10/14/2016

RELIABILITY MONITOR REPORT
FOR

San Antonio 0.5µm 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:

87-3231M+ZNX 87-3731M+ZNX

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 23254 QUANTITY: 240 FAILS: 0 FITS: 4.9

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 7/1/2016 and 9/30/2016 .

Process Information:

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

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT		QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1621	87-3231M+ZNX	135°C	500	HRS	80	0	ZX625744AB
HIGH TEMP OP LIFE	1622	87-3231M+ZNX	135°C	1000	HRS	80	0	ZX625744ABA
HIGH TEMP OP LIFE	1622	87-3231M+ZNX	135°C	1000	HRS	80	0	ZX625744BB
					Total:		**0**	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT		QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1621	87-3231M+ZNX	150°C	1000	HRS	80	0	ZX625744AB
STORAGE LIFE	1622	87-3731M+ZNX	150°C	1000	HRS	80	0	ZX625744ABA
STORAGE LIFE	1622	87-3231M+ZNX	150°C	1000	HRS	77	0	ZX625744BB
					Total:		**0**	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT		QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1621	87-3231M+ZNX	-65C TO +150C (Condition C)	1000	CYS	100	0	ZX625744AB
TEMP CYCLE, 5' RAMP, 10' DWELL	1622	87-3231M+ZNX	-65C TO +150C (Condition C)	1000	CYS	100	0	ZX625744ABA
TEMP CYCLE, 5' RAMP, 10' DWELL	1622	87-3231M+ZNX	-65C TO +150C (Condition C)	1000	CYS	95	0	ZX625744BB
					Total:		**0**	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.

BIASED MOISTURE	1621	87-3231M+ZNX	130C, 85% R.H.	96	HRS	80	0	ZX625744AB
BIASED MOISTURE	1622	87-3231M+ZNX	130C, 85% R.H.	96	HRS	80	0	ZX625744ABA
BIASED MOISTURE	1622	87-3231M+ZNX	130C, 85% R.H.	96	HRS	80	0	ZX625744BB
					Total:		**0**	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT		QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1621	87-3231M+ZNX	130C, 85% R.H.	96	HRS	80	0	ZX625744AB
MOISTURE SOAK	1622	87-3231M+ZNX	130C, 85% R.H.	96	HRS	80	0	ZX625744ABA
MOISTURE SOAK	1622	87-3231M+ZNX	130C, 85% R.H.	96	HRS	80	0	ZX625744BB
					Total:		**0**	

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