

4/17/2013



**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:

MAX1240AESA/ MAX6321HPUK	MAX4257ESA+ MAX6322HPUK	MAX6318MHUK MAX8873REUK/	MAX6319LHUK MAX8877EZK33	MAX6320PUK29
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 54065 QUANTITY: 320 FAILS: 0 FITS: 2.1

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: MFN 1.2µm Silicon Gate CMOS (B12)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1010	MAX8873REUK/V+	135°C	500 HRS	80	0	NI9ECA146BA
HIGH TEMP OP LIFE	1131	MAX4257ESA+	135°C	1000 HRS	80	0	JL3BDA046E#
HIGH TEMP OP LIFE	1209	MAX4257ESA+	135°C	1000 HRS	80	0	JL3BDA047C#
HIGH TEMP OP LIFE	1209	MAX4257ESA+	135°C	1000 HRS	80	0	JL3BDA048D#
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1143	MAX6320PUK29DY+	150°C	1000 HRS	50	0	JQLEIQ001BC
STORAGE LIFE	1204	MAX1240AESA/V+	150°C	500 HRS	50	0	JV7GFA124P#
STORAGE LIFE	1208	MAX6318MHUK46CY+	150°C	1000 HRS	50	0	JQLCIQ002CB
STORAGE LIFE	1209	MAX4257ESA+	150°C	500 HRS	80	0	JL3BDA047C#
STORAGE LIFE	1209	MAX4257ESA+	150°C	500 HRS	80	0	JL3BDA048D#
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1143	MAX6320PUK29DY+	-65C TO 150C	500 CYS	80	0	JQLEIQ001BC
TEMP CYCLE, 5' RAMP, 10' DWELL	1147	MAX6319LHUK46C+	-65C TO 150C	500 CYS	80	0	JQLDIQ002AB
TEMP CYCLE, 5' RAMP, 10' DWELL	1204	MAX1240AESA/V+	-65C TO 150C	500 CYS	80	0	JV7GFA124P#

TEMP CYCLE, 5' RAMP, 10' DWELL	1204	MAX1240AESA/V+	-65C TO 150C	500	CYS	80	0	JV7GFA124O#
TEMP CYCLE, 5' RAMP, 10' DWELL	1208	MAX6318MHUK46CY+	-65C TO 150C	500	CYS	80	0	JQLCIQ002CB
TEMP CYCLE, 5' RAMP, 10' DWELL	1208	MAX6322HPUK46C+	-65C TO 150C	500	CYS	80	0	JQLGIQ002AB
TEMP CYCLE, 5' RAMP, 10' DWELL	1209	MAX4257ESA+	-65C TO 150C	500	CYS	80	0	JL3BDA047C#
TEMP CYCLE, 5' RAMP, 10' DWELL	1209	MAX4257ESA+	-65C TO 150C	500	CYS	80	0	JL3BDA048D#
TEMP CYCLE, 5' RAMP, 10' DWELL	1222	MAX6321HPUK46CY+	-65C TO 150C	500	CYS	80	0	JQLFIA010F#
TEMP CYCLE, 5' RAMP, 10' DWELL	1246	MAX8877EZK33+GF4	-65C TO 150C	1000	CYS	77	0	JM2AGA078Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1246	MAX8877EZK33+GF4	-65C TO 150C	1000	CYS	77	0	JM2AGA078Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	1246	MAX8877EZK33+GF4	-65C TO 150C	1000	CYS	77	0	JM2AGA078Q3
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1143	MAX6320PUK29DY+	130C, 85% R.H.	96	HRS	80	0	JQLEIQ001BC
BIASED MOISTURE	1147	MAX6319LHUK46C+	130C, 85% R.H.	96	HRS	80	0	JQLDIQ002AB
BIASED MOISTURE	1208	MAX6322HPUK46C+	130C, 85% R.H.	100	HRS	80	0	JQLGIQ002AB
Total:							0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	1208	MAX6322HPUK46C+	130C, 85% R.H.	100	HRS	80	0	JQLGIQ002AB
Total:							0	

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