

8/1/2019



**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+	MAX6126BASA2	MAX6226ALA25	MAX9050AEUK
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 143476 QUANTITY: 830 FAILS: 0 FITS: 0.8

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 4/1/2019 and 8/1/2019 .

Process Information:

Process Description: MFN S12

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1804	MAX9050AEUK+T	125°C	380 HRS	80	0	N3HBCA046AA
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
HIGH TEMP OP LIFE	1832	MAX5170BEEE+	125°C	500 HRS	80	0	NAEZ13131GX
HIGH TEMP OP LIFE	1832	MAX5170BEEE+	125°C	1000 HRS	80	0	NAEZ13131GX
HIGH TEMP OP LIFE	1839	MAX6226ALA25+	125°C	1000 HRS	80	0	NAI1BA263KA
HIGH TEMP OP LIFE	1839	MAX6226ALA25+	125°C	1000 HRS	80	0	NAI1BA263KB
HIGH TEMP OP LIFE	1839	MAX6226ALA25+	125°C	1000 HRS	80	0	NAI1BA263KC
HIGH TEMP OP LIFE	1910	MAX5170BEEE+	125°C	1000 HRS	79	0	NAEZ1A136JA
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1804	MAX9050AEUK+T	150°C	1000 HRS	80	0	N3HBCA046AA
STORAGE LIFE	1832	MAX5170BEEE+	150°C	1000 HRS	80	0	NAEZ1A130JX
STORAGE LIFE	1832	MAX5170BEEE+	150°C	1000 HRS	80	0	NAEZ13131GX
STORAGE LIFE	1839	MAX6226ALA25+	150°C	1000 HRS	85	0	NAI1BA263KA
STORAGE LIFE	1839	MAX6226ALA25+	150°C	1000 HRS	85	0	NAI1BA263KB
STORAGE LIFE	1839	MAX6226ALA25+	150°C	1000 HRS	85	0	NAI1BA263KC
STORAGE LIFE	1910	MAX5170BEEE+	150°C	1000 HRS	80	0	NAEZ1A136JA

Total: 0

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
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
TEMP CYCLE, 5' RAMP, 10' DWELL	1832	MAX5170BEEE+	-65C TO +150C (Condition C)	1000 CYS	79	0	NAEZ13131GX
TEMP CYCLE, 5' RAMP, 10' DWELL	1839	MAX6226ALA25+	-65C TO +150C (Condition C)	1000 CYS	85	0	NAI1BA263KA
TEMP CYCLE, 5' RAMP, 10' DWELL	1839	MAX6226ALA25+	-65C TO +150C (Condition C)	1000 CYS	85	0	NAI1BA263KB
TEMP CYCLE, 5' RAMP, 10' DWELL	1839	MAX6226ALA25+	-65C TO +150C (Condition C)	1000 CYS	85	0	NAI1BA263KC
TEMP CYCLE, 5' RAMP, 10' DWELL	1910	MAX5170BEEE+	-65C TO +150C (Condition C)	1000 CYS	80	0	NAEZ1A136JA
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1804	MAX9050AEUK+T	130C, 85% R.H.	96 HRS	80	0	N3HBCA046AA
BIASED MOISTURE	1811	MAX5170BEEE+	130C, 85% R.H.	96 HRS	80	0	NAEZ1A130EA
BIASED MOISTURE	1832	MAX5170BEEE+	130C, 85% R.H.	96 HRS	80	0	NAEZ1A130JX
BIASED MOISTURE	1910	MAX5170BEEE+	130C, 85% R.H.	96 HRS	79	0	NAEZ1A136JA
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1804	MAX9050AEUK+T	130C, 85% R.H.	96 HRS	80	0	N3HBCA046AA
MOISTURE SOAK	1832	MAX5170BEEE+	130C, 85% R.H.	96 HRS	75	0	NAEZ13131GX
Total:						0	

FAILURE RATE: MTTF (YRS): 143476 QUANTITY: 830 FAILS: 0 FITS: 0.8