

7/10/2017



**RELIABILITY MONITOR REPORT
FOR**

MFN GST20

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:

MAX2235EUP+	MAX2248ETE+	MAX3645EEE+	MAX3969ETP+
-------------	-------------	-------------	-------------

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 103092 QUANTITY: 452 FAILS: 0 FITS: 1.1

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 4/1/2017 and 6/30/2017 .

Process Information:

Process Description: MFN GST20

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1613	MAX3645EEE+	135°C	1000 HRS	54	0	NNL0AA122Q1
HIGH TEMP OP LIFE	1613	MAX3645EEE+	135°C	1000 HRS	55	0	NNL0AA122Q1
HIGH TEMP OP LIFE	1613	MAX3645EEE+	135°C	1000 HRS	55	0	NNL0AA122Q2
HIGH TEMP OP LIFE	1614	MAX3969ETP+	135°C	1000 HRS	48	0	NSM0A3142G
HIGH TEMP OP LIFE	1614	MAX3969ETP+	135°C	1000 HRS	32	0	NSM0A3142G
HIGH TEMP OP LIFE	1635	MAX3969ETP+	135°C	1000 HRS	48	0	NSM0AA201AB
HIGH TEMP OP LIFE	1635	MAX3969ETP+	135°C	1000 HRS	32	0	NSM0AA201AB
HIGH TEMP OP LIFE	1641	MAX2235EUP+	135°C	1000 HRS	80	0	NW2AFA098EF
HIGH TEMP OP LIFE	1646	MAX3969ETP+	135°C	1000 HRS	48	0	NSM0AA203CA
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1551	MAX3645EEE+	150°C	1000 HRS	90	0	NNL0A3121DA
STORAGE LIFE	1613	MAX3645EEE+	150°C	1000 HRS	90	0	NNL0AA122Q1
STORAGE LIFE	1613	MAX3645EEE+	150°C	1000 HRS	90	0	NNL0AA122Q2
STORAGE LIFE	1614	MAX3969ETP+	150°C	1000 HRS	80	0	NSM0A3142G
STORAGE LIFE	1635	MAX3969ETP+	150°C	1000 HRS	80	0	NSM0AA201AB
STORAGE LIFE	1641	MAX2235EUP+	150°C	1000 HRS	80	0	NW2AFA098EF
STORAGE LIFE	1646	MAX3969ETP+	150°C	1000 HRS	80	0	NSM0AA203CA
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1614	MAX3969ETP+	-65C TO +150C (Condition C)	1000 CYS	80	0	NSM0A3142G
TEMP CYCLE, 5' RAMP, 10' DWELL	1635	MAX3969ETP+	-65C TO +150C (Condition C)	1000 CYS	80	0	NSM0AA201AB
TEMP CYCLE, 5' RAMP, 10' DWELL	1641	MAX2235EUP+	-65C TO +150C (Condition C)	1000 CYS	80	0	NW2AFA098EF
TEMP CYCLE, 5' RAMP, 10' DWELL	1646	MAX3969ETP+	-65C TO +150C (Condition C)	1000 CYS	80	0	NSM0AA203CA
TEMP CYCLE, 5' RAMP, 10' DWELL	1702	MAX2248ETE+	-65C TO +150C (Condition C)	1000 CYS	100	0	NBOIQ001B#
TEMP CYCLE, 5' RAMP, 10' DWELL	1702	MAX2248ETE+	-65C TO +150C (Condition C)	1000 CYS	100	0	NBOIQ001B\$
TEMP CYCLE, 5' RAMP, 10' DWELL	1702	MAX2248ETE+	-65C TO +150C (Condition C)	1000 CYS	100	0	NBOIQ001B%
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1613	MAX3645EEE+	130C, 85%	96 HRS	80	0	NNL0AA122Q1
BIASED MOISTURE	1613	MAX3645EEE+	130C, 85%	96 HRS	80	0	NNL0AA122Q2
BIASED MOISTURE	1614	MAX3969ETP+	130C, 85%	100 HRS	80	0	NSM0A3142G
BIASED MOISTURE	1641	MAX2235EUP+	130C, 85%	96 HRS	80	0	NW2AFA098EF
BIASED MOISTURE	1646	MAX3969ETP+	130C, 85%	96 HRS	80	0	NSM0AA203CA
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1635	MAX3969ETP+	130C, 85%	96 HRS	80	0	NSM0AA201AB
Total:						0	

FAILURE RATE: MTTF (YRS): 103092 QUANTITY: 452 FAILS: 0 FITS: 1.1