

7/10/2017



**RELIABILITY MONITOR REPORT
FOR**

Fab 102 S90

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:

MAX77057AEN	MAX77057AEN	MAX77057AEN	MAX77057ENV	MAX77833EWM
MAX77833EWM	MAX77838EWO	MAX77910EWW	MAX77910EWW	MAX98507BEW
MAX98723AEN	MAX98723BEN	MAX98723BEN		

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 112090 QUANTITY: 736 FAILS: 0 FITS: 1.0

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: Fab 102 S90

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1316	MAX77833EWM+T	135°C	1000 HRS	80	0	HBEX2A131BD
HIGH TEMP OP LIFE	1416	MAX77833EWM+T	135°C	1000 HRS	80	0	HBEX2A131B#
HIGH TEMP OP LIFE	1614	MAX98507BEWX+T	135°C	192 HRS	48	0	HBKK9Q003AQ
HIGH TEMP OP LIFE	1629	MAX77910EWW+T	135°C	192 HRS	48	0	HBMM5Q003CQ
HIGH TEMP OP LIFE	1632	MAX77057ENV+T	135°C	1000 HRS	80	0	HBLG1Q001AC
HIGH TEMP OP LIFE	1634	MAX98723BENX+	135°C	1000 HRS	80	0	HBLW2A006AA
HIGH TEMP OP LIFE	1636	MAX77057ENV+T	135°C	1000 HRS	80	0	HBLG1Q002B#
HIGH TEMP OP LIFE	1636	MAX77057ENV+T	135°C	1000 HRS	80	0	HBLG1Q003B#
HIGH TEMP OP LIFE	1643	MAX98723BENX+	135°C	500 HRS	80	0	HBLW2A004AK
HIGH TEMP OP LIFE	1643	MAX98723BENX+	135°C	500 HRS	80	0	HBLW2A005AG
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1632	MAX77057ENV+T	150°C	1000 HRS	50	0	HBLG1Q001AC
STORAGE LIFE	1634	MAX98723BENX+	150°C	1000 HRS	50	0	HBLW2A006A#
STORAGE LIFE	1636	MAX77057ENV+T	150°C	1000 HRS	50	0	HBLG1Q002B#
STORAGE LIFE	1643	MAX98723BENX+	150°C	1000 HRS	50	0	HBLW2A004AK
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX98723BENX+TG7	-40C TO +125C (Condition G)	500	CYS	80	0	HBLW2A004E#
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX98723BENX+TG7	-40C TO +125C (Condition G)	850	CYS	80	0	HBLW2A004F#
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX98723BENX+TG7	-40C TO +125C (Condition G)	850	CYS	80	0	HBLW2A004G#
TEMP CYCLE, 5' RAMP, 10' DWELL	1520	MAX77838EWO+	-65C TO +150C (Condition C)	144	CYS	100	0	HBBR0Q001#
TEMP CYCLE, 15' RAMP, 15' DWELL	1620	MAX77910EWW+	-40C TO +125C (Condition G)	500	CYS	77	0	HBLI9Q003C#
TEMP CYCLE, 15' RAMP, 15' DWELL	1620	MAX77910EWW+	-40C TO +125C (Condition G)	500	CYS	77	0	HBLI9Q004B#
TEMP CYCLE, 15' RAMP, 15' DWELL	1621	MAX77910EWW+	-40C TO +125C (Condition G)	500	CYS	77	0	HBLI9Q002A#
TEMP CYCLE, 15' RAMP, 15' DWELL	1631	MAX98723AENX+	-40C TO +125C (Condition G)	850	CYS	80	0	HBX0Q003A\$
TEMP CYCLE, 15' RAMP, 15' DWELL	1631	MAX98723AENX+	-40C TO +125C (Condition G)	850	CYS	80	0	HBX0Q003AB
TEMP CYCLE, 15' RAMP, 15' DWELL	1631	MAX98723AENX+	-40C TO +125C (Condition G)	850	CYS	80	0	HBX0Q003A#
TEMP CYCLE, 15' RAMP, 15' DWELL	1632	MAX77057AENV+T	-40C TO +125C (Condition G)	850	CYS	80	0	HBLG1Q001A#
TEMP CYCLE, 15' RAMP, 15' DWELL	1636	MAX77057AENV+	-40C TO +125C (Condition G)	850	CYS	80	0	HBLG1Q002BA
TEMP CYCLE, 15' RAMP, 15' DWELL	1636	MAX77057AENV+TG7	-40C TO +125C (Condition G)	850	CYS	80	0	HBLG1Q003BA
TEMP CYCLE, 5' RAMP, 10' DWELL	1718	MAX77833EWM+	-65C TO +150C (Condition C)	500	CYS	80	0	JBVM6A258
Total:						0		

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1632	MAX77057AENV+T	130C, 85%	264	HRS	80	0	HBLG1Q001A#
BIASED MOISTURE	1636	MAX77057AENV+	130C, 85%	264	HRS	80	0	HBLG1Q002BA
BIASED MOISTURE	1636	MAX77057AENV+TG7	130C, 85%	264	HRS	80	0	HBLG1Q003BA
Total:						0		

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK		MAX77057AENV+	130C, 85%	264	HRS	80	0 HBLG1Q0031A#
MOISTURE SOAK		MAX77057AENV+	130C, 85%	264	HRS	80	0 HBLG1Q003B#
MOISTURE SOAK		MAX98723BENX+	130C, 85%	96	HRS	80	0 HBLW2A004E#
MOISTURE SOAK		MAX98723BENX+	130C, 85%	96	HRS	80	0 HBLW2A004F#
MOISTURE SOAK		MAX98723BENX+	130C, 85%	96	HRS	80	0 HBLW2A004G#
MOISTURE SOAK	1631	MAX98723AENX+	130C, 85%	100	HRS	80	0 HBKX0Q003A\$
MOISTURE SOAK	1631	MAX98723AENX+	130C, 85%	96	HRS	80	0 HBXX0Q003AB
MOISTURE SOAK	1631	MAX98723AENX+	130C, 85%	96	HRS	80	0 HBKX0Q003A#
MOISTURE SOAK	1632	MAX77057AENV+T	130C, 85%	96	HRS	80	0 HBLG1Q001A#
MOISTURE SOAK	1636	MAX77057AENV+TG7	130C, 85%	110	HRS	79	0 HBLG1Q002BA
MOISTURE SOAK	1636	MAX77057AENV+TG7	130C, 85%	96	HRS	80	0 HBLG1Q003BA

Total: 0

FAILURE RATE: **MTTF (YRS): 112090** **QUANTITY: 736** **FAILS: 0** **FITS: 1.0**