



4/17/2012

**RELIABILITY MONITOR REPORT  
FOR**

**X3 Passive Chip Technology (PAC)**

**MAXIM Integrated Products**

120 San Gabriel Dr.  
Sunnyvale, CA 94086

**This Report was prepared by  
Maxim 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+	MAXEXPETE+
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The calculated failure rate for devices using this process is:

**FAILURE RATE:    MTTF (YRS): 93015    QUANTITY: 480    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 4/1/2011 and 3/31/2012 .

**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	1108	MAXEXPETE+	135C	1000 HRS	80	0	SX9ZBZ003Q2
HIGH TEMP OP LIFE	1108	MAXEXPETE+	135C	1000 HRS	80	0	SX9ZBZ004Q3
HIGH TEMP OP LIFE	1108	MAXEXPETE+	135C	1000 HRS	80	0	SX9ZBZ002Q1
HIGH TEMP OP LIFE	1127	MAXEXP7ETE+	135C	1000 HRS	80	0	S23W8Z061A#
HIGH TEMP OP LIFE	1127	MAXEXP7ETE+	135C	1000 HRS	80	0	S23W8Z062A#
HIGH TEMP OP LIFE	1127	MAXEXP7ETE+	135C	1000 HRS	80	0	S23W8Z076A#
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1127	MAXEXP7ETE+	150C	500 HRS	80	0	S23W8Z061A#
STORAGE LIFE	1127	MAXEXP7ETE+	150C	1000 HRS	80	0	S23W8061A#
STORAGE LIFE	1127	MAXEXP7ETE+	150C	1000 HRS	80	0	S23W8Z062A#
STORAGE LIFE	1127	MAXEXP7ETE+	150C	1000 HRS	80	0	S23W8Z076A#
<b>Total:</b>						<b>0</b>	

**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1108	MAXEXPETE+	-65C TO 150C	500 CYS	80	0	SX9ZBZ003Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	1108	MAXEXPETE+	-65C TO 150C	500 CYS	80	0	SX9ZBZ004Q3
TEMP CYCLE, 5' RAMP, 10' DWELL	1108	MAXEXPETE+	-65C TO 150C	500 CYS	80	0	SX9ZBZ002Q1

TEMP CYCLE, 5' RAMP, 10' DWELL	1127	MAXEXP7ETE+	-65C TO 150C	500	CYS	80	0	S23W8Z061A#
TEMP CYCLE, 5' RAMP, 10' DWELL	1127	MAXEXP7ETE+	-65C TO 150C	1000	CYS	80	0	S23W8Z061A#
TEMP CYCLE, 5' RAMP, 10' DWELL	1127	MAXEXP7ETE+	-65C TO 150C	500	CYS	80	0	S23W8Z062A#
TEMP CYCLE, 5' RAMP, 10' DWELL	1127	MAXEXP7ETE+	-65C TO 150C	1000	CYS	78	0	S23W8Z062A#
TEMP CYCLE, 5' RAMP, 10' DWELL	1127	MAXEXP7ETE+	-65C TO 150C	500	CYS	80	0	S23W8Z076A#
TEMP CYCLE, 5' RAMP, 10' DWELL	1127	MAXEXP7ETE+	-65C TO 150C	1000	CYS	78	0	S23W8Z076A#

**Total:** **0**

**FAILURE RATE:**    **MTTF (YRS): 93015**    **QUANTITY: 480**    **FAILS: 0**    **FITS: 1.2**