

10/27/2017



**RELIABILITY MONITOR REPORT
FOR**

MFN M5

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:

MAX1480AEPI+	MAX1480BEPI+	MAX202ECWE+	MAX221CAE+	MAX232EEPE+
MAX253ESA+				

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 154638 QUANTITY: 798 FAILS: 0 FITS: 0.7

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 7/1/2017 and 9/30/2017 .

Process Information:

Process Description: MFN M5

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1528	MAX1480AEPI+	135°C	1000 HRS	80	0	8FDPBNSQ4
HIGH TEMP OP LIFE	1528	MAX1480AEPI+	135°C	1000 HRS	80	0	8FDPBNSQ5
HIGH TEMP OP LIFE	1528	MAX1480BEPI+	135°C	1000 HRS	80	0	8FEPBMTQ4
HIGH TEMP OP LIFE	1528	MAX1480BEPI+	135°C	1000 HRS	80	0	8FEPBMTQ5
HIGH TEMP OP LIFE	1544	MAX1480AEPI+	135°C	1000 HRS	80	0	8FDPBNSQ1
HIGH TEMP OP LIFE	1544	MAX1480BEPI+	135°C	1000 HRS	80	0	8FEPBMTQ1
HIGH TEMP OP LIFE	1641	MAX221CAE+	135°C	1000 HRS	78	0	NX6AC3133BX
HIGH TEMP OP LIFE	1643	MAX232EEPE+	135°C	1000 HRS	80	0	NDOAC28S4F
HIGH TEMP OP LIFE	1709	MAX253ESA+	135°C	1000 HRS	80	0	NCVAC3982BX
HIGH TEMP OP LIFE	1714	MAX202ECWE+	135°C	1000 HRS	80	0	NDOBCA1U7AB
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1528	MAX1480BEPI+	150°C	1000 HRS	80	0	8FDPBNSQ4
STORAGE LIFE	1528	MAX1480BEPI+	150°C	1000 HRS	80	0	8FDPBNSQ5
STORAGE LIFE	1528	MAX1480BEPI+	150°C	1000 HRS	80	0	8FEPBMTQ4
STORAGE LIFE	1544	MAX1480BEPI+	150°C	1000 HRS	80	0	8FDPBNSQ1
STORAGE LIFE	1544	MAX1480BEPI+	150°C	1000 HRS	80	0	8FEPBMTQ1
STORAGE LIFE	1631	MAX253ESA+	150°C	1000 HRS	80	0	NCVACA944BA
STORAGE LIFE	1641	MAX221CAE+	150°C	1000 HRS	80	0	NX6AC3133BX

STORAGE LIFE	1709	MAX253ESA+	150°C	1000	HRS	80	0	NCVAC3982BX
STORAGE LIFE	1714	MAX202ECWE+	150°C	1000	HRS	80	0	NDOBCA1U7AB
Total:							0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
TEMP CYCLE, 5' RAMP, 10' DWELL	1528	MAX1480AEPI+	-65C TO +150C (Condition C)	1000	CYS	80	0 8FDPBNSQ4	
TEMP CYCLE, 5' RAMP, 10' DWELL	1528	MAX1480AEPI+	-65C TO +150C (Condition C)	1000	CYS	80	0 8FDPBNSQ5	
TEMP CYCLE, 5' RAMP, 10' DWELL	1528	MAX1480BEPI+	-65C TO +150C (Condition C)	1000	CYS	80	0 8FEPBMTQ4	
TEMP CYCLE, 5' RAMP, 10' DWELL	1528	MAX1480BEPI+	-65C TO +150C (Condition C)	1000	CYS	80	0 8FEPBMTQ5	
TEMP CYCLE, 5' RAMP, 10' DWELL	1544	MAX1480AEPI+	-65C TO +150C (Condition C)	500	CYS	80	0 8FDPBNSQ1	
TEMP CYCLE, 5' RAMP, 10' DWELL	1544	MAX1480BEPI+	-65C TO +150C (Condition C)	1000	CYS	80	0 8FEPBMTQ1	
TEMP CYCLE, 5' RAMP, 10' DWELL	1631	MAX253ESA+	-65C TO +150C (Condition C)	1000	CYS	80	0 NCVACA944BA	
TEMP CYCLE, 5' RAMP, 10' DWELL	1641	MAX221CAE+	-65C TO +150C (Condition C)	1000	CYS	80	0 NX6AC3133BX	
TEMP CYCLE, 5' RAMP, 10' DWELL	1709	MAX253ESA+	-65C TO +150C (Condition C)	1000	CYS	80	0 NCVAC3982BX	
TEMP CYCLE, 5' RAMP, 10' DWELL	1714	MAX202ECWE+	-65C TO +150C (Condition C)	1000	CYS	80	0 NDOBCA1U7AB	
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1631	MAX253ESA+	130C, 85%	96	HRS	80	0 NCVACA944BA	
BIASED MOISTURE	1641	MAX221CAE+	130C, 85%	96	HRS	80	0 NX6AC3133BX	
BIASED MOISTURE	1709	MAX253ESA+	130C, 85%	96	HRS	80	0 NCVAC3982BX	
BIASED MOISTURE	1714	MAX202ECWE+	130C, 85%	96	HRS	80	0 NDOBCA1U7AB	
Total:							0	

FAILURE RATE: MTTF (YRS): 154638 QUANTITY: 798 FAILS: 0 FITS: 0.7