

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 10/1/2005 and 9/30/2006

Assembly Information:

Package Type: iButton
 Flammability: UL 94-V0
 Moisture Sensitivity (JEDEC J-STD20A) NA
 Date Code Range: 0528 to 0621

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0529	DS1955B0	85 C, 5.25 VOLTS	1000 HRS	77	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0528	DS1990	70 C	1000 HRS	77	0	
STORAGE LIFE	0529	DS1955B0	85 C	1000 HRS	77	0	
STORAGE LIFE	0544	DS1990	70 C	1000 HRS	77	0	
STORAGE LIFE	0603	DS1990	70 C	1000 HRS	77	0	

STORAGE LIFE	0621	DS1955B5	85 C	1000 HRS	77	0
Total:						0

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE	0528	DS1990	-40 TO 85C	500 CYS	77	0	
TEMP CYCLE	0529	DS1955B0	-40 TO 85C	1000 CYS	77	0	
TEMP CYCLE	0544	DS1990	-40 TO 85C	500 CYS	77	0	
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	
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
MOISTURE SOAK	0528	DS1990	60C/90% R.H.	1000 HRS	77	0	
MOISTURE SOAK	0529	DS1955B0	60C/90% R.H.	1000 HRS	77	0	
MOISTURE SOAK	0544	DS1990	60C/90% R.H.	1000 HRS	77	0	
MOISTURE SOAK	0603	DS1990	60C/90% R.H.	1000 HRS	77	0	
MOISTURE SOAK	0621	DS1955B5	60C/90% R.H.	1000 HRS	77	0	
Total:						0	

Assembly Information:

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

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	
Total:						0	

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	
Total:						0	

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	
					Total:	0	

FAILURE RATE:**MTTF (YRS): 925****FITS: 123.4**