

4/16/2014



**RELIABILITY MONITOR REPORT
FOR**

MFN 1.2 μ m Silicon Gate CMOS (B12)

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:

MAX6008AEUR/	MAX6166AESA	MAX669EUB/V+
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 18512 QUANTITY: 317 FAILS: 0 FITS: 6.2

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 4/1/2013 and 3/31/2014 .

Process Information:

Process Description: MFN 1.2µm Silicon Gate CMOS (B12)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1308	MAX6008AEUR/V+	135°C	192 HRS	80	0	R26737AL1
HIGH TEMP OP LIFE	1344	MAX6166AESA+	135°C	1000 HRS	26	0	JXE0CA032PG
HIGH TEMP OP LIFE	1344	MAX6166AESA+	135°C	1000 HRS	26	0	JXE0CA032PH
HIGH TEMP OP LIFE	1344	MAX6166AESA+	135°C	500 HRS	26	0	JXE0CA032PI
HIGH TEMP OP LIFE	1345	MAX6008AEUR/V+	135°C	192 HRS	80	0	JAKM9Q003H#
HIGH TEMP OP LIFE	1345	MAX6008AEUR/V+	135°C	192 HRS	79	0	JAKM9A005D#
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1308	MAX6008AEUR/V+	150°C	500 HRS	50	0	JAKM9Q001DB
STORAGE LIFE	1344	MAX6166AESA+	150°C	1000 HRS	77	0	JXE0CA032PG
STORAGE LIFE	1344	MAX6166AESA+	150°C	1000 HRS	77	0	JXE0CA032PH
STORAGE LIFE	1344	MAX6166AESA+	150°C	1000 HRS	77	0	JXE0CA032PI
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1344	MAX6166AESA+	-65C TO 150C	1000 CYS	77	0	JXE0CA032PG
TEMP CYCLE, 5' RAMP, 10' DWELL	1344	MAX6166AESA+	-65C TO 150C	1000 CYS	77	0	JXE0CA032PH
TEMP CYCLE, 5' RAMP, 10' DWELL	1344	MAX6166AESA+	-65C TO 150C	1000 CYS	77	0	JXE0CA032PI

TEMP CYCLE, 5' RAMP, 10' DWELL	1345	MAX6008AEUR/V+	-65C TO 150C	500	CYS	80	0	JAKM9Q003H#
TEMP CYCLE, 5' RAMP, 10' DWELL	1345	MAX6008AEUR/V+	-65C TO 150C	500	CYS	80	0	JAKM9A005D#
TEMP CYCLE, 5' RAMP, 10' DWELL	1352	MAX669EUB/V+	-65C TO 150C	500	CYS	80	0	JYGBLA089G#
TEMP CYCLE, 5' RAMP, 10' DWELL	1352	MAX669EUB/V+	-65C TO 150C	500	CYS	80	0	JYGBLA090D#
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1344	MAX6166AESA+	130C, 85% R.H.	100	HRS	45	0 JXE0CA032PH	
BIASED MOISTURE	1344	MAX6166AESA+	130C, 85% R.H.	100	HRS	45	0 JXE0CA032PI	
BIASED MOISTURE	1345	MAX6008AEUR/V+	130C, 85% R.H.	100	HRS	80	0 JAKM9Q003H#	
BIASED MOISTURE	1345	MAX6008AEUR/V+	130C, 85% R.H.	100	HRS	80	0 JAKM9A005D#	
BIASED MOISTURE	1352	MAX669EUB/V+	130C, 85% R.H.	100	HRS	80	0 JYGBLA089G#	
BIASED MOISTURE	1352	MAX669EUB/V+	130C, 85% R.H.	100	HRS	80	0 JYGBLA090D#	
Total:							0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	1344	MAX6166AESA+	130C, 85% R.H.	392	HRS	45	0 JXE0CA032PG	
MOISTURE SOAK	1344	MAX6166AESA+	130C, 85% R.H.	392	HRS	45	0 JXE0CA032PH	
MOISTURE SOAK	1344	MAX6166AESA+	130C, 85% R.H.	392	HRS	45	0 JXE0CA032PI	
MOISTURE SOAK	1345	MAX6008AEUR/V+	130C, 85% R.H.	100	HRS	80	0 JAKM9Q003H#	
MOISTURE SOAK	1345	MAX6008AEUR/V+	130C, 85% R.H.	100	HRS	80	0 JAKM9A005D#	
MOISTURE SOAK	1352	MAX669EUB/V+	130C, 85% R.H.	100	HRS	80	0 JYGBLA089G#	
MOISTURE SOAK	1352	MAX669EUB/V+	130C, 85% R.H.	100	HRS	80	0 JYGBLA090D#	
Total:							0	

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