



10/8/2010

RELIABILITY MONITOR REPORT
FOR

TSOC 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	UTL (NSEB)	UTAC	6 TSOC (Pb-Free)
Cirtek	6	TSOC (Pb-Free)	UTL (NSEB)	UTAC	6 TSOC (Pb-Free)

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 26170 FITS: 4.4

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 10/1/2009 and 9/30/2010.

Assembly Information:

Package Type: TSOC (Pb-Free)

Date Code Range: 0951 to 1018

DATA RETENTION

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	1018	DS28E10	150C	192 HRS	77	0	
Total:						0	

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0951	DS2430A	125C, 5.25 VOLTS	192 HRS	50	0	
HIGH TEMP OP LIFE	1013	DS2431	150C, 5.25 VOLTS	408 HRS	50	0	
HIGH TEMP OP LIFE	1013	DS2431	150C, 5.25 VOLTS	408 HRS	50	0	
HIGH TEMP OP LIFE	1014	DS2431	150C, 5.25 VOLTS	408 HRS	50	0	
HIGH TEMP OP LIFE	1018	DS28E10	125C, 3.6 VOLTS	192 HRS	45	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	1013	DS2431	150C	1000 HRS	77	0	
STORAGE LIFE	1013	DS2431	150C	1000 HRS	77	0	
STORAGE LIFE	1014	DS2431	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	1013	DS2431	-55C TO 125C	500 CYS	77	0	

TEMP CYCLE, 5' RAMP, 10' DWELL	1013	DS2431	-55C TO 125C	1000 CYS	77	0
TEMP CYCLE, 5' RAMP, 10' DWELL	1014	DS2431	-55C TO 125C	1000 CYS	77	0
Total:						0

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HAST	1013	DS2431	130C, 85%R.H.,5.5V	96	HRS	77	0
HAST	1013	DS2431	130C, 85%R.H.,5.5V	96	HRS	77	0
HAST	1014	DS2431	130C, 85%R.H.,5.5V	96	HRS	77	0
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HAST, NO BIAS	1013	DS2431	130C, 85% R.H.	96	HRS	77	0
HAST, NO BIAS	1013	DS2431	130C, 85% R.H.	96	HRS	77	0
HAST, NO BIAS	1014	DS2431	130C, 85% R.H.	96	HRS	77	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)	0951	DS2430A	25 C, 5.25 VOLTS	200	KCYS	77	0
STORAGE LIFE	0951	DS2430A	150C	96	HRS	77	0
Total:						0	

FAILURE RATE: MTTF (YRS): 26170 FITS: 4.4