

6/25/2020



**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:

MAX98373EFF+	MAX98390EWX	MAX98512BEW	MAX98512BEW	MAX98709BENI
MAX98709ENI+				

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 22694 QUANTITY: 316 FAILS: 0 FITS: 5.0

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 1/1/2020 and 3/31/2020 .

Process Information:

Process Description: Fab 102 S90

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1844	MAX98709ENI+T	125°C	192 HRS	80	0	HBZZ1Q001BB
HIGH TEMP OP LIFE	1847	MAX98390EWX+T	125°C	192 HRS	47	0	HCAA1Q001CL
HIGH TEMP OP LIFE	1847	MAX98390EWX+T	125°C	192 HRS	33	0	HCAA1Q001CL
HIGH TEMP OP LIFE	1917	MAX98709BENI+	125°C	1000 HRS	79	0	HCBZ1Q001BH
HIGH TEMP OP LIFE	1941	MAX98373EFF+CPP	125°C	96 HRS	77	0	HBUD9A050AN
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1844	MAX98709ENI+T	150°C	1000 HRS	80	0	HBZZ1Q001BB
STORAGE LIFE	1901	MAX98709ENI+T	150°C	1000 HRS	80	0	HBZZ1Q003BA
STORAGE LIFE	1907	MAX98512BEWX+T	150°C	1000 HRS	100	0	HCTJ9A272BC
STORAGE LIFE	1931	MAX98373EFF+CPP	150°C	1000 HRS	80	0	HBUD9A025AX
STORAGE LIFE	1941	MAX98373EFF+CPP	150°C	1000 HRS	80	0	HBUD9A050AN
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1844	MAX98709ENI+T	-65C TO +150C (Condition C)	1000 CYS	80	0	HBZZ1Q001BB
TEMP CYCLE, 15' RAMP, 15' DWELL	1901	MAX98709ENI+T	-65C TO +150C (Condition C)	1000 CYS	80	0	HBZZ1Q002BA

TEMP CYCLE, 15' RAMP, 15' DWELL	1901	MAX98709ENI+T	-40C TO +125C (Condition G)	500	CYS	80	0	HBZZ1Q003BA
TEMP CYCLE, 5' RAMP, 10' DWELL	1907	MAX98512BEWX+T	-65C TO +150C (Condition C)	500	CYS	84	0	HCTJ9A272BC
TEMP CYCLE, 5' RAMP, 10' DWELL	1931	MAX98373EFF+CPP	-65C TO +150C (Condition C)	1000	CYS	80	0	HBUD9A025AX
TEMP CYCLE, 5' RAMP, 10' DWELL	1941	MAX98373EFF+CPP	-65C TO +150C (Condition C)	1000	CYS	80	0	HBUD9A050AN
TEMP CYCLE, 15' RAMP, 15' DWELL	1944	MAX98709BENI+	-40C TO +125C (Condition G)	500	CYS	79	0	HCBZ1Q003IA
TEMP CYCLE, 15' RAMP, 15' DWELL	1947	MAX98709BENI+	-40C TO +125C (Condition G)	500	CYS	80	0	HCBZ1Q003K
TEMP CYCLE, 15' RAMP, 15' DWELL	1948	MAX98709BENI+	-40C TO +125C (Condition G)	500	CYS	80	0	HCBZ1Q003J
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1844	MAX98709ENI+T	130C, 85% R.H.	264 HRS	80	0	HBZZ1Q001BB
BIASED MOISTURE	1901	MAX98709ENI+T	130C, 85% R.H.	264 HRS	80	0	HBZZ1Q002BA
BIASED MOISTURE	1901	MAX98709ENI+T	130C, 85% R.H.	264 HRS	80	0	HBZZ1Q003BA
BIASED MOISTURE	1907	MAX98512BEWX+	130C, 85% R.H.	264 HRS	73	0	HCTJ9A272A
BIASED MOISTURE	1907	MAX98512BEWX+	130C, 85% R.H.	264 HRS	75	0	HCTJ9A272B
BIASED MOISTURE	1907	MAX98512BEWX+	130C, 85% R.H.	264 HRS	80	0	HCTJ9A272C
BIASED MOISTURE	1915	MAX98709ENI+T	130C, 85% R.H.	264 HRS	80	0	HBZZ1Q003GA
Total:							0

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1844	MAX98709ENI+T	130C, 85% R.H.	96 HRS	80	0	HBZZ1Q001BB
MOISTURE SOAK	1901	MAX98709ENI+T	130C, 85% R.H.	96 HRS	80	0	HBZZ1Q002BA
MOISTURE SOAK	1901	MAX98709ENI+T	130C, 85% R.H.	96 HRS	80	0	HBZZ1Q003BA
MOISTURE SOAK	1941	MAX98373EFF+CPP	130C, 85% R.H.	96 HRS	80	0	HBUD9A050AN
MOISTURE SOAK	1944	MAX98709BENI+	130C, 85% R.H.	96 HRS	80	0	HCBZ1Q003IA
MOISTURE SOAK	1947	MAX98709BENI+	130C, 85% R.H.	96 HRS	80	0	HCBZ1Q003K
MOISTURE SOAK	1948	MAX98709BENI+	130C, 85% R.H.	96 HRS	80	0	HCBZ1Q003J
Total:							0

FAILURE RATE: MTTF (YRS): 22694 QUANTITY: 316 FAILS: 0 FITS: 5.0