

7/10/2017



**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:

MAX2141ETH/V	MAX2172ETL/V	MAX2678GTB/V	MAX2769BETI/
--------------	--------------	--------------	--------------

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 78520 QUANTITY: 719 FAILS: 0 FITS: 1.5

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: Epson MB3

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1522	MAX2769BETI/V+	135°C	192 HRS	80	0	EBAH33002A#
HIGH TEMP OP LIFE	1620	MAX2678GTB/V+	135°C	500 HRS	80	0	EBEE7Q001Q1
HIGH TEMP OP LIFE	1620	MAX2678GTB/V+	135°C	500 HRS	80	0	EBEE7Q001Q2
HIGH TEMP OP LIFE	1620	MAX2678GTB/V+	135°C	500 HRS	79	0	EBEE7Q001Q3
HIGH TEMP OP LIFE	1629	MAX2172ETL/V+	135°C	1000 HRS	80	0	EAKE6A176DA
HIGH TEMP OP LIFE	1630	MAX2769BETI/V+	135°C	192 HRS	80	0	EBAH3A004DA
HIGH TEMP OP LIFE	1632	MAX2769BETI/V+	135°C	192 HRS	80	0	EBAH3Q003L#
HIGH TEMP OP LIFE	1643	MAX2141ETH/V+	135°C	1000 HRS	80	0	EBAK9A022AB
HIGH TEMP OP LIFE	1704	MAX2172ETL/V+	135°C	1000 HRS	80	0	EAKE6A215CG
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1620	MAX2678GTB/V+	150°C	1000 HRS	80	0	EBEE7Q001Q1
STORAGE LIFE	1620	MAX2678GTB/V+	150°C	1000 HRS	79	0	EBEE7Q001Q2
STORAGE LIFE	1620	MAX2678GTB/V+	150°C	1000 HRS	80	0	EBEE7Q001Q3
STORAGE LIFE	1629	MAX2172ETL/V+	150°C	1000 HRS	80	0	EAKE6A176DA
STORAGE LIFE	1643	MAX2141ETH/V+	150°C	1000 HRS	80	0	EBAK9A022AB
STORAGE LIFE	1704	MAX2172ETL/V+	150°C	1000 HRS	80	0	EAKE6A215CG
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
-------------	-----------	--------------	-----------	-----------	----------	-------	---------

TEMP CYCLE, 5' RAMP, 10' DWELL	1620	MAX2678GTB/V+	-65C TO +150C (Condition C)	500	CYS	80	0	EBEE7Q001Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1620	MAX2678GTB/V+	-65C TO +150C (Condition C)	500	CYS	80	0	EBEE7Q001Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	1620	MAX2678GTB/V+	-65C TO +150C (Condition C)	500	CYS	80	0	EBEE7Q001Q3
TEMP CYCLE, 5' RAMP, 10' DWELL	1629	MAX2172ETL/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	EAKE6A176DA
TEMP CYCLE, 5' RAMP, 10' DWELL	1643	MAX2141ETH/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	EBAK9A022AB
TEMP CYCLE, 5' RAMP, 10' DWELL	1704	MAX2172ETL/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	EAKE6A215CG
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1630	MAX2769BETI/V+	130C, 85%	96	HRS	38	0	EBAH3A004DA
BIASED MOISTURE	1632	MAX2769BETI/V+	130C, 85%	96	HRS	38	0	EBAH3A003L#
BIASED MOISTURE	1643	MAX2141ETH/V+	130C, 85%	96	HRS	40	0	EBAK9A022AB
BIASED MOISTURE	1643	MAX2141ETH/V+	130C, 85%	96	HRS	40	0	EBAK9A022AB
BIASED MOISTURE	1704	MAX2172ETL/V+	130C, 85%	96	HRS	40	0	EAKE6A215CG
BIASED MOISTURE	1704	MAX2172ETL/V+	130C, 85%	96	HRS	40	0	EAKE6A215CG
Total:							0	

FAILURE RATE: MTTF (YRS): 78520 QUANTITY: 719 FAILS: 0 FITS: 1.5