

10/23/2014



**RELIABILITY MONITOR REPORT
FOR**

X3 Passive Chip Technology (PAC)

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:

MAXEXP7ETE+

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 46508 QUANTITY: 240 FAILS: 0 FITS: 2.5

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 10/1/2013 and 9/30/2014 .

Process Information:

Process Description: X3 Passive Chip Technology (PAC)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1324	MAXEXP7ETE+	135°C	1000 HRS	80	0	S23W8Z004B
HIGH TEMP OP LIFE	1325	MAXEXP7ETE+	135°C	1000 HRS	80	0	S23W8Z002A
HIGH TEMP OP LIFE	1330	MAXEXP7ETE+	135°C	1000 HRS	80	0	S23W8Z005B
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1324	MAXEXP7ETE+	150°C	1000 HRS	80	0	S23W8Z004B
STORAGE LIFE	1325	MAXEXP7ETE+	150°C	1000 HRS	80	0	S23W8Z002A
STORAGE LIFE	1330	MAXEXP7ETE+	150°C	1000 HRS	80	0	S23W8Z005B
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1330	MAXEXP7ETE+	-65C TO +150C (Condition C)	500 CYS	80	0	S23W8Z005B
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1325	MAXEXP7ETE+	130C, 85% R.H.	100 HRS	80	0	S23W8Z002A
BIASED MOISTURE	1330	MAXEXP7ETE+	130C, 85% R.H.	100 HRS	32	0	S23W8Z005B

BIASED MOISTURE	1416	MAXEXP7ETE+	130C, 85% R.H.	100	HRS	80	0	SAPP3Z010C
BIASED MOISTURE	1416	MAXEXP7ETE+	130C, 85% R.H.	100	HRS	80	0	SAPP3Z011B
BIASED MOISTURE	1417	MAXEXP7ETE+	130C, 85% R.H.	100	HRS	80	0	SAPP3Z012B
BIASED MOISTURE	1431	MAXEXP7ETE+	130C, 85% R.H.	100	HRS	45	0	SAPP3Z012C

Total: **0**

FAILURE RATE: **MTTF (YRS): 46508** **QUANTITY: 240** **FAILS: 0** **FITS: 2.5**