

4/17/2013



**RELIABILITY MONITOR REPORT
FOR**

San Antonio 0.4 μ m Silicon Gate CMOS (E35)

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:

DS2431	DS28E01
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 27143 QUANTITY: 231 FAILS: 0 FITS: 4.2

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 0.4µm Silicon Gate CMOS (E35)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP REVERSE BIAS	1221	DS2431	125C, 5.25 VOLTS	1000 HRS	77	0	ZX278253AB
HIGH TEMP REVERSE BIAS	1221	DS2431	125C, 5.25 VOLTS	1000 HRS	77	0	ZX278253AC
HIGH TEMP REVERSE BIAS	1221	DS2431	125C, 5.25 VOLTS	1000 HRS	77	0	ZX278253AE
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1221	DS2431	150°C	1000 HRS	77	0	ZX278253AB
STORAGE LIFE	1221	DS2431	150°C	1000 HRS	77	0	ZX278253AC
STORAGE LIFE	1221	DS2431	150°C	1000 HRS	77	0	ZX278253AE
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1221	DS2431	-55C TO 125C	1000 CYS	77	0	ZX278253AB
TEMP CYCLE, 5' RAMP, 10' DWELL	1221	DS2431	-55C TO 125C	1000 CYS	77	0	ZX278253AC
TEMP CYCLE, 5' RAMP, 10' DWELL	1221	DS2431	-55C TO 125C	1000 CYS	77	0	ZX278253AE
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
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BIASED MOISTURE	1221	DS2431	85/85, 5.25 VOLTS	1000 HRS	77	0	ZX278253AB
BIASED MOISTURE	1221	DS2431	85/85, 5.25 VOLTS	1000 HRS	77	0	ZX278253AC
BIASED MOISTURE	1221	DS2431	85/85, 5.25 VOLTS	1000 HRS	77	0	ZX278253AE
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HAST, NO BIAS	1124	DS28E01	130C, 85% R.H.	96	HRS	80	FH166745AB
Total:						0	

FAILURE RATE: MTTF (YRS): 27143 QUANTITY: 231 FAILS: 0 FITS: 4.2