

RELIABILITY MONITOR REPORT  
FOR

**iButton 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		
AK Stamp	BRICK		Batangas Assembly	iButton F50 (Pb-Free)
BTW China	BRICK		Chi Cheng Enterprise	BRICK
Chi Cheng Enterprise	BRICK (Pb-Free)		Dallas	BRICK
Dallas	Dongle/Fob		Dallas	iButton F30 (RoHS)
Dallas	iButton F30 w/Bump		Dallas	iButton F30 w/Bump (RoHS)
Dallas	iButton F50 (Pb-Free)		Dallas	iButton F50 w/Bump
Dallas	iButton F50nw		Dallas	iButton F50w/IC's
Dallas	iButton R30		Dallas	iButton Retainer
Dallas	iButton Socket		Dallas	Puk Can F50 Insert Mold w/Bump Humidity
Dallas	Puk Can F50 Insert Mold w/Bump/Battery		Dallas-8"	Puk Can F50 Insert Mold w/Bump/Battery
Fastech	Dongle/Fob		Fastech	iButton F30 (RoHS)
Fastech	iButton F30 w/Bump		Fastech	iButton F30 w/Bump (RoHS)
Fastech	iButton F30w/IC's		Fastech	iButton F30w/IC's (RoHS)
Fastech	iButton F50 (Pb-Free)		Fastech	iButton F50 w/Bump
Fastech	iButton F50w/IC's		Fastech	iButton F50w/IC's (Pb-Free)
Fastech	Puk Can F50 Insert Mold w/Bump/Battery		Fastech-8"	Puk Can F50 Insert Mold Bump Humidity w-SMT Crystal
Fastech-8"	Puk Can F50 Insert Mold Bump, Battery w-SMT Crystal (RoHS)		Fastech-8"	Puk Can F50 Insert Mold w/Bump/Battery
Fastech-8"	Puk Can F50 Insert Mold w/Bump/Battery (RoHS)		Hana	iButton F50
Hana	iButton F50 (Pb-Free)		ISPL (ATEC, PI)	Dongle/Fob
ISPL (ATEC, PI)	iButton F50		ISPL (ATEC, PI)	iButton F50 (Pb-Free)
ISPL (ATEC, PI)	iButton Retainer		MMET	iButton F30w/IC's
MMET	iButton F30w/IC's (RoHS)		MMET	iButton F50w/IC's
MPD	iButton Socket (Pb-Free)		Solectron	Dongle/Fob

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.

**Assembly Information:**

Package Type: iButton IM (RoHS)  
 Flammability: UL 94-V0  
 Moisture Sensitivity (JEDEC J-STD20A) NA  
 Date Code Range: 0653 to 0703

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0653	DS1922L	85 C	500 HRS	77	0	
STORAGE LIFE	0653	DS1922L	85 C	1000 HRS	77	0	
STORAGE LIFE	0703	DS1922L	85 C	500 HRS	77	0	

**Total: 0**

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**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE	0653	DS1922L	-40 TO 85C	1000 CYS	77	0	
TEMP CYCLE	0653	DS1922L	-40 TO 85C	1000 CYS	77	0	
TEMP CYCLE	0703	DS1922L	-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	0653	DS1922L	85 C/85% R.H.	500 HRS	77	0	
MOISTURE SOAK	0653	DS1922L	85 C/85% R.H.	500 HRS	77	0	
MOISTURE SOAK	0703	DS1922L	85 C/85% R.H.	500 HRS	77	0	
<b>Total:</b>						<b>0</b>	