

4/17/2013



**RELIABILITY MONITOR REPORT
FOR**

Epson 0.6 μ m Silicon Gate CMOS (C6Y)

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:

MAX11616EEE+	MAX11628EEE/	MAX11632EEG+	MAX1231BCEG	MAX9914EXK+
NAX1231BCEG+				

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 23429 QUANTITY: 159 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 4/1/2012 and 3/31/2013 .

Process Information:

Process Description: Epson 0.6µm Silicon Gate CMOS (C6Y)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1104	MAX11632EEG+	135°C	1336 HRS	79	0	EF4ZAA002X#
HIGH TEMP OP LIFE	1140	MAX9914EXK+	135°C	192 HRS	48	0	EOK3EQ002FQ
HIGH TEMP OP LIFE	1140	MAX9914EXK+	135°C	192 HRS	32	0	EOK3EQ002GQ
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1209	MAX11616EEE+	150°C	500 HRS	50	0	E3N0IA062AA
STORAGE LIFE	1216	MAX1231BCEG+	150°C	500 HRS	80	0	EF4ZAA010Q1
STORAGE LIFE	1216	MAX1231BCEG+	150°C	500 HRS	80	0	EF4ZAA010Q2
STORAGE LIFE	1216	NAX1231BCEG+	150°C	500 HRS	80	0	EF4ZAA010Q3
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1209	MAX11616EEE+	-65C TO 150C	500 CYS	80	0	E3N0IA062AA
TEMP CYCLE, 5' RAMP, 10' DWELL	1211	MAX11628EEE/V+	-65C TO 150C	500 CYS	80	0	EF4ZAA009S#
TEMP CYCLE, 5' RAMP, 10' DWELL	1214	MAX11616EEE+	-65C TO 150C	500 CYS	80	0	E3N0IA066A
TEMP CYCLE, 5' RAMP, 10' DWELL	1216	MAX1231BCEG+	-65C TO 150C	1000 CYS	80	0	EF4ZAA010Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1216	MAX1231BCEG+	-65C TO 150C	1000 CYS	80	0	EF4ZAA010Q2

TEMP CYCLE, 5' RAMP, 1216 MAX1231BCEG+ -65C TO 150C 1000 CYS 80 0 EF4ZAA010Q3
 10' DWELL
Total: 0

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1201	MAX11628EEE/V+	130C, 85% R.H.	100 HRS	80	0	EF4ZAA006D#
BIASED MOISTURE	1209	MAX11616EEE+	130C, 85% R.H.	100 HRS	32	0	E3N0IA062AA
BIASED MOISTURE	1211	MAX11628EEE/V+	130C, 85% R.H.	100 HRS	80	0	EF4ZAA009S#
BIASED MOISTURE	1214	MAX11616EEE+	130C, 85% R.H.	100 HRS	32	0	E3N0IA066A
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1209	MAX11616EEE+	130C, 85% R.H.	100 HRS	80	0	E3N0IA062AA
MOISTURE SOAK	1214	MAX11616EEE+	130C, 85% R.H.	100 HRS	80	0	E3N0IA066A
Total:						0	

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