

1/24/2019



**RELIABILITY MONITOR REPORT  
FOR**

**MFN S12**

**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:

MAX15038ETG+	MAX5170BEEE+	MAX6126BASA
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The calculated failure rate for devices using this process is:

**FAILURE RATE:    MTTF (YRS): 83520    QUANTITY: 431    FAILS: 0    FITS: 1.4**

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 1/1/2019 and 12/31/2018.

**Process Information:**

Process Description:            MFN S12

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1745	MAX6126BASA25+	135°C	1000 HRS	80	0	NAI1BA221PC
HIGH TEMP OP LIFE	1801	MAX5170BEEE+	135°C	1000 HRS	80	0	NAEZ14125G
HIGH TEMP OP LIFE	1811	MAX5170BEEE+	125°C	1000 HRS	80	0	NAEZ1A130EA
HIGH TEMP OP LIFE	1822	MAX15038ETG+	125°C	1000 HRS	32	0	EBKL4A043EX
HIGH TEMP OP LIFE	1828	MAX6126BASA25+	125°C	1000 HRS	79	0	NAI1B2238B
HIGH TEMP OP LIFE	1832	MAX5170BEEE+	125°C	1000 HRS	80	0	NAEZ1A130JX
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1745	MAX6126BASA25+	150°C	1000 HRS	80	0	NAI1BA221PC
STORAGE LIFE	1801	MAX5170BEEE+	150°C	1000 HRS	80	0	NAEZ14125G
STORAGE LIFE	1811	MAX5170BEEE+	150°C	500 HRS	80	0	NAEZ1A130EA
STORAGE LIFE	1832	MAX5170BEEE+	150°C	1000 HRS	80	0	NAEZ1A130JX
<b>Total:</b>						<b>0</b>	

**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1745	MAX6126BASA25+	-65C TO +150C (Condition C)	1000 CYS	80	0	NAI1BA221PC
TEMP CYCLE, 5' RAMP, 10' DWELL	1801	MAX5170BEEE+	-65C TO +150C (Condition C)	1000 CYS	80	0	NAEZ14125G

TEMP CYCLE, 5' RAMP, 10' DWELL	1811	MAX5170BEEE+	-65C TO +150C (Condition C)	1000	CYS	80	0	NAEZ1A130EA
TEMP CYCLE, 5' RAMP, 10' DWELL	1832	MAX5170BEEE+	-65C TO +150C (Condition C)	1000	CYS	80	0	NAEZ1A130JX
<b>Total:</b>							<b>0</b>	

**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1745	MAX6126BASA25+	85 C/85% R.H.	96	HRS	79	0 NAI1BA221PC
BIASED MOISTURE	1801	MAX5170BEEE+	130C, 85% R.H.	96	HRS	78	0 NAEZ14125G
BIASED MOISTURE	1811	MAX5170BEEE+	130C, 85% R.H.		HRS	80	0 NAEZ1A130EA
BIASED MOISTURE	1832	MAX5170BEEE+	130C, 85% R.H.	96	HRS	80	0 NAEZ1A130JX
<b>Total:</b>							<b>0</b>
<b>FAILURE RATE:</b>	<b>MTTF (YRS): 83520</b>		<b>QUANTITY: 431</b>	<b>FAILS: 0</b>		<b>FITS: 1.4</b>	