

1/24/2019



**RELIABILITY MONITOR REPORT
FOR**

Epson MB3

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:

90-02135+X0V	90-02550+X00	MAX2141ETH/V	MAX2172ETL/V	MAX2659ELT+
MAX2659ELT+T	MAX2769BETI/	MAX2771ETI+		

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 131648 QUANTITY: 823 FAILS: 0 FITS: 0.9

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 10/1/2018 and 12/31/2018.

Process Information:

Process Description: Epson MB3

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1736	90-02550+X00	135°C	1000 HRS	80	0	AX800400AB-REL
HIGH TEMP OP LIFE	1741	MAX2659ELT+	135°C	1000 HRS	77	0	EAPS02086CE
HIGH TEMP OP LIFE	1741	MAX2659ELT+	135°C	1000 HRS	80	0	EAPS02086CE
HIGH TEMP OP LIFE	1744	MAX2141ETH/V+	135°C	1000 HRS	80	0	EBAK9A069E
HIGH TEMP OP LIFE	1745	90-02135+X0V	135°C	500 HRS	80	0	ZJA01444AC-REL
HIGH TEMP OP LIFE	1809	MAX2172ETL/V+	135°C	1000 HRS	80	0	EAKE6A306CA
HIGH TEMP OP LIFE	1818	MAX2771ETI+	125°C	192 HRS	80	0	EBUJ7Q001CQ
HIGH TEMP OP LIFE	1820	MAX2769BETI/V+	125°C	1000 HRS	80	0	EBAH3A031EA
HIGH TEMP OP LIFE	1820	MAX2769BETI/V+	125°C	1000 HRS	30	0	EBAH3A031EA
HIGH TEMP OP LIFE	1820	MAX2659ELT+T	125°C	1000 HRS	78	0	EAPS0A089AC
HIGH TEMP OP LIFE	1820	MAX2771ETI+	125°C	500 HRS	78	0	EBAH3A0131EX
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1739	MAX2769BETI/V+	150°C	500 HRS	49	0	EBAH3A017DA
STORAGE LIFE	1744	MAX2141ETH/V+	150°C	1000 HRS	80	0	EBAK9A069E
STORAGE LIFE	1809	MAX2172ETL/V+	150°C	1000 HRS	80	0	EAKE6A306CA
STORAGE LIFE	1820	MAX2769BETI/V+	150°C	1000 HRS	80	0	EBAH3A031EA
STORAGE LIFE	1820	MAX2659ELT+T	150°C	500 HRS	80	0	EAPS0A089AC
STORAGE LIFE	1820	MAX2771ETI+	150°C	1000 HRS	80	0	EBAH3A0131EX

Total: 0

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1739	MAX2769BETI/V+	-65C TO +150C (Condition C)	500 CYS	80	0	EBAH3A010F#
TEMP CYCLE, 5' RAMP, 10' DWELL	1744	MAX2141ETH/V+	-65C TO +150C (Condition C)	1000 CYS	80	0	EBAK9A069E
TEMP CYCLE, 5' RAMP, 10' DWELL	1809	MAX2172ETL/V+	-65C TO +150C (Condition C)	1000 CYS	80	0	EAKE6A306CA
TEMP CYCLE, 5' RAMP, 10' DWELL	1820	MAX2769BETI/V+	-65C TO +150C (Condition C)	500 CYS	80	0	EBAH3A031EA
TEMP CYCLE, 5' RAMP, 10' DWELL	1820	MAX2771ETI+	-65C TO +150C (Condition C)	1000 CYS	80	0	EBAH3A0131EX
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1739	MAX2769BETI/V+	85 C/85% R.H.	96 HRS	40	0	EBAH3A010F#
BIASED MOISTURE	1739	MAX2769BETI/V+	85 C/85% R.H.	96 HRS	40	0	EBAH3A010F#
BIASED MOISTURE	1741	MAX2769BETI/V+	85 C/85% R.H.	96 HRS	40	0	EBAH3A021CA
BIASED MOISTURE	1741	MAX2769BETI/V+	85 C/85% R.H.	96 HRS	40	0	EBAH3A021CA
BIASED MOISTURE	1744	MAX2141ETH/V+	85 C/85% R.H.	96 HRS	38	0	EBAK9A069E
BIASED MOISTURE	1744	MAX2141ETH/V+	85 C/85% R.H.	96 HRS	37	0	EBAK9A069E
BIASED MOISTURE	1744	MAX2141ETH/V+	85 C/85% R.H.	96 HRS	5	0	EBAK9A069E
BIASED MOISTURE	1809	MAX2172ETL/V+	130C, 85% R.H.	96 HRS	58	0	EAKE6A306CA
BIASED MOISTURE	1809	MAX2172ETL/V+	130C, 85% R.H.	96 HRS	22	0	EAKE6A306CA
BIASED MOISTURE	1820	MAX2771ETI+	130C, 85% R.H.	96 HRS	80	0	EBAH3A0131EX
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1739	MAX2769BETI/V+	130C, 85% R.H.	96 HRS	80	0	EBAH3A010F#
Total:						0	

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