

# **USBT31A**

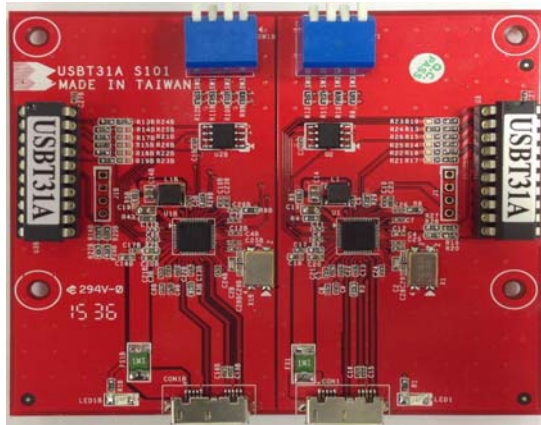
## **User's Manual (Win XP)**

**Bear Technologies**  
**[www.beartech.com.tw](http://www.beartech.com.tw)**

## Section 1 : Introduction

1-1> Accessories :

- A) USBT31A Test Card \*1



- B) USBT31A Cable \*2

## Section 2 : Common Program Syntax

2-1> Filename: BRUSBT31A.exe

2-2> Syntax: ( BRUSBT31A )

```
Dialog
BRUSBT31A [-Log][Exit?][Create][SP??][S??][H??][CSP][CS][CH]

Exit0 : Exit Under All Conditions
Exit1 : Exit On Pass [ Halt on Error ]
Create : Create and Write the Test Result to BearTestReport.log
-Log : Without Saving the Test Result to BearTestReport.log
(Default): Append the Test Result to BearTestReport.log

SP4 : 4 Ports Super Speed Plus Test [ Gen2 ]
S6 : 6 Ports Super Speed Test [ Gen1 ]
H8 : 8 Ports High Speed Test [ USB 2.0 ]
CSP : Change to Super Speed Plus [ Gen2 ]
CS : Change to Super Speed [ Gen1 ]
CH : Change to High Speed [ USB 2.0 ]

if PASS
return(Errorlevel=0)
else
return(Errorlevel=1)

BRUSBT31A : Show Help Message
BRUSBT31A SP2 : 2 Ports USB 3.1 Test
BRUSBT31A S4 : 4 Ports USB 3.0 Test
BRUSBT31A H6 : 6 Ports USB 2.0 Test
BRUSBT31A SP2 H6 : 2/6 Ports USB 3.1/2.0
BRUSBT31A SP2 CH : 2 Ports USB 3.1 & Change USB to High Speed
BRUSBT31A H2 CSP : 2 Ports USB 2.0 & Change USB to Super Speed Plus
```

