



5/9/2009

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
Cirtek	6 TSOC (Pb-Free)

The calculated failure rate for this assembly is:

**FAILURE RATE: MTTF (YRS): 15863 FITS: 7.2**

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 1/1/2008 and 12/31/2008

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**Assembly Information:**

Package Type: TSOC (Pb-Free)  
Date Code Range: 0836 to 0836

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**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0836	DS2432	125C, 5.25 VOLTS	1000 HRS	45	0	
HIGH TEMP OP LIFE	0836	DS2432	125C, 5.25 VOLTS	1000 HRS	45	0	
HIGH TEMP OP LIFE	0836	DS2432	125C, 5.25 VOLTS	1000 HRS	45	0	
<b>Total:</b>						<b>0</b>	

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**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0836	DS2432	150C	1000 HRS	77	0	
STORAGE LIFE	0836	DS2432	150C	1000 HRS	77	0	
STORAGE LIFE	0836	DS2432	150C	1000 HRS	76	0	
<b>Total:</b>						<b>0</b>	

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**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0836	DS2432	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0836	DS2432	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0836	DS2432	-55C TO 125C	1000 CYS	77	0	
<b>Total:</b>						<b>0</b>	

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**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HAST	0836	DS2432	130C, 85%R.H.,5.5V	96 HRS	45	0	

HAST	0836	DS2432	130C, 85%R.H.,5.5V	96	HRS	45	0
HAST	0836	DS2432	130C, 85%R.H.,5.5V	96	HRS	45	0
					<b>Total:</b>		<b>0</b>

**FAILURE RATE: MTTF (YRS): 15863 FITS: 7.2**