



4/20/2008

RELIABILITY MONITOR REPORT
FOR

TSSOP 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		
ATP (Amkor, PI)	8	TSSOP (Pb-Free)	ATP (Amkor, PI)	16 TSSOP (Pb-Free)
OSEP	28	TSSOP (Pb-Free)	UNK	20 TSSOP
UNK	24	TSSOP	UNK	28 TSSOP
UTL (NSEB) UTAC	20	TSSOP (Pb-Free)		

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 144838 FITS: 0.8

The parameters used to calculate this failure rate are as follows:

Cf: 60% Ea: 0.7 Tu: 25 °C

The reliability data follows. At 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 4/1/2007 and 3/31/2008.

Assembly Information:

Package Type: TSSOP
Flammability: UL 94-V0
Date Code Range: to

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE		MAX3388ECUG+	135C, 5.25V	1000 HRS	50	0	
		MAX1968	135C, 5.25V	1000 HRS	45	0	
			135C, 5.25V	1000 HRS	45	0	
		MAX2027EUP	135C, 5.25V	1000 HRS	45	0	
			135C, 5.25V	1000 HRS	45	0	
		MAX7454UUP+	135C, 5.25V	1000 HRS	80	0	
			135C, 5.25V	1000 HRS	80	0	
	MAX3388ECUG+	135C, 5.25V	1000 HRS	50	0		
Total:						0	

Assembly Information:

Package Type: TSSOP (Pb-Free)
Flammability: UL 94-V0
Date Code Range: 0701 to 0802

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0701	DS1081L	125C, 3.6 VOLTS	1000 HRS	45	0	
HIGH TEMP OP LIFE	0714	DS2784	125C, 5.5 V (PSA) & 15.0 V (PSB)	1000 HRS	77	0	
HIGH TEMP OP LIFE	0716	DS2119M	125C, 5.5 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0716	DS2119M	125C, 5.5 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0716	DS2119M	125C, 5.5 VOLTS	1000 HRS	77	0	

HIGH TEMP OP LIFE	0720	DS1859	125C, 5.5 VOLTS	1000 HRS	77	0
HIGH TEMP OP LIFE	0732	DS2784	125C, 5.5 V (PSA) & 15.0 V (PSB)	1000 HRS	77	0
Total:						0

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0715	DS2782	150C	1000 HRS	77	0	
STORAGE LIFE	0716	DS2119M	150C	1000 HRS	77	0	
STORAGE LIFE	0716	DS2119M	150C	1000 HRS	77	0	
STORAGE LIFE	0716	DS2119M	150C	1000 HRS	77	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0715	DS2782	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0716	DS2119M	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0716	DS2119M	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0716	DS2119M	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0720	DS1859	-55C TO 125C	1000 CYS	77	0	
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
BIASED MOISTURE	0715	DS2782	85/85, 5.5 VOLTS	1000 HRS	77	0	
BIASED MOISTURE	0716	DS2119M	85/85, 5.5 VOLTS	1000 HRS	45	0	
BIASED MOISTURE	0716	DS2119M	85/85, 5.5 VOLTS	1000 HRS	45	0	
BIASED MOISTURE	0716	DS2119M	85/85, 5.5 VOLTS	1000 HRS	45	0	
BIASED MOISTURE	0720	DS1859	85/85, 5.5 VOLTS	1000 HRS	76	0	
Total:						0	

W/E ENDURANCE AND DATA RET'N

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
WRITE CYCLE STRESS (KCYS)	0714	DS2784	50 C, 5.5 V (PSA) & 15.0 V (PSB)	50 KCYS	77	0	
STORAGE LIFE			150C	1000 HRS	77	0	
WRITE CYCLE STRESS (KCYS)	0720	DS1859	70 C, 5.5 VOLTS	30 KCYS	77	0	
STORAGE LIFE			150C	1000 HRS	73	0	
STORAGE LIFE	0732	DS2784	150C	1000 HRS	77	0	
WRITE CYCLE STRESS (KCYS)			50 C, 5.5 V (PSA) & 15.0 V (PSB)	50 KCYS	77	0	
STORAGE LIFE	0802	DS3508	150C	1000 HRS	77	0	

WRITE CYCLE STRESS
(KCYS)

85 C, 5.5 V (PSA) & 15.0 V (PSB) 50

KCYS

77

0

Total:

0

FAILURE RATE: MTTF (YRS): 144838 FITS: 0.8