



4/20/2008

RELIABILITY MONITOR REPORT
FOR

PDIP 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)	20	PDIP (Pb-Free)	ATP (Amkor, PI)	40 PDIP (Pb-Free)
UNK	8	PDIP	UNK	18 PDIP
UNK	20	PDIP		

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 257221 FITS: 0.4

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: PDIP
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		MAX525BCPP+	135C, 5.25V	1000 HRS	50	0	
		MAX369CPN+	135C, 5.25V	1000 HRS	50	0	
		ICL7665AEPA+	135C, 5.25V	1000 HRS	250	0	
		MAX525BCPP+	135C, 5.25V	1000 HRS	50	0	
			135C, 5.25V	1000 HRS	50	0	
			135C, 5.25V	1000 HRS	50	0	
			135C, 5.25V	1000 HRS	50	0	
			135C, 5.25V	1000 HRS	50	0	
			135C, 5.25V	1000 HRS	50	0	
		MAX369CPN+	135C, 5.25V	1000 HRS	49	0	
			135C, 5.25V	1000 HRS	50	0	
		ICL7665AEPA+	135C, 5.25V	1000 HRS	250	0	
				Total:		0	

Assembly Information:

Package Type: PDIP (Pb-Free)
Flammability: UL 94-V0
Date Code Range: 0720 to 0727

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0720	DS1844	125C, 5.5 VOLTS	1000 HRS	54	0	
HIGH TEMP OP LIFE	0720	DS1844	125C, 5.5 VOLTS	1000 HRS	54	0	
HIGH TEMP OP LIFE	0720	DS1844	125C, 5.5 VOLTS	1000 HRS	54	0	

HIGH TEMP OP LIFE	0726	DS80C320	125C, 5.5 VOLTS	1000 HRS	77	0
			125C, 5.5 VOLTS	1000 HRS	77	0
HIGH TEMP OP LIFE	0726	DS80C320	125C, 5.5 VOLTS	1000 HRS	77	0
			125C, 5.5 VOLTS	1000 HRS	77	0
HIGH TEMP OP LIFE	0727	DS80C320	125C, 5.5 VOLTS	1000 HRS	77	0
			125C, 5.5 VOLTS	1000 HRS	77	0
Total:						0

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0720	DS1844	150C	1000 HRS	77	0	
STORAGE LIFE	0720	DS1844	150C	1000 HRS	77	0	
STORAGE LIFE	0720	DS1844	150C	1000 HRS	77	0	
STORAGE LIFE	0726	DS80C320	150C	1000 HRS	77	0	
			150C	1000 HRS	77	0	
STORAGE LIFE	0726	DS80C320	150C	1000 HRS	77	0	
			150C	1000 HRS	77	0	
STORAGE LIFE	0727	DS80C320	150C	1000 HRS	77	0	
			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	0720	DS1844	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0720	DS1844	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0720	DS1844	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0726	DS80C320	-55C TO 125C	1000 CYS	77	0	
			-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0726	DS80C320	-55C TO 125C	1000 CYS	77	0	
			-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0727	DS80C320	-55C TO 125C	1000 CYS	77	0	
			-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	0720	DS1844	85/85, 5.5 VOLTS	1000 HRS	77	0	
BIASED MOISTURE	0720	DS1844	85/85, 5.5 VOLTS	1000 HRS	77	0	
BIASED MOISTURE	0720	DS1844	85/85, 5.5 VOLTS	1000 HRS	77	0	
BIASED MOISTURE	0726	DS80C320	85/85, 5.5 VOLTS	1000 HRS	77	0	
			85/85, 5.5 VOLTS	1000 HRS	77	0	
BIASED MOISTURE	0726	DS80C320	85/85, 5.5 VOLTS	1000 HRS	77	0	

			85/85, 5.5 VOLTS	1000 HRS	77	0
BIASED MOISTURE	0727	DS80C320	85/85, 5.5 VOLTS	1000 HRS	77	0
			85/85, 5.5 VOLTS	1000 HRS	77	0
				Total:		0

FAILURE RATE: MTTF (YRS): 257221 FITS: 0.4