



5/18/2009

RELIABILITY MONITOR REPORT
FOR

SOIC 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	SOIC (Pb-Free)	Carsem	28 SOIC (Pb-Free)
Carsem-M	14	SOIC (Pb-Free)	Carsem-S	8 SOIC (Pb-Free)
Carsem-S	28	SOIC (Pb-Free)	Unisem Malaysia	8 SOIC
Unisem Malaysia	8	SOIC (Pb-Free)	UTL (NSEB) UTAC	14 SOIC
UTL (NSEB) UTAC	8	SOIC (Pb-Free)		

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 62807 FITS: 1.8

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 and

Assembly Information:

Package Type: SOIC
Date Code Range: 0749 to 0751

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0751	MAX4394ESD+	135C	500 HRS	99	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0749	MAX4364ESA+	-65C TO 150C	1000 CYS	80	0	
Total:						0	

Assembly Information:

Package Type: SOIC (Pb-Free)
Date Code Range: 0715 to 0851

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0715	MAX11500USA+	135C	192 HRS	48	0	
HIGH TEMP OP LIFE	0719	MAX11501USA+	135C	192 HRS	48	0	
HIGH TEMP OP LIFE	0802	MAX3085ECSA+	135C	1000 HRS	77	0	
HIGH TEMP OP LIFE	0821	DS2413	125C, 5.25 VOLTS	1000 HRS	45	0	
HIGH TEMP OP LIFE	0823	MAX483CSA+	135C	192 HRS	50	0	
HIGH TEMP OP LIFE	0824	DS2482-101	125C, 5.5 VOLTS	1000 HRS	45	0	

HIGH TEMP OP LIFE	0826	MAX16822AASA+	135C	192	HRS	80	0
HIGH TEMP OP LIFE	0832	DS2502	125C, 6.0 VOLTS	1000	HRS	77	0
HIGH TEMP OP LIFE	0835	MAX13433EESD+	135C	192	HRS	48	0
HIGH TEMP OP LIFE	0835	MAX13432EESD+	135C	192	HRS	49	0
HIGH TEMP OP LIFE	0837	DS2413	125C, 5.25 VOLTS	1000	HRS	45	0
HIGH TEMP OP LIFE	0845	MAX5035DASA+	135C	192	HRS	32	0
HIGH TEMP OP LIFE	0851	DS8313	125C, 6.0 VOLTS	1000	HRS	45	0
Total:						0	0

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0802	MAX3085ECSA+	150C	1000	HRS	80	0
STORAGE LIFE	0808	MAX6006BESA+	150C	1000	HRS	80	0
STORAGE LIFE	0808	MAX6006BESA+	150C	1000	HRS	80	0
STORAGE LIFE	0808	MAX6006BESA+	150C	1000	HRS	80	0
STORAGE LIFE	0839	MAX3081EESA+	150C	500	HRS	45	0
STORAGE LIFE	0845	MAX5035DASA+	150C	500	HRS	80	0
Total:						0	0

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0802	MAX3085ECSA+	-65C TO 150C	1000	CYS	80	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0808	MAX6006BESA+	-65C TO 150C	1000	CYS	80	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0808	MAX6006BESA+	-65C TO 150C	1000	CYS	80	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0808	MAX6006BESA+	-65C TO 150C	1000	CYS	80	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0839	MAX3081EESA+	-65C TO 150C	500	CYS	80	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0839	MAX3081EESA+	-65C TO 150C	500	CYS	80	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0845	MAX5035DASA+	-65C TO 150C	200	CYS	80	0
Total:						0	0

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
MOISTURE SOAK	0730	MAX2102CWI+	85 C/85% R.H.	1000	HRS	42	0
MOISTURE SOAK	0730	MAX2102CWI+	85 C/85% R.H.	1000	HRS	45	0
MOISTURE SOAK	0730	MAX2102CWI+	85 C/85% R.H.	1000	HRS	42	0
MOISTURE SOAK	0808	MAX6006BESA+	85 C/85% R.H.	1000	HRS	45	0
MOISTURE SOAK	0808	MAX6006BESA+	85 C/85% R.H.	1000	HRS	50	0
MOISTURE SOAK	0808	MAX6006BESA+	85 C/85% R.H.	1000	HRS	45	0
Total:						0	0

FAILURE RATE: MTTF (YRS): 62807 FITS: 1.8