

4/23/2015



**RELIABILITY MONITOR REPORT
FOR**

MFN 3 μ m Silicon Gate (B3)

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:

MAX16945TGU	MAX1744EUB+	MAX3243EAI+	MAX6174BASA	MAX6175BASA
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 42057 QUANTITY: 479 FAILS: 1 FITS: 2.7

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 4/1/2014 and 3/31/2015 .

Process Information:

Process Description: MFN 3µm Silicon Gate (B3)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1337	MAX6174BASA+	135°C	1000 HRS	79	0	JAMO5Q001I#
HIGH TEMP OP LIFE	1407	MAX1744EUB+	135°C	1000 HRS	80	1	J3KAIA287C
HIGH TEMP OP LIFE	1425	MAX6175BASA+	135°C	1000 HRS	80	0	JAMO6A004C#
HIGH TEMP OP LIFE	1425	MAX6175BASA+	135°C	1000 HRS	80	0	JAMO6Q003D#
HIGH TEMP OP LIFE	1425	MAX6175BASA+	135°C	1000 HRS	80	0	JAMO6Q002F#
HIGH TEMP OP LIFE	1437	MAX3243EAI+	135°C	1000 HRS	80	0	JAHR0A075D
Total:						1	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1337	MAX6174BASA+	150°C	1000 HRS	80	0	JAMO5Q001I#
STORAGE LIFE	1407	MAX1744EUB+	150°C	1000 HRS	80	0	J3KAIA287C
STORAGE LIFE	1425	MAX6175BASA+	150°C	1000 HRS	50	0	JAMO6A004C#
STORAGE LIFE	1437	MAX3243EAI+	150°C	1000 HRS	78	0	JAHR0A075D
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1337	MAX6174BASA+	-65C TO +150C (Condition C)	500 CYS	80	0	JAMO5Q001I#
TEMP CYCLE, 5' RAMP, 10' DWELL	1405	MAX16945TGUT#TG16	-65C TO +150C (Condition C)	600 CYS	100	0	NACX62094BA

TEMP CYCLE, 5' RAMP, 10' DWELL	1407	MAX1744EUB+	-65C TO +150C (Condition C)	500	CYS	78	0	J3KAIA287C
TEMP CYCLE, 5' RAMP, 10' DWELL	1425	MAX6175BASA+	-65C TO +150C (Condition C)	500	CYS	80	0	JAMO6A004C#
TEMP CYCLE, 5' RAMP, 10' DWELL	1425	MAX6175BASA+	-65C TO +150C (Condition C)	500	CYS	80	0	JAMO6Q003D#
TEMP CYCLE, 5' RAMP, 10' DWELL	1425	MAX6175BASA+	-65C TO +150C (Condition C)	500	CYS	80	0	JAMO6Q002F#
TEMP CYCLE, 5' RAMP, 10' DWELL	1437	MAX3243EAI+	-65C TO +150C (Condition C)	500	CYS	78	0	JAHR0A075D
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1337	MAX6174BASA+	130C, 85% R.H.	96	HRS	80	0	JAMO5Q001I#
BIASED MOISTURE	1425	MAX6175BASA+	130C, 85% R.H.	96	HRS	80	0	JAMO6A004C#
BIASED MOISTURE	1425	MAX6175BASA+	130C, 85% R.H.	96	HRS	80	0	JAMO6Q003D#
BIASED MOISTURE	1425	MAX6175BASA+	130C, 85% R.H.	96	HRS	80	0	JAMO6Q002F#
BIASED MOISTURE	1437	MAX3243EAI+	130C, 85% R.H.	100	HRS	78	0	JAHR0A075D
Total:							0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	1337	MAX6174BASA+	130C, 85% R.H.	96	HRS	80	0	JAMO5Q001I#
MOISTURE SOAK	1425	MAX6175BASA+	130C, 85% R.H.	96	HRS	80	0	JAMO6A004C#
MOISTURE SOAK	1425	MAX6175BASA+	130C, 85% R.H.	96	HRS	80	0	JAMO6Q003D#
MOISTURE SOAK	1425	MAX6175BASA+	130C, 85% R.H.	96	HRS	80	0	JAMO6Q002F#
Total:							0	

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