

10/23/2014



**RELIABILITY MONITOR REPORT
FOR**

MFN 0.8 μ m Silicon Gate (B8)

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:

MAX14781EESA	MAX14784EAS	MAX1793EUE33	MAX1793EUE33	MAX4364ESA+
MAX5961ETM+	MAX8505EEE+	MAX8880EUT+		

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 23330 QUANTITY: 511 FAILS: 1 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 10/1/2013 and 9/30/2014 .

Process Information:

Process Description: MFN 0.8µm Silicon Gate (B8)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1333	MAX8880EUT+T	135°C	1000 HRS	76	1	J7GAIA111Q1
HIGH TEMP OP LIFE	1333	MAX8880EUT+T	135°C	1000 HRS	77	0	J7GAIA111Q2
HIGH TEMP OP LIFE	1333	MAX8880EUT+T	135°C	1000 HRS	77	0	J7GAIA111Q3
HIGH TEMP OP LIFE	1338	MAX14781EESA+	135°C	192 HRS	80	0	JANC3Q002CQ
HIGH TEMP OP LIFE	1345	MAX14784EASD+	135°C	192 HRS	32	0	JAPE4Q001DQ
HIGH TEMP OP LIFE	1345	MAX14784EASD+	135°C	192 HRS	48	0	JAPE4Q001BQ
HIGH TEMP OP LIFE	N/A	MAX5961ETM+	135°C	500 HRS	38	0	JADL9A079Q1
HIGH TEMP OP LIFE	N/A	MAX5961ETM+	135°C	500 HRS	42	0	JADL9A079Q2
HIGH TEMP OP LIFE	N/A	MAX5961ETM+	135°C	1000 HRS	41	0	JADL9A079Q3
				Total:		1	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1333	MAX8880EUT+T	150°C	1000 HRS	80	0	J7GAIA111Q1
STORAGE LIFE	1333	MAX8880EUT+T	150°C	1000 HRS	80	0	J7GAIA111Q2
STORAGE LIFE	1333	MAX8880EUT+T	150°C	1000 HRS	80	0	J7GAIA111Q3
STORAGE LIFE	1340	MAX4364ESA+CGL	150°C	1000 HRS	50	0	JD50FA032Q1
STORAGE LIFE	1341	MAX4364ESA+CGL	150°C	1000 HRS	50	0	JD50FA032Q2
STORAGE LIFE	1341	MAX4364ESA+CGL	150°C	1000 HRS	50	0	JD50FA032Q3
STORAGE LIFE	1347	MAX8505EEE+	150°C	1000 HRS	80	0	JKK0IA058G
STORAGE LIFE	1347	MAX8505EEE+	150°C	1000 HRS	80	0	JKK0IA059GA

STORAGE LIFE	1347	MAX8505EEE+	150°C	1000	HRS	80	0	JKK0IA059GB
STORAGE LIFE	1423	MAX1793EUE33/V+T	150°C	500	HRS	50	0	J2HAE3044F#
Total:							0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
TEMP CYCLE, 5' RAMP, 10' DWELL	1333	MAX8880EUT+T	-65C TO +150C (Condition C)	1000	CYS	45	0	J7GAIA111Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1333	MAX8880EUT+T	-65C TO +150C (Condition C)	1000	CYS	80	0	J7GAIA111Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	1333	MAX8880EUT+T	-65C TO +150C (Condition C)	1000	CYS	80	0	J7GAIA111Q3
TEMP CYCLE, 5' RAMP, 10' DWELL	1340	MAX4364ESA+CGL	-65C TO +150C (Condition C)	1000	CYS	79	0	JD50FA032Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1341	MAX4364ESA+CGL	-65C TO +150C (Condition C)	1000	CYS	84	0	JD50FA032Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	1341	MAX4364ESA+CGL	-65C TO +150C (Condition C)	1000	CYS	80	0	JD50FA032Q3
TEMP CYCLE, 5' RAMP, 10' DWELL	1347	MAX8505EEE+	-65C TO +150C (Condition C)	1000	CYS	80	0	JKK0IA058G
TEMP CYCLE, 5' RAMP, 10' DWELL	1347	MAX8505EEE+	-65C TO +150C (Condition C)	1000	CYS	80	0	JKK0IA058GA
TEMP CYCLE, 5' RAMP, 10' DWELL	1347	MAX8505EEE+	-65C TO +150C (Condition C)	1000	CYS	80	0	JKK0IA058GB
TEMP CYCLE, 5' RAMP, 10' DWELL	1423	MAX1793EUE33/V+T	-65C TO +150C (Condition C)	500	CYS	80	0	J2HAE3044F#
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1340	MAX4364ESA+CGL	130C, 85% R.H.	100	HRS	80	0	JD50FA032Q1
BIASED MOISTURE	1341	MAX4364ESA+CGL	130C, 85% R.H.	100	HRS	80	0	JD50FA032Q2
BIASED MOISTURE	1341	MAX4364ESA+CGL	130C, 85% R.H.	100	HRS	80	0	JD50FA032Q3
Total:							0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	1333	MAX8880EUT+T	85 C/85% R.H.	1000	HRS	45	0	J7GAIA111Q2
MOISTURE SOAK	1333	MAX8880EUT+T	85 C/85% R.H.	1000	HRS	45	0	J7GAIA111Q1

MOISTURE SOAK	1333	MAX8880EUT+T	85 C/85% R.H.	1000	HRS	45	0	J7GAIA111Q3
MOISTURE SOAK	1340	MAX4364ESA+CGL	130C, 85% R.H.	100	HRS	80	0	JD50FA032Q1
MOISTURE SOAK	1341	MAX4364ESA+CGL	130C, 85% R.H.	100	HRS	80	0	JD50FA032Q2
MOISTURE SOAK	1341	MAX4364ESA+CGL	130C, 85% R.H.	100	HRS	80	0	JD50FA032Q3
MOISTURE SOAK	1423	MAX1793EUE33/V+T	130C, 85% R.H.	96	HRS	80	0	J2HAE3044F#
MOISTURE SOAK	1427	MAX1793EUE33/V+	130C, 85% R.H.	96	HRS	80	0	J2HAEA038T#
MOISTURE SOAK	1429	MAX1793EUE33/V+T	130C, 85% R.H.	100	HRS	80	0	J2HAEA042E#

Total: 0

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