



4/20/2008

RELIABILITY MONITOR REPORT
FOR

TO 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		
CIRTEK	2	TO92 (Pb-Free)	CIRTEK	3 TO92 (Pb-Free)
Hana AYUTHAYA	3	PR35 (Pb-Free) (TO226)	Hana AYUTHAYA	3 TO92

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 81430 FITS: 1.4

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: PR35 (Pb-Free)
 Flammability: UL 94-V0
 Date Code Range: 0742 to 0742

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
VISUAL INSPECTION	0742	DS2434	WHISKERS < 50uM		77	0	
HIGH TEMP OP LIFE			125C, 6.4 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0742	DS2434	125C, 6.4 VOLTS	1000 HRS	77	0	
VISUAL INSPECTION			WHISKERS < 50uM		77	0	
HIGH TEMP OP LIFE	0742	DS2434	125C, 6.4 VOLTS	1000 HRS	77	0	
VISUAL INSPECTION			WHISKERS < 50uM		77	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
VISUAL INSPECTION	0742	DS2434	WHISKERS < 50uM		77	0	
STORAGE LIFE			150C	1000 HRS	77	0	
VISUAL INSPECTION	0742	DS2434	WHISKERS < 50uM		77	0	
STORAGE LIFE			150C	1000 HRS	77	0	
STORAGE LIFE	0742	DS2434	150C	1000 HRS	77	0	
VISUAL INSPECTION			WHISKERS < 50uM		77	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0742	DS2434	-55C TO 125C	1000 CYS	77	0	
VISUAL INSPECTION			WHISKERS < 50uM		77	0	

TEMP CYCLE, 5' RAMP, 10' DWELL	0742	DS2434	-55C TO 125C	1000	CYS	77	0
VISUAL INSPECTION			WHISKERS < 50uM			77	0
TEMP CYCLE, 5' RAMP, 10' DWELL	0742	DS2434	-55C TO 125C	1000	CYS	77	0
VISUAL INSPECTION			WHISKERS < 50uM			77	0
Total:						0	0

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
VISUAL INSPECTION	0742	DS2434	WHISKERS < 50uM			77	0
HAST			130C, 85%R.H.,5.5V	96	HRS	77	0
HAST	0742	DS2434	130C, 85%R.H.,5.5V	96	HRS	77	0
VISUAL INSPECTION			WHISKERS < 50uM			77	0
VISUAL INSPECTION	0742	DS2434	WHISKERS < 50uM			77	0
HAST			130C, 85%R.H.,5.5V	96	HRS	77	0
Total:						0	0

Assembly Information:

Package Type: TO92
 Flammability: UL 94-V0
 Date Code Range: 0626 to 0626

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0626	DS2502	125C, 6.0 VOLTS	1000	HRS	77	0
Total:						0	0

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0626	DS2502	150C	1000	HRS	77	0
Total:						0	0

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0626	DS2502	-55C TO 125C	1000	CYS	77	0
Total:						0	0

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HAST	0626	DS2502	130C, 85%R.H.,5.5V	96	HRS	77	0
Total:						0	0

Assembly Information:

Package Type: TO92 (Pb-Free)
 Flammability: UL 94-V0
 Date Code Range: 0740 to 0745

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0740	DS2502	125C, 6.0 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0740	DS2503	125C, 6.0 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0745	DS2501	125C, 6.0 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0745	DS2501	125C, 6.0 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0745	DS2501	125C, 6.0 VOLTS	1000 HRS	77	0	
					Total:	0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0740	DS2502	150C	1000 HRS	77	0	
STORAGE LIFE	0740	DS2503	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	0740	DS2502	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0740	DS2503	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0745	DS2501	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0745	DS2501	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0745	DS2501	-55C TO 125C	1000 CYS	77	0	
					Total:	0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HAST	0745	DS2501	130C, 85%R.H.,5.5V	96 HRS	77	0	
HAST	0745	DS2501	130C, 85%R.H.,5.5V	96 HRS	77	0	
HAST	0745	DS2501	130C, 85%R.H.,5.5V	96 HRS	77	0	
					Total:	0	

FAILURE RATE: MTTF (YRS): 81430 FITS: 1.4