

7/10/2017



**RELIABILITY MONITOR REPORT  
FOR**

**MFN GST40**

**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:

MAX12000ETB+	MAX2070GTM/	MAX2070GTM+	MAX3814CHJ+	MAX3815CCM+
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The calculated failure rate for devices using this process is:

**FAILURE RATE:    MTTF (YRS): 123633    QUANTITY: 606    FAILS: 0    FITS: 0.9**

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

**Process Information:**

Process Description:            MFN GST40

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1548	MAX2070GTM/V+	135°C	1000 HRS	84	0	NAJYB3049D
HIGH TEMP OP LIFE	1607	MAX2070GTM+	135°C	1000 HRS	90	0	NAJYBZ056C
HIGH TEMP OP LIFE	1607	MAX2070GTM+	135°C	1000 HRS	90	0	NAJYBZ056E
HIGH TEMP OP LIFE	1612	MAX3814CHJ+	135°C	1000 HRS	48	0	NBOZBA054H
HIGH TEMP OP LIFE	1620	MAX12000ETB+	135°C	1000 HRS	80	0	NZD0A3043G
HIGH TEMP OP LIFE	1627	MAX2070GTM+	135°C	1000 HRS	54	0	NAJYBZ056D
HIGH TEMP OP LIFE	1641	MAX3815CCM+	135°C	1000 HRS	48	0	NXQ0A3365AB
HIGH TEMP OP LIFE	1641	MAX3815CCM+	135°C	1000 HRS	32	0	NXQ0A3365AB
HIGH TEMP OP LIFE	1702	MAX3815CCM+	135°C	1000 HRS	48	0	NXQ0AA381AH
HIGH TEMP OP LIFE	1702	MAX3815CCM+	135°C	1000 HRS	32	0	NXQ0AA381AH
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1548	MAX2070GTM/V+	150°C	1000 HRS	80	0	NAJYB3049C
STORAGE LIFE	1548	MAX2070GTM/V+	150°C	1000 HRS	80	0	NAJYB3049D
STORAGE LIFE	1548	MAX2070GTM/V+	150°C	1000 HRS	80	0	NAJYB3049E
STORAGE LIFE	1607	MAX2070GTM+	150°C	1000 HRS	90	0	NAJYBZ056D
STORAGE LIFE	1607	MAX2070GTM+	150°C	1000 HRS	89	0	NAJYBZ056E
STORAGE LIFE	1612	MAX3814CHJ+	150°C	1000 HRS	80	0	NBOZBA054H
STORAGE LIFE	1620	MAX12000ETB+	150°C	1000 HRS	80	0	NZD0A3043G
STORAGE LIFE	1641	MAX3815CCM+	150°C	1000 HRS	80	0	NXQ0A3365AB

STORAGE LIFE	1702	MAX3815CCM+	150°C	1000	HRS	80	0	NXQ0AA381AH
<b>Total:</b>							<b>0</b>	

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**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
TEMP CYCLE, 5' RAMP, 10' DWELL	1548	MAX2070GTM/V+	-65C TO +150C (Condition C)	1000	CYS	100	0 NAJYB3049C	
TEMP CYCLE, 5' RAMP, 10' DWELL	1548	MAX2070GTM/V+	-65C TO +150C (Condition C)	1000	CYS	100	0 NAJYB3049D	
TEMP CYCLE, 5' RAMP, 10' DWELL	1607	MAX2070GTM+	-65C TO +150C (Condition C)	1000	CYS	120	0 NAJYBZ056C	
TEMP CYCLE, 5' RAMP, 10' DWELL	1607	MAX2070GTM+	-65C TO +150C (Condition C)	500	CYS	120	0 NAJYBZ056D	
TEMP CYCLE, 5' RAMP, 10' DWELL	1607	MAX2070GTM+	-65C TO +150C (Condition C)	1000	CYS	120	0 NAJYBZ056E	
TEMP CYCLE, 5' RAMP, 10' DWELL	1612	MAX3814CHJ+	-65C TO +150C (Condition C)	1000	CYS	79	0 NBOZBA054H	
TEMP CYCLE, 5' RAMP, 10' DWELL	1620	MAX12000ETB+	-65C TO +150C (Condition C)	1000	CYS	80	0 NZD0A3043G	
TEMP CYCLE, 5' RAMP, 10' DWELL	1641	MAX3815CCM+	-65C TO +150C (Condition C)	1000	CYS	80	0 NXQ0A3365AB	
TEMP CYCLE, 5' RAMP, 10' DWELL	1702	MAX3815CCM+	-65C TO +150C (Condition C)	1000	CYS	80	0 NXQ0AA381AH	
<b>Total:</b>							<b>0</b>	

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**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1548	MAX2070GTM/V+	130C, 85%	96	HRS	80	0 NAJYB3049C	
BIASED MOISTURE	1620	MAX12000ETB+	130C, 85%	96	HRS	60	0 NZD0A3043G	
BIASED MOISTURE	1620	MAX12000ETB+	130C, 85%	96	HRS	20	0 NZD0A3043G	
BIASED MOISTURE	1641	MAX3815CCM+	130C, 85%	96	HRS	40	0 NXQ0A3365AB	
BIASED MOISTURE	1641	MAX3815CCM+	130C, 85%	96	HRS	40	0 NXQ0A3365AB	
BIASED MOISTURE	1702	MAX3815CCM+	130C, 85%	96	HRS	40	0 NXQ0AA381AH	
BIASED MOISTURE	1702	MAX3815CCM+	130C, 85%	96	HRS	40	0 NXQ0AA381AH	
<b>Total:</b>							<b>0</b>	

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**UNBIASED MOISTURE RESISTANCE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1607	MAX2070GTM+	130C, 85%	96	HRS	80	0 NAJYBZ056C
MOISTURE SOAK	1607	MAX2070GTM+	130C, 85%	96	HRS	80	0 NAJYBZ056D

MOISTURE SOAK	1607	MAX2070GTM+	130C, 85%	96	HRS	85	0	NAJYBZ056E
					<b>Total:</b>		<b>0</b>	
<b>FAILURE RATE:</b>	<b>MTTF (YRS):</b>	<b>123633</b>	<b>QUANTITY:</b>	<b>606</b>	<b>FAILS:</b>	<b>0</b>	<b>FITS:</b>	<b>0.9</b>