

RELIABILITY MONITOR REPORT  
FOR

**Cartridge Package**

**Dallas Semiconductor**

4401 South Beltwood Parkway  
Dallas, TX 75244-3292

This Report was prepared by  
Dallas Semiconductor Reliability Engineering

**Summary:**

The data in the tables that follow was generated as the result of an on-going Package Reliability Monitor. The assemblies covered by this package monitor are:

ASSY SITE	PINS	PACKAGE		
Batangas Assembly	3	Cartridge	Batangas Assembly	2 Cartridge (Pb-Free)
Consonic C	3	Cartridge	Consonic T	3 Cartridge
Dallas	0	Cartridge	Dallas	3 Cartridge
Fastech	2	Cartridge	Fastech	3 Cartridge
Fastech	2	Cartridge (Pb-Free)	Fastech	2 Cartridge w/Chip on Board
Fastech	2	Cartridge w/Flip Chip	Hana	2 Cartridge w/Chip on Board
MMET	2	Cartridge	MMET	2 Cartridge (Pb-Free)

Note: Due to the nature of the construction on this assembly, there is no operating life data collected.

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 7/1/2006 and 6/30/2007.

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**Assembly Information:**

Package Type: Cartridge 250  
Flammability: UL 94-V0  
Moisture Sensitivity (JEDEC J-STD20A) NA  
Date Code Range: 0710 to 0710

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**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0710	DS29022	70 C	336 HRS	77	0	
STORAGE LIFE	0710	DS29022	70 C	336 HRS	77	0	
STORAGE LIFE	0710	DS29022	70 C	336 HRS	77	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	0710	DS29022	0C TO 70C	300 CYS	77	0	
TEMP CYCLE	0710	DS29022	0C TO 70C	300 CYS	77	0	
TEMP CYCLE	0710	DS29022	0C TO 70C	300 CYS	77	0	
<b>Total:</b>						<b>0</b>	

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**Assembly Information:**

Package Type: Cartridge (Pb-Free) 670  
Flammability: UL 94-V0  
Moisture Sensitivity (JEDEC J-STD20A) Level 1  
Date Code Range: 0716 to 0716

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**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0716	DSQ33G4	85 C	1000 HRS	77	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	0716	DSQ33G4	-40 TO 85C	1000 CYS	77	0	
				<b>Total:</b>		<b>0</b>	

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**UNBIASED MOISTURE RESISTANCE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
MOISTURE SOAK	0716	DSQ33G4	60C/90% R.H.	1000 HRS	77	0	
				<b>Total:</b>		<b>0</b>	