

10/23/2014



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:

MAX1744EUB/V	MAX1745AUB+	MAX6174BASA/	MAX6175BASA/
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 26131 QUANTITY: 237 FAILS: 0 FITS: 4.4

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 3µm Silicon Gate (B3)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1330	MAX6175BASA/V+	135°C	284 HRS	80	0	JAMO6Q003E#
HIGH TEMP OP LIFE	1335	MAX6175BASA/V+	135°C	716 HRS	78	0	JAMO6Q002EX
HIGH TEMP OP LIFE	1337	MAX6174BASA/V+	135°C	1000 HRS	79	0	JAMO5Q001I#
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1328	MAX6175BASA/V+	150°C	500 HRS	80	0	JAMO6Q001JB
STORAGE LIFE	1337	MAX6174BASA/V+	150°C	1000 HRS	80	0	JAMO5Q001I#
STORAGE LIFE	1407	MAX1744EUB/V+	150°C	500 HRS	80	0	J3KAIA287C
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1330	MAX6175BASA/V+	-65C TO +150C (Condition C)	500 CYS	80	0	JAMO6Q003E#
TEMP CYCLE, 5' RAMP, 10' DWELL	1335	MAX6175BASA/V+	-65C TO +150C (Condition C)	500 CYS	80	0	JAMO6Q002EX
TEMP CYCLE, 5' RAMP, 10' DWELL	1337	MAX6174BASA/V+	-65C TO +150C (Condition C)	500 CYS	80	0	JAMO5Q001I#
TEMP CYCLE, 5' RAMP, 10' DWELL	1407	MAX1744EUB/V+	-65C TO +150C (Condition C)	200 CYS	80	0	J3KAIA287C
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1328	MAX6175BASA/V+	130C, 85% R.H.	100	HRS	30	0	JAMO6Q001JB
BIASED MOISTURE	1330	MAX6175BASA/V+	130C, 85% R.H.	100	HRS	80	0	JAMO6Q003E#
BIASED MOISTURE	1337	MAX6174BASA/V+	130C, 85% R.H.	96	HRS	80	0	JAMO5Q001I#
Total:						0		

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	1308	MAX1745AUB+	130C, 85% R.H.	96	HRS	80	0	J3KBIA177Q1
MOISTURE SOAK	1308	MAX1745AUB+	130C, 85% R.H.	96	HRS	80	0	J3KBIA177Q2
MOISTURE SOAK	1308	MAX1745AUB+	130C, 85% R.H.	96	HRS	80	0	J3KBIA177Q3
MOISTURE SOAK	1328	MAX6175BASA/V+	130C, 85% R.H.	100	HRS	30	0	JAMO6Q001JB
MOISTURE SOAK	1330	MAX6175BASA/V+	130C, 85% R.H.	100	HRS	80	0	JAMO6Q003E#
MOISTURE SOAK	1337	MAX6174BASA/V+	130C, 85% R.H.	96	HRS	80	0	JAMO5Q001I#
Total:						0		

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