

M2EX1G3U3B (DOS)

User's Manual

Bear Technologies
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Section 1 : Introduction

1. Product Feature

PCI-EXPRESS x1 Gen3 & USB 3.0 Test (Key B)



2. Accessories

M2EX1G3U3B B101 test card * 1

Section 2 : Common Program Syntax

2-1> Filename: PCI-XP.COM

```
PCI Express Test Ver 3.1 09/16/2015 Bear Technologies ( PCI-XP ? ..Help)
Port PciIndex Bus ChipSet Width/Speed Width/Speed Card ID Result
01 80010000 001 ASM1142 (X 1/Gen3) (X 1/Gen3) (0) Pass

          PASS

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

09/17/2015 16:59:36
C:\NPIC>
```

```
PCI Express Test Ver 3.1 09/16/2015 Bear Technologies ( PCI-XP ? ..Help)

PCI-XP [T1..T16][N][K][L][K][I][+S][[-Width][[+Gen][P??X??][P??G?][Self]
[-P??W][[-P??G][\NG]
/K : Any key to continue +S : Add Error Status Test
-Width: Skip Link Width Test +Gen : Add Link Speed Test
P??X??: Expected Which Port Link Width
P??G? : Expected Which Port Link Speed
-P??W : Which Port To Skip Link Width Test
-P??G : Which Port To Skip Link Speed Test
\NG : Skip Gate A20 Eenable Self : Self Link Width & Speed

PCI-XP : Test 1 PCI-Express Slot
PCI-XP T2 : Test 2 PCI-Express Slot
PCI-XP -Width : Skip Link Width
PCI-XP +Gen : Add Link Speed
PCI-XP P1X1 : Expected Port 1 Link Width = X1
PCI-XP P2X4 : Expected Port 2 Link Width = X4
PCI-XP P6X8 : Expected Port 6 Link Width = X8
PCI-XP P10X16 : Expected Port 10 Link Width = X16
PCI-XP +Gen P1G1: Expected Port 1 Link Speed = Gen1
PCI-XP +Gen -P2G: Skip Port 2 Link Speed

C:\NPIC>
```

2-2> Filename: USBT30.COM

```

USB3.0 Test Ver 7.1 Bear Technologies 11/23/2015 (USBT30 ? ..Help)
nn VendorSW Result r |nn VendorSW Result r | HUB-SW1 | HUB-SW1 | HUB-HUB-SW1
01 Int13.? Disconn. 017 Int12.? Disconn. 0
02 Int13.? Disconn. 018 Int12.? Disconn. 0
03 Int13.? Disconn. 019 Int12.? Disconn. 0
04 Int13.? Disconn. 020 Int12.? Disconn. 0
05 Int13.3 PassXHCI 021 Int12.? Disconn. 0
06 Int13.F PassXHCI 0
07 Int12.? Disconn. 0
08 Int12.? Disconn. 0
09 Int12.? Disconn. 0
10 Int12.? Disconn. 0
11 Int12.? Disconn. 0
12 Int12.? Disconn. 0
13 Int12.? Disconn. 0
14 Int12.? Disconn. 0
15 Int12.3 PassXHCI 0
16 Int12.F PassXHCI 0

Max.Ports 21(01-21)
L1 HubPortStatus ????? ????? ????? ????? ????? ????? ????? ?????
????????? ?????????? ??????????
Event Deg. PTR:00410020h 103> USBT30 (Exp./Pass)(04/04): Pass
05/12/2016 07:04:13 Lap_Cnt:18034 Retry(USB30/USB20)(230/00243)
C:\NPIC>_

```

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USB3.0 Test Ver 7.1 Bear Technologies 11/23/2015 (USBT30 ? ..Help)
USBT30 [T1 .. T99][R0..R9][P0..P24][+S][K][?]
+S : SMI ignore
R0: No retry R5: retry_cnt=5 Default: Retry_cnt=3

USBT30 ; 4 USB3.0/2.0 Ports Pass Retry_cnt=3
USBT30 T2 R0 ; 2 USB3.0/2.0 Ports Pass Retry_cnt=0
USBT30 T6 R1 ; 6 USB3.0/2.0 Ports Pass Retry_cnt=1
USBT30 T8 R2 ; 8 USB3.0/2.0 Ports Pass Retry_cnt=2
USBT30 T10 R5 ; 10 USB3.0/2.0 Ports Pass Retry_cnt=5
USBT30 ? ; Help Message

Lap_Cnt:18035 Retry(USB30/USB20)(230/00243)
C:\NPIC>_

```

Section 3 : Testing Principle

A. Fuction:

PCI express x1 Gen3 & USB 3.0 real test.

- A. To wake use of PCI express TO USB Bridge capability by ASM1142.
- B. Using ASM1351 to transmission data realistically

B. Compatibility:

1. The mother board with M.2 Key B Slot

C. Efficiency and Completeness:

1. Only requires one test program (PCI-XP.COM ? Help Message) to complete the 1~16 PCI Express slots and the process only test 1 second
2. Only require one test program (USBT30.COM ? Help Message) to complete the USB 3.0

D. Operating Procedure:

1. Connect test card to M.2 Key B Slot
2. Boot up the system to DOS platform
3. Execute **PCI-XP.COM & USBT30.COM**