## Section 3 : Testing Principle

### A. Function:

USB3.1 & USB2.0 Function Test

### B. Compatibility:

MB, NB, IPC, Server, HUB, & PCI Express CARD

### C. Efficiency and Completeness :

Only requires one test program BRUSBT31A.EXE to complete the USB3.1 Test

### D. Test Material:

1. USB3.1 & USB2.0 Data Transfer
2. Control Transfer
3. Bulk Transfer
4. D+ / D- , TX+ / TX- , RX+ / RX-
5. VCC / GND

### E. Test Procedure:

1. Connect USBT31A Test card with the target
2. Boot the screen to Win7 platform
3. Excute **BRUSBT31A.exe**

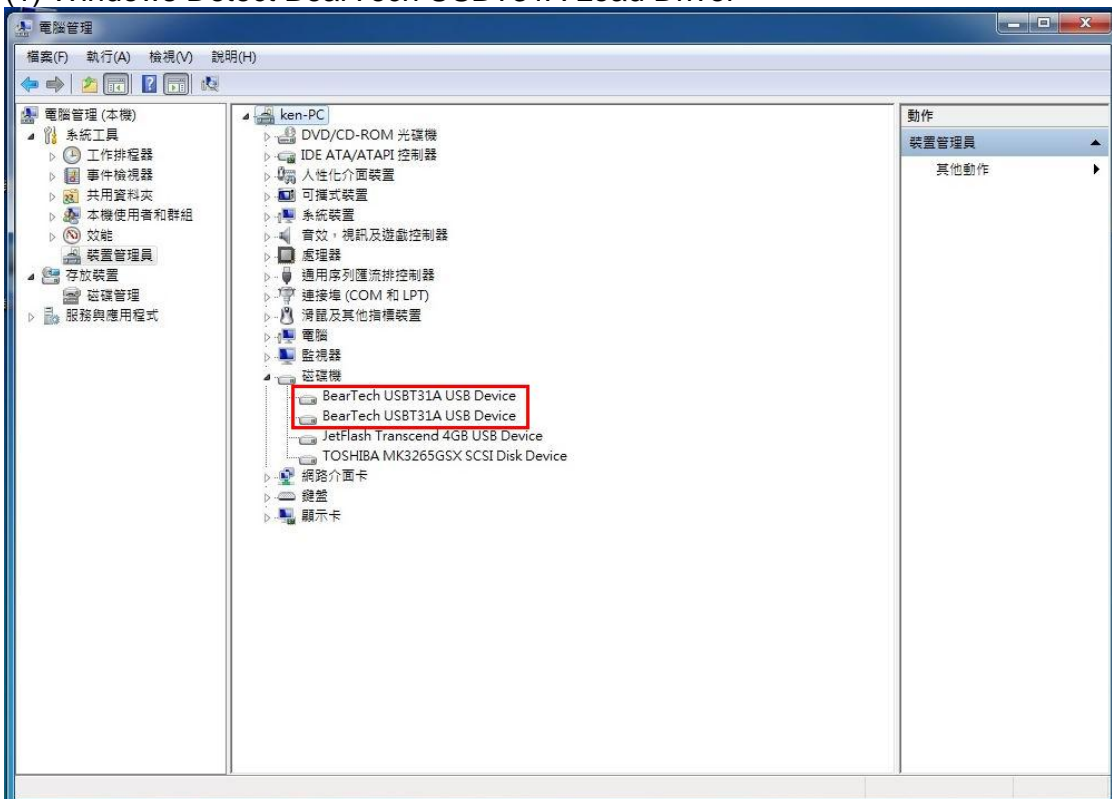
3.a BRUSBT31A SP2 CH

3.b BRWAIT 7000

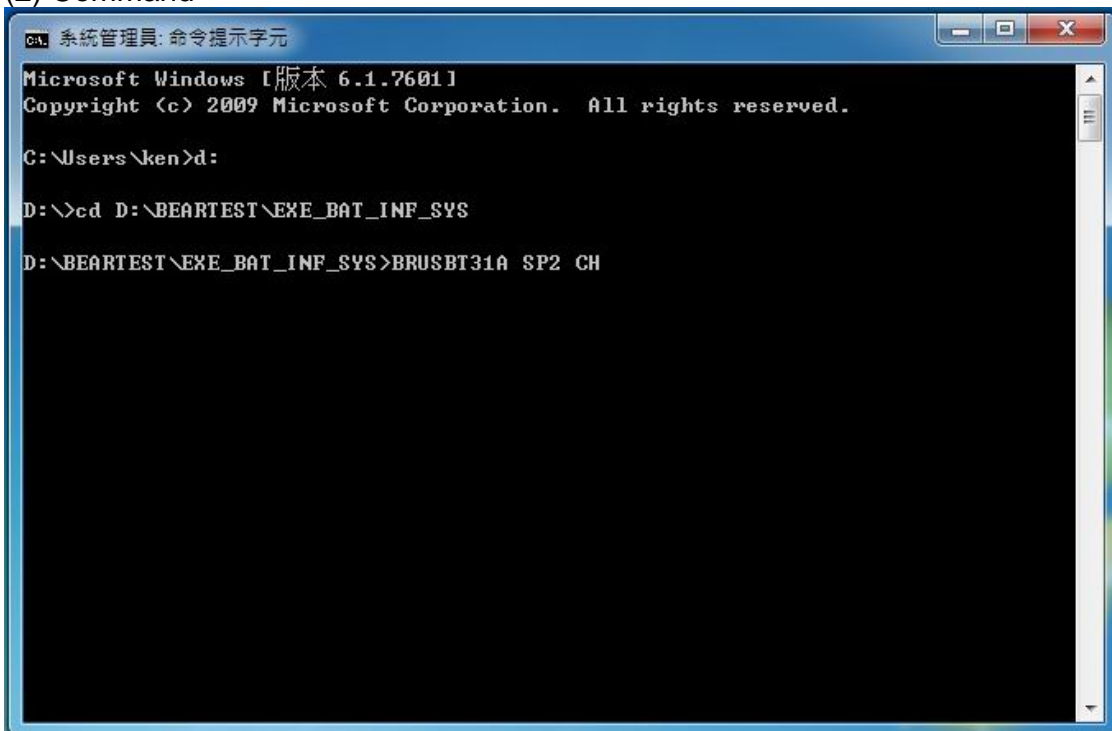
3.c BRUSBT31A H2

### F. Actual operation:

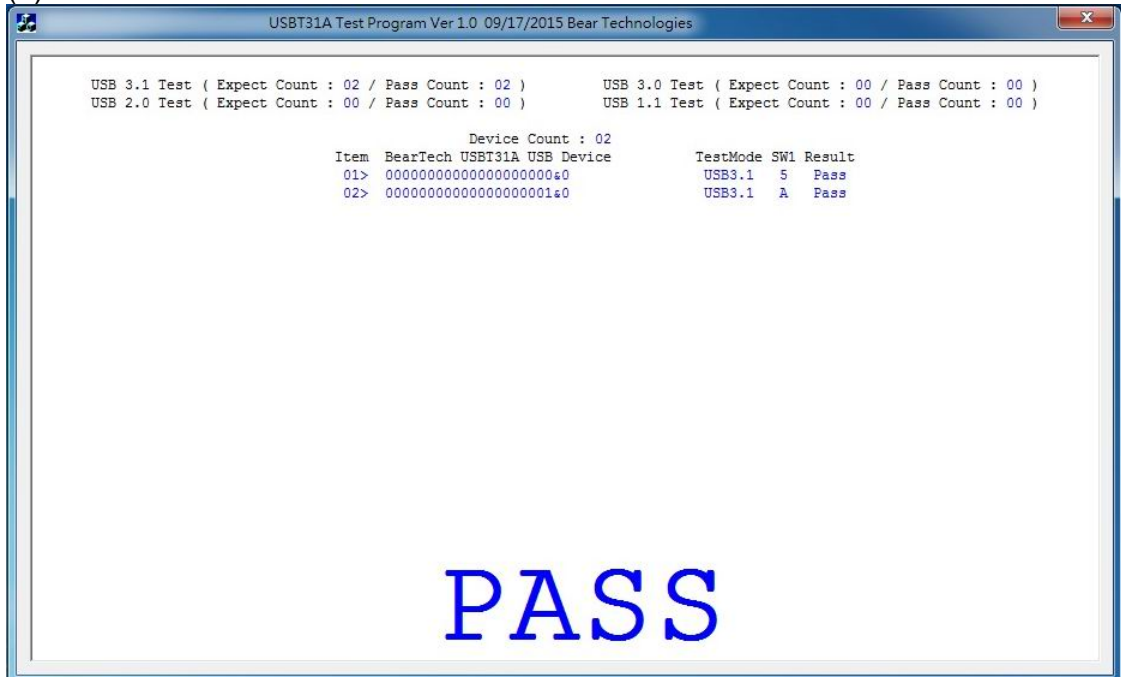
## (1) Windows Detect BearTech USBT31A Load Driver



