

8/1/2019



**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:

MAX2136AETJ/ MAX2771ETI+	MAX2172ETL/V MAX40025CAW	MAX2659ELT+T MAX40026ATA/	MAX2769BETI/ MAX40661ATB/	MAX2771ETI+
-----------------------------	-----------------------------	------------------------------	------------------------------	-------------

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 95858 QUANTITY: 790 FAILS: 0 FITS: 1.2

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: Epson MB3

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE		MAX40025CAWT+T	125°C	192 HRS	79	0	R40498NB1
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	1000 HRS	78	0	EBAH3A0131EX
HIGH TEMP OP LIFE	1846	MAX2172ETL/V+	125°C	500 HRS	80	0	EAKE6A344BA
HIGH TEMP OP LIFE	1846	MAX2172ETL/V+	125°C	1000 HRS	80	0	EAKE6A344BA
HIGH TEMP OP LIFE	1903	MAX40026ATA/VY+	125°C	192 HRS	78	0	ECTP8Q001IQ
HIGH TEMP OP LIFE	1907	MAX2136AETJ/V+	125°C	1000 HRS	48	0	EAKK3A013F
HIGH TEMP OP LIFE	1912	MAX40661ATB/VY+T	125°C	192 HRS	79	0	JCTQ5A004MA
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1820	MAX2769BETI/V+	150°C	1000 HRS	80	0	EBAH3A031EA
STORAGE LIFE	1820	MAX2771ETI+	150°C	1000 HRS	80	0	EBAH3A0131EX
STORAGE LIFE	1846	MAX2172ETL/V+	150°C	1000 HRS	80	0	EAKE6A344BA
STORAGE LIFE	1907	MAX2136AETJ/V+	150°C	1000 HRS	80	0	EAKK3A013F
STORAGE LIFE	1912	MAX40661ATB/VY+T	150°C	1000 HRS	80	0	JCTQ5A004MA
STORAGE LIFE	1912	MAX40661ATB/VY+T	150°C	1000 HRS	80	0	JCTQ5A004MB

STORAGE LIFE	1912	MAX40661ATB/VY+T	150°C	1000	HRS	80	0	EBNP3A012JC
						Total:	0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1820	MAX2771ETI+	-65C TO +150C (Condition C)	1000	CYS	80	0 EBAH3A0131EX
TEMP CYCLE, 5' RAMP, 10' DWELL	1846	MAX2172ETL/V+	-65C TO +150C (Condition C)	1000	CYS	80	0 EAKE6A344BA
TEMP CYCLE, 5' RAMP, 10' DWELL	1907	MAX2136AETJ/V+	-65C TO +150C (Condition C)	1000	CYS	80	0 EAKK3A013F
TEMP CYCLE, 5' RAMP, 10' DWELL	1912	MAX40661ATB/VY+T	-65C TO +150C (Condition C)	1000	CYS	80	0 JCTQ5A004MA
TEMP CYCLE, 5' RAMP, 10' DWELL	1912	MAX40661ATB/VY+T	-65C TO +150C (Condition C)	1000	CYS	79	0 JCTQ5A004MB
TEMP CYCLE, 5' RAMP, 10' DWELL	1912	MAX40661ATB/VY+T	-65C TO +150C (Condition C)	1000	CYS	80	0 EBNP3A012JC
						Total:	0

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1846	MAX2172ETL/V+	130C, 85% R.H.	96	HRS	80	0 EAKE6A344BA
BIASED MOISTURE	1912	MAX40661ATB/VY+T	130C, 85% R.H.	96	HRS	80	0 JCTQ5A004MA
						Total:	0

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1820	MAX2771ETI+	130C, 85% R.H.	96	HRS	80	0 EBAH3A0131EX
MOISTURE SOAK	1846	MAX2172ETL/V+	130C, 85% R.H.	96	HRS	80	0 EAKE6A344BA
MOISTURE SOAK	1907	MAX2136AETJ/V+	130C, 85% R.H.	96	HRS	80	0 EAKK3A013F
MOISTURE SOAK	1912	MAX40661ATB/VY+T	130C, 85% R.H.	96	HRS	80	0 JCTQ5A004MA
MOISTURE SOAK	1912	MAX40661ATB/VY+T	130C, 85% R.H.	96	HRS	80	0 JCTQ5A004MB
MOISTURE SOAK	1912	MAX40661ATB/VY+T	130C, 85% R.H.	96	HRS	80	0 EBNP3A012JC
						Total:	0

FAILURE RATE: MTTF (YRS): 95858 QUANTITY: 790 FAILS: 0 FITS: 1.2