

8/1/2019



**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:

MAX77705FEW	MAX97937EWX	MAX98373EFF+	MAX98373EFF+	MAX98512BEW
MAX98709	MAX98709ENI+	MAX98728AEN	MAX98728BEN	

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 50210 QUANTITY: 531 FAILS: 0 FITS: 2.3

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: Fab 102 S90

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE		MAX98709	125°C	192 HRS	48	0	HBZZ1Q001B
HIGH TEMP OP LIFE	1806	MAX98728BENX+	125°C	1000 HRS	67	0	HBYZ9A005CC
HIGH TEMP OP LIFE	1806	MAX98728BENX+	125°C	1000 HRS	19	0	HBYZ9A005CC
HIGH TEMP OP LIFE	1813	MAX98373EFF+	125°C	192 HRS	79	0	HBUD9A005EQ
HIGH TEMP OP LIFE	1835	MAX77705FEWN+T	125°C	1000 HRS	78	0	HCTN5Z009B
HIGH TEMP OP LIFE	1842	MAX97937EWX+T	125°C	500 HRS	80	0	CCUU3Q001D
HIGH TEMP OP LIFE	1844	MAX98709ENI+T	125°C	192 HRS	80	0	HBZZ1Q001BB
HIGH TEMP OP LIFE	1845	MAX77705FEWN+T	125°C	192 HRS	80	0	CBTR7A640FC
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1806	MAX98728BENX+	150°C	1000 HRS	90	0	HBYZ9A005C#
STORAGE LIFE	1835	MAX77705FEWN+T	150°C	1000 HRS	80	0	HCTN5Z009B
STORAGE LIFE	1844	MAX98709ENI+T	150°C	1000 HRS	80	0	HBZZ1Q001BB
STORAGE LIFE	1901	MAX98709ENI+T	150°C	1000 HRS	80	0	HBZZ1Q003BA
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, 5' RAMP, 10' DWELL	1847	MAX98373EFF+CQ8	-65C TO +150C (Condition C)	1000	CYS	80	0	HBUD9A009AA
TEMP CYCLE, 5' RAMP, 10' DWELL	1901	MAX98709ENI+T	-65C TO +150C (Condition C)	1000	CYS	80	0	HBZZ1Q002BA
TEMP CYCLE, 5' RAMP, 10' DWELL	1901	MAX98709ENI+T	-65C TO +150C (Condition C)	1000	CYS	80	0	HBZZ1Q003BA
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1745	MAX98728AENX+T	130C, 85% R.H.	96 HRS	41	0	HBTE4Q003C#	
BIASED MOISTURE	1835	MAX77705FEWN+T	130C, 85% R.H.	96 HRS	78	0	HCTN5Z009B	
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	
Total:							0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	1835	MAX77705FEWN+T	130C, 85% R.H.	96 HRS	79	0	HCTN5Z009B	
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	
Total:							0	

FAILURE RATE: MTTF (YRS): 50210 QUANTITY: 531 FAILS: 0 FITS: 2.3