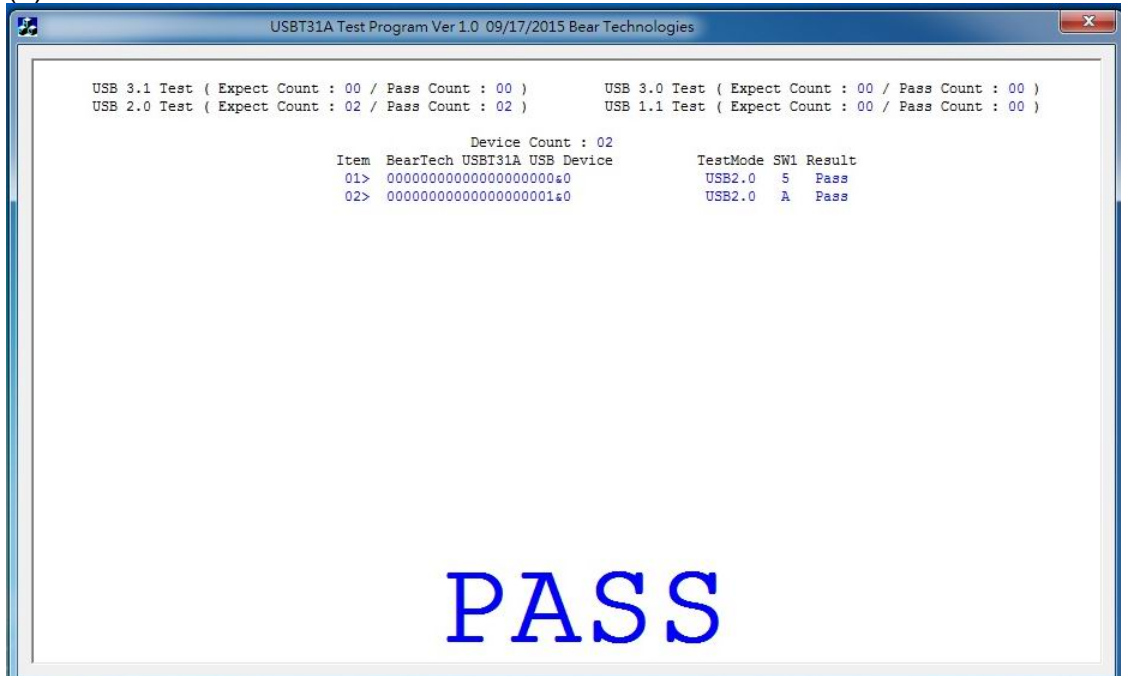
## (2) Command



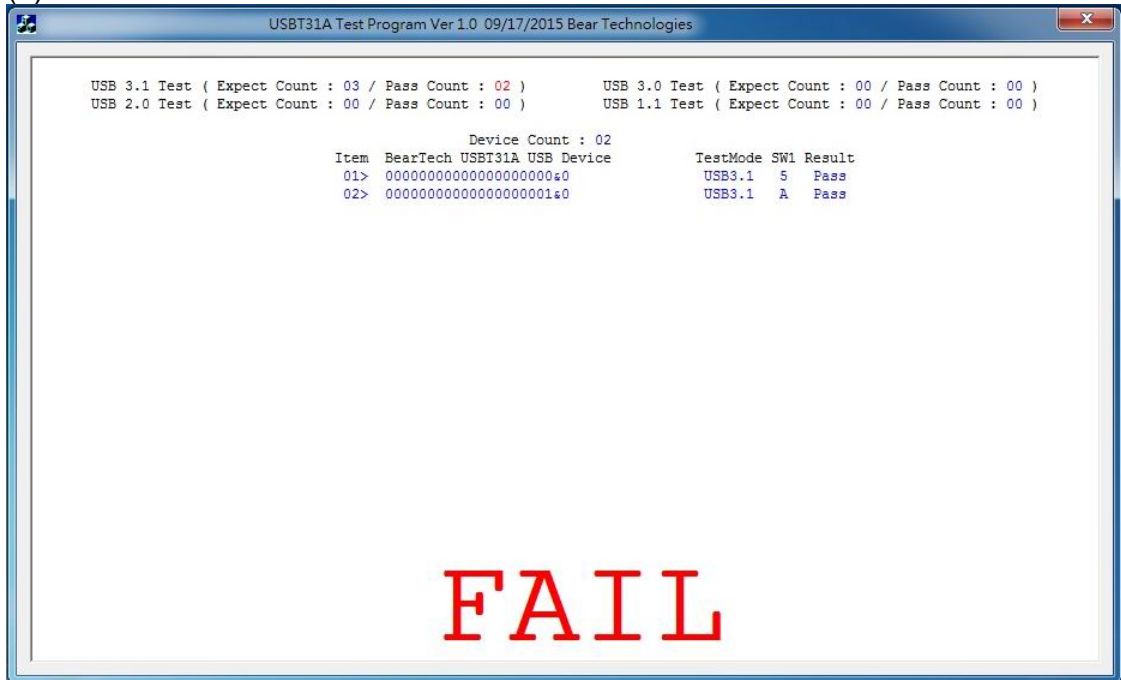
### (3) USB3.1 Test Pass



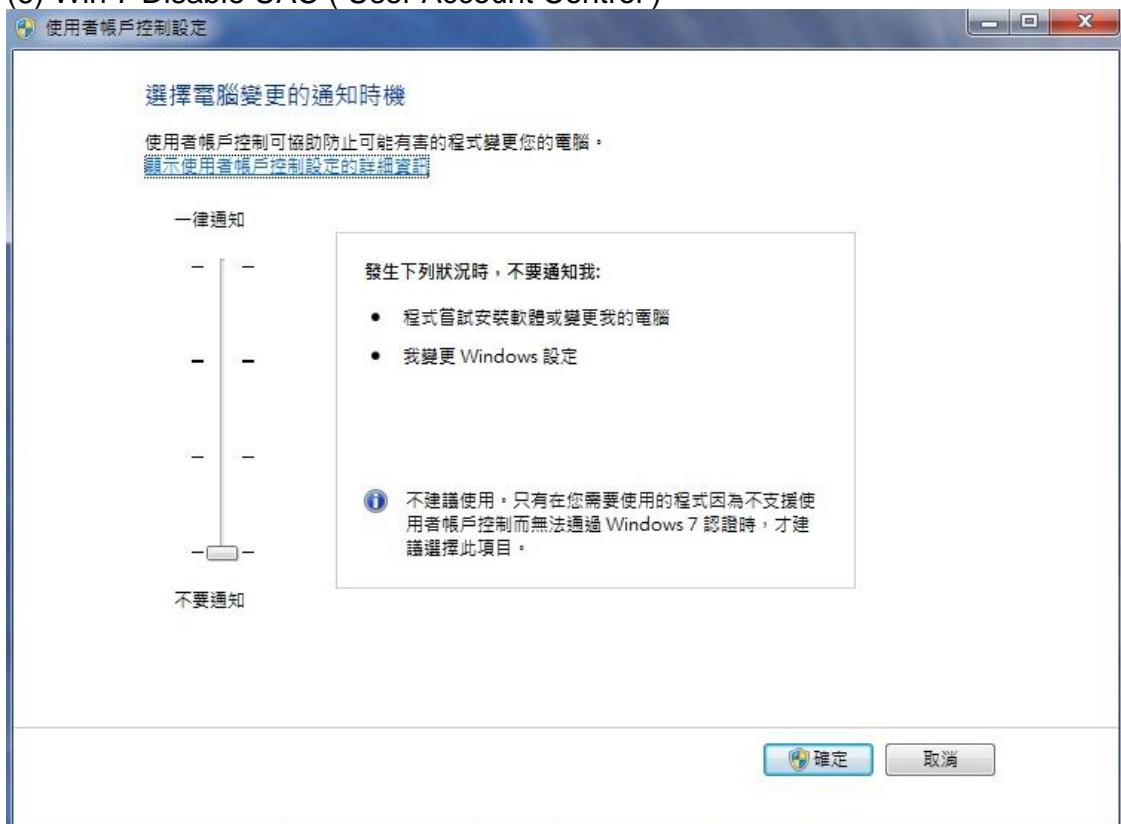
### (4) USB2.0 Test Pass



### (5) Test Fail

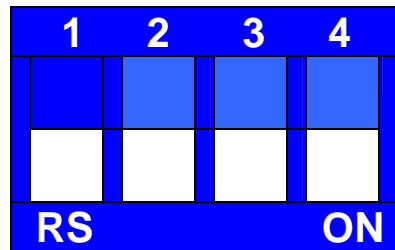


### (6) Win 7 Disable UAC ( User Account Control )



## LED & SWITCH :

### ● SW1



- Bit 1 : S\_SW3 ( ON → S\_SW3 = 0 , OFF → S\_SW3 = 1 )  
Bit 2 : S\_SW2 ( ON → S\_SW2 = 0 , OFF → S\_SW2 = 1 )  
Bit 3 : S\_SW1 ( ON → S\_SW1 = 0 , OFF → S\_SW1 = 1 )  
Bit 4 : S\_SW0 ( ON → S\_SW0 = 0 , OFF → S\_SW0 = 1 )

S_NO	SW3	SW2	SW1	SW0
0H	0	0	0	0
1H	0	0	0	1
2H	0	0	1	0
3H	0	0	1	1
4H	0	1	0	0
5H	0	1	0	1
6H	0	1	1	0
7H	0	1	1	1
8H	1	0	0	0
9H	1	0	0	1
AH	1	0	1	0
BH	1	0	1	1
CH	1	1	0	0
DH	1	1	0	1
EH	1	1	1	0
FH	1	1	1	1

### ● LED1 : Power LED

## Section 4 : Test Results

### A. The chips that have been tested:

- Asmedia            ASM1142



**Program updates and product related information can be viewed  
and download at : <http://www.beartech.com.tw>**

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