

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	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	Dallas	Puk Can F50 Insert Mold w/Bump/
Dallas-8"		Puk Can F50 Insert Mold w/Bump/	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 Bump, Ba
Fastech		Puk Can F50 Insert Mold w/Bump/	Fastech	Puk Can F50 Insert Mold w/Bump/
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
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 1/1/2006 and 12/31/2006

**Assembly Information:**

Package Type: iButton  
 Flammability: UL 94-V0  
 Moisture Sensitivity (JEDEC J-STD20A) NA  
 Date Code Range: 0603 to 0621

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0603	DS1990	70 C	1000 HRS	77	0	
STORAGE LIFE	0621	DS1955B5	85 C	1000 HRS	77	0	
<b>Total:</b>						<b>0</b>	

**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE	0603	DS1990	-40 TO 85C	500 CYS	77	0	
TEMP CYCLE	0604	DS1921G	0C TO 70C	500 CYS	5	0	
TEMP CYCLE	0621	DS1955B5	-40 TO 85C	500 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	0603	DS1990	60C/90% R.H.	1000 HRS	77	0	
MOISTURE SOAK	0621	DS1955B5	60C/90% R.H.	1000 HRS	77	0	
<b>Total:</b>						<b>0</b>	

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**Assembly Information:**

Package Type: iButton (RoHS)  
Flammability: UL 94-V0  
Moisture Sensitivity (JEDEC J-STD20A) NA  
Date Code Range: 0549 to 0549

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**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0549	DS1904	85 C	1000 HRS	77	0	
STORAGE LIFE	0549	DS1904	85 C	1000 HRS	77	0	
STORAGE LIFE	0549	DS1904	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	0549	DS1904	-40 TO 85C	1000 CYS	77	0	
TEMP CYCLE	0549	DS1904	-40 TO 85C	1000 CYS	77	0	
TEMP CYCLE	0549	DS1904	-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	0549	DS1904	60C/90% R.H.	1000 HRS	77	0	
MOISTURE SOAK	0549	DS1904	60C/90% R.H.	1000 HRS	77	0	
MOISTURE SOAK	0549	DS1904	60C/90% R.H.	1000 HRS	77	0	
<b>Total:</b>						<b>0</b>	