

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		
A TEC		BRICK	A TEC	iButton F30
A TEC		iButton F50	A TEC	iButton Retainer
A TEC		iButton Socket	Dallas	BRICK
Dallas		Dongle/Fob	Dallas	iButton F30
Dallas		iButton F30 w/Bump	Dallas	iButton F50
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/B	Fastech	BRICK
Fastech		Dongle/Fob	Fastech	iButton F30
Fastech		iButton F30 w/Bump	Fastech	iButton F30w/IC's
Fastech		iButton F50	Fastech	iButton F50 w/Bump
Fastech		iButton F50w/IC's	Hana	iButton F30
Hana		iButton F50		

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 07/01/2003 and 06/30/2004.

**Assembly Information:**

Package Type: Dongle/Fob  
 Flammability: UL 94-V0  
 Moisture Sensitivity (JEDEC J-STD20A)  
 Date Code Range: 0328 to 0328

**MECHANICAL LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
MECHANICAL SHOCK	0328	DS9490	200G, 1/2 SINE, 6 MS	30	CYS	50	0
VIBRATION, VARIABLE FREQUENCY	0328	DS9490	10g or 0.06", 5Hz-2KHz, X Y Z axis	9	HRS	50	0
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0328	DS9490	85 C	1000	HRS	50	0
<b>Total:</b>						<b>0</b>	

**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE	0328	DS9490	-40 TO 85C	1000	CYS	50	0
<b>Total:</b>						<b>0</b>	

---

**UNBIASED MOISTURE RESISTANCE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
MOISTURE SOAK	0328	DS9490	60C/90% R.H.	1000 HRS	50	0	
				<b>Total:</b>		<b>0</b>	

---

**Assembly Information:**

Package Type: iButton  
Flammability: UL 94-V0  
Moisture Sensitivity  
(JEDEC J-STD20A)  
Date Code Range: 0334 to 0346

---

**MECHANICAL LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
MECHANICAL SHOCK	0334	DS1955B0	200G, 1/2 SINE, 6 MS	30 CYS	50	0	
VIBRATION, VARIABLE FREQUENCY	0334	DS1955B0	10g or 0.06", 5Hz-2KHz, X Y Z axis	9 HRS	50	0	
				<b>Total:</b>		<b>0</b>	

---

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0346	DS1921G	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	0346	DS1921G	-40 TO 85C	1000 CYS	77	0	
				<b>Total:</b>		<b>0</b>	

---

**UNBIASED MOISTURE RESISTANCE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
MOISTURE SOAK	0346	DS1921G	85 C/85% R.H.	1000 HRS	77	0	
				<b>Total:</b>		<b>0</b>	