



10/8/2010

**RELIABILITY MONITOR REPORT
FOR**

SOT Package

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 Package Reliability Monitor. The specific assemblies included in this package monitor are:

ASSY SITE	PINS	PACKAGE		
Carsem-M	3	SOT23 (Pb-Free)	Carsem-M	5 SOT23 (Pb-Free)
Hana AYUTHAYA	6	TSOT23 (Pb-Free)	UNISEM	5 SOT23 (Pb-Free)
UTL (NSEB) UTAC	5	SOT23 (Pb-Free)	UTL (NSEB) UTAC	6 SOT23 (Pb-Free)
UTL (NSEB) UTAC	8	SOT23 (Pb-Free)	UTL (NSEB) UTAC	6 SOT23 Flip Chip
UTL (NSEB) UTAC	6	TSOT23 (Pb-Free)		

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 126839 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. A the start of this data is a description of the assembly vehicle used to generate this reliability data. The next section is the detailed reliability data for each stress. The reliability data section includes the latest data available. This report covers data between 10/1/2009 and 9/30/2010

Assembly Information:

Package Type: SOT23 (Pb-Free)

Date Code Range: 0723 to 1019

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0723	MAX6029EUK21+T	135C	1000 HRS	45	0	
HIGH TEMP OP LIFE	0845	MAX4917AEUK+	135C	138 HRS	16	0	
HIGH TEMP OP LIFE	0905	MAX4915AEUK+	135C	138 HRS	16	0	
HIGH TEMP OP LIFE	0925	MAX6029EUK41+T	135C	1000 HRS	45	0	
HIGH TEMP OP LIFE	0925	MAX6029EUK50+T	135C	1000 HRS	45	0	
HIGH TEMP OP LIFE	0929	MAX4791EUK/V+	135C	138 HRS	20	0	
HIGH TEMP OP LIFE	1007	MAX5026EUT+T	135C	1000 HRS	80	0	
HIGH TEMP OP LIFE	1007	MAX5026EUT+T	135C	1000 HRS	54	0	
HIGH TEMP OP LIFE	1007	MAX5026EUT+T	135C	500 HRS	54	0	
HIGH TEMP OP LIFE	1007	MAX5026EUT+T	135C	1000 HRS	80	0	
HIGH TEMP OP LIFE	1015	MAX4232AKA/V+	135C	700 HRS	80	0	
HIGH TEMP OP LIFE	1019	MAX5026EUT+	135C	500 HRS	52	0	
HIGH TEMP OP LIFE	1019	MAX5026EUT+	135C	1000 HRS	52	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0723	MAX6029EUK21+T	150C	1000 HRS	77	0	
STORAGE LIFE	0925	MAX6029EUK41+T	150C	1000 HRS	77	0	

STORAGE LIFE	0925	MAX6029EUK50+T	150C	1000	HRS	77	0
STORAGE LIFE	0932	MAX6427EHUR+	150C	500	HRS	45	0
STORAGE LIFE	1015	MAX4232AKA/V+	150C	1000	HRS	44	0
						Total:	0

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0723	MAX6029EUK21+T	-65C TO 150C	500	CYS	77	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0925	MAX6029EUK50+T	-65C TO 150C	500	CYS	77	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0925	MAX6029EUK41+T	-65C TO 150C	1000	CYS	77	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0925	MAX6029EUK50+T	-65C TO 150C	500	CYS	77	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0925	MAX6029EUK50+T	-65C TO 150C	71	CYS	77	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0936	MAX5026EUT+	-65C TO 150C	1000	CYS	80	0
						Total:	0

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
MOISTURE SOAK	0830	MAX6735AKALTD3+T	85 C/85% R.H.	1000	HRS	33	0
						Total:	0

Assembly Information:

Package Type: SOT23 Flip Chip

Date Code Range: 1026 to 1029

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	1027	MAX5048BAUT#G16	135C	500	HRS	45	0
						Total:	0

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	1026	MAX5048BAUT#G16	150C	500	HRS	77	0
STORAGE LIFE	1027	MAX5048BAUT#G16	150C	500	HRS	77	0
STORAGE LIFE	1029	MAX5048BAUT#G16	150C	500	HRS	20	0
						Total:	0

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	1027	MAX5048BAUT#G16	-65C TO 150C	650	CYS	77	0
TEMP CYCLE, 5' RAMP, 10' DWELL	1029	MAX5048BAUT#G16	-65C TO 150C	500	CYS	77	0
						Total:	0

Assembly Information:

Package Type: TSOT23 (Pb-Free)

Date Code Range: 0935 to 1011

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	1011	MAX5383EZT+T	135C	1000 HRS	50	0	
HIGH TEMP OP LIFE	1011	MAX5383EZT+T	135C	1000 HRS	50	0	
HIGH TEMP OP LIFE	1011	MAX5383EZT+T	135C	1000 HRS	50	0	
				Total:		0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0935	MAX5383EZT+T	150C	1000 HRS	80	0	
STORAGE LIFE	0935	MAX5383EZT+T	150C	1000 HRS	80	0	
STORAGE LIFE	0935	MAX5383EZT+T	150C	1000 HRS	75	0	
STORAGE LIFE	1011	MAX5383EZT+T	150C	1000 HRS	80	0	
STORAGE LIFE	1011	MAX5383EZT+T	150C	1000 HRS	80	0	
STORAGE LIFE	1011	MAX5383EZT+T	150C	1000 HRS	80	0	
				Total:		0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0935	MAX5383EZT+T	-65C TO 150C	1000 CYS	80	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0935	MAX5383EZT+T	-65C TO 150C	1000 CYS	80	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0935	MAX5383EZT+T	-65C TO 150C	1000 CYS	80	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	1011	MAX5383EZT+T	-65C TO 150C	1000 CYS	80	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	1011	MAX5383EZT+T	-65C TO 150C	1000 CYS	80	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	1011	MAX5383EZT+T	-65C TO 150C	1000 CYS	80	0	
				Total:		0	

FAILURE RATE: MTTF (YRS): ##### FITS: 0.9