

M2EXPRESS AE102

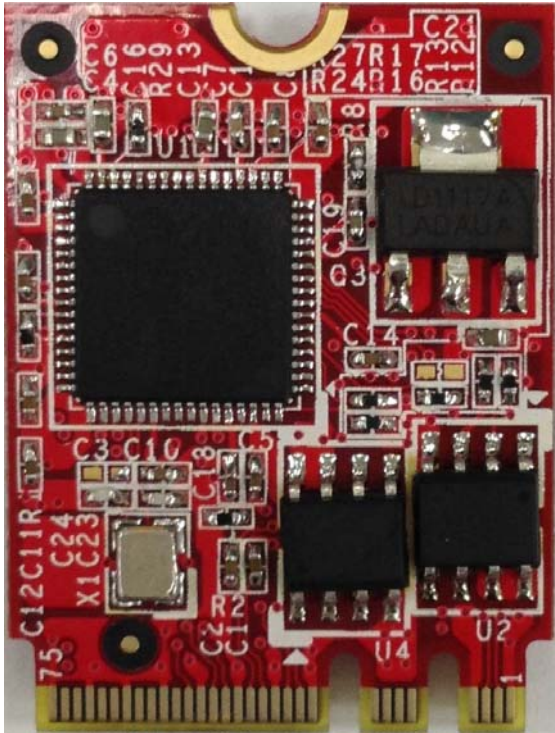
User's Manual

Bear Technologies
www.beartech.com.tw

Section 1 : Introduction

1. Product Feature

Test PCI EXPRESS M.2 Slot (Key A/E)



2. Accessories

M2EXPRESS AE102 test card * 1

Section 2 : Common Program Syntax

2-1> Filename: PCI-XP.COM

PCI-XP [T1 .. T16]

PCI-XP	:	TEST 1 PCI EXPRESS CARD
PCI-XP T2	:	TEST 2 PCI EXPRESS CARD
PCI-XP ?	:	HELP MESSAGE

2-2> Filename: USBT.COM

```
USBT [T1..T99][F0..F99][H0..H99][\U1][\U2][\B][\IN][\IS][?]  
      [K1..K10]  
K1           : USB Keyboard at Port 1  
K5           : USB Keyboard at Port 5  
\U1          : Skip Usb 1.1 Test  
\U2          : Skip Usb 2.0 Test  
\B           : Skip BULK MODE Test  
\IN          : Skip INTERRUPT MODE Test  
\IS         : Skip ISO MODE Test  
USBT T8     : 8 USB1.1 PORTS PASS & 8 USB2.0 PORTS PASS  
USBT F12 H8 : 12 USB1.1 PORTS PASS & 8 USB2.0 PORTS PASS  
USBT        : 2 USB1.1 PORTS PASS & 0 USB2.0 PORTS PASS  
USBT T8 \U1 : USB1.1 TEST SKIP & 8 USB2.0 PORTS PASS  
USBT T8 \U2 : 8 USB1.1 PORTS PASS & USB2.0 TEST SKIP  
USBT T8 \B  : 8 USB1.1/2.0 PORTS PASS & BULK MODE SKIP  
USBT T8 \IN : 8 USB1.1/2.0 PORTS PASS & INTERRUPT MODE SKIP  
USBT T8 \IS : 8 USB1.1/2.0 PORTS PASS & ISO MODE SKIP  
USBT T8 \IN \IS: 8 USB1.1/2.0 PORTS PASS & INTERRUPT/ISO  
                MODE SKIP  
USBT ?       : Help Message
```

2-2.1> Usbt.com Error Message:

```
Disconnect      ; Usb Port Disconnect  
Uhci Low        ; Low Speed Device (UHCI)  
Ohci Low        ; Low Speed Device (UHCI)  
Pass L_spd      ; Usb Low Speed Device Pass  
Skip L_spd      ; Usb Low Speed Device Skip  
EHCI_Reset      ; EHCI RESET  
Port Enabl      ; Usb Port Enable  
Port Disab      ; Usb Port Disable  
Set Addr        ; Usb is Setting Address  
Get Desc.       ; Usb Get Descriptor Test  
Get ID1         ; Bear ID1  
Get Id2         ; Bear ID2  
Get Config      ; Usb Get Configuration Test  
Set Config      ; Usb Set Configuration Test  
???????IRQ     ; IRQ  
Bulk Test       ; Usb Bulk Mode Test  
INT Test        ; Usb Interrupt Mode Test  
ISO Test        ; Usb ISO Mode Test
```

2-3> PCI-XP.COM Screenshot

```
PCI Express Test Ver 2.8 11/22/2012 Bear Technologies (PCI-XP ? ..Help)
Port PciIndex Bus ChipSet Expected Read Card ID Result
01 80020000 002 ASM1042 (X 1/Gen2) (X 1/Gen2) (0) Pass

          PASS

105> Ports (Exp./Pass)(01/01): Pass

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2-4> USBT.COM Screenshot

```
USB1.1 & USB2.0 Test Ver 7.6 Bear Tech. 06/17/2014 (WIN) (USBT ? ..Help)
USB 1.1 Test
Base_addr Vendor IRQ:SW Result
USB 2.0 Test
Base_addr Vendor IRQ:SW Result
01 F7F18000h 123456 11 Pass Hub 1
02 F7F18000h Intel 11 Disconnect
03 F7F17000h 1234567810 HubDisconn
04 F7F17000h Intel 10 Disconnect

102> USB1.1 (Exp./Pass)(00/00): ????
103> USB2.0 (Exp./Pass)(01/01): Pass

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Section 3 : Testing Principle

A. Fuction:

1. PCI express 1x , USB 1.1 ,USB 2.0 real test.
 - A. To wake use of PCI express TO USB Bridge capability by Asmedia ASM1042.

B. Using Asmedia ASM1051 to transmission data realistically
2. The test signal as follow:
3.3V , RX+/-, TX+/-, USBD+ , USBD- , REFCLK+/- .

B. Compatibility:

1. The mother board with PCI Express M.2 Card .

C. Efficiency and Completeness:

1. Only requires one test program (PCI-XP.COM ? Help Message) to complete the 1~17 PCI Express slots and the process only test 1 second
2. Only require one test program (USBT.COM ? Help Message) to complete the usb 1.1 & usb 2.0

D. Operating Procedure:

1. Connect test card to PCI EXPRESS M.2 Slot
2. Boot up the system to DOS platform
3. Execute **PCI-XP.COM & USBT.COM**

**Program updates and product related information
can be viewed and downloaded at :**

<http://www.beartech.com.tw>

Bear Technologies

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