1000 CYS	77	0	ZH273560ACE-ENG
TEMP CYCLE, 5' RAMP, 10' DWELL	1215	DS1992	-40 TO 85C	1000 CYS	77	0	ZH273560ACF-ENG
TEMP CYCLE, 5' RAMP, 10' DWELL	1225	DS75	-55C TO 125C	1000 CYS	80	0	FK277512AAA
TEMP CYCLE, 5' RAMP, 10' DWELL	1234	DS75	-65C TO 150C	500 CYS	80	0	FK380548AF

Total: 0

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HAST	1225	DS75	130C, 85%R.H., 5.5V	96 HRS	80	0	FK277512AAA
HAST	1234	DS75	130C, 85%R.H., 5.5V	96 HRS	80	0	FK380548AF
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1214	DS1992	60C/90% R.H.	1000 HRS	77	0	ZH273560ACD-ENG
MOISTURE SOAK	1214	DS1992	60C/90% R.H.	1000 HRS	77	0	ZH273560ACE-ENG
MOISTURE SOAK	1215	DS1992	60C/90% R.H.	1000 HRS	77	0	ZH273560ACF-ENG
HAST, NO BIAS	1225	DS75	130C, 85% R.H.	96 HRS	80	0	FK277512AAA
HAST, NO BIAS	1230	DS75	130C, 85% R.H.	96 HRS	80	0	FK279117AH
HAST, NO BIAS	1234	DS75	130C, 85% R.H.	96 HRS	80	0	FK380548AF
Total:						0	

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