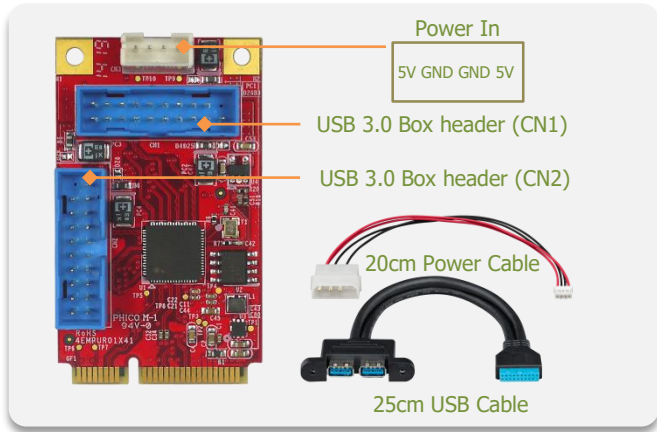


EMPU-3401

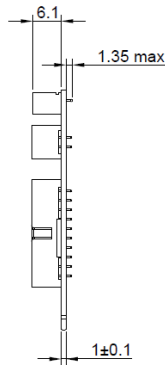
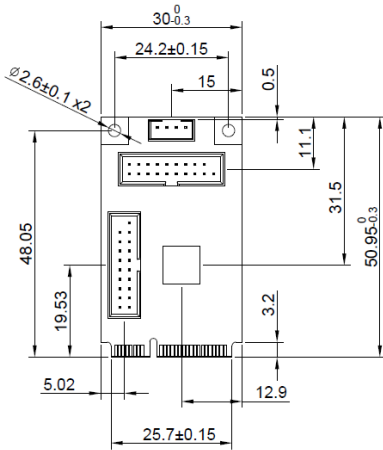
mPCIe to four USB 3.0 Module



Features

- Support 4 x USB 3.0 ports up to SuperSpeed (5Gbps) data rate (share PCIe Gen2 x1 bandwidth).
- Independent 1.5A overcurrent protection (OCP) for each port.
- Compliant with xHCI 1.0, USB 3.0 Rev 1.0.
- Two USB ports from CN1 provides limited power natively.
- Two USB ports from CN2 needs external power.
- Supports USB Battery Charging Specification Revision 1.2.
- Optional Industrial Temperature (-40°C to +85°C) support.
- 30μ golden finger, 3 years warranty.
- Industrial design, manufactured in innodisk Taiwan

Mechanical Drawing



TOLERANCE: ±0.25 mm

USB 3.0 Pin Assignment

| Signal | Pin | Pin | Signal |
|---------------|-----|-----|---------------|
| Vbus | 1 | | |
| IntA_P1_SSRX- | 2 | 19 | Vbus |
| IntA_P1_SSRX+ | 3 | 18 | IntA_P1_SSRX- |
| GND | 4 | 17 | IntA_P2_SSRX+ |
| IntA_P1_SSTX- | 5 | 16 | GND |
| IntA_P1_SSTX+ | 6 | 15 | IntA_P2_SSTX- |
| GND | 7 | 14 | IntA_P2_SSTX+ |
| IntA_P1_D- | 8 | 13 | GND |
| IntA_P1_D+ | 9 | 12 | IntA_P2_D- |
| | 10 | 11 | IntA_P2_D+ |

Specifications

Headquarters (Taiwan)
 5F., No.237, Sec. 1, Datong Rd.,
 Xizhi Dist., New Taipei City 221,
 Taiwan
 Tel: +886-2-7703-3000
 Email: sales@innodisk.com

Branch Offices:
USA
usasales@innodisk.com
 +1-510-770-9421

Europe
eusales@innodisk.com
 +31-40-3045-400

Japan
jpsales@innodisk.com
 +81-45-594-7581

China
sales_cn@innodisk.com
 +86-755-2167-3689

www.innodisk.com

© 2018 Innodisk Corporation.
 All right reserved. Specifications
 are subject to change without
 prior notice.

November 24, 2022

| | |
|-------------------|---|
| Form-Factor | mPCIe |
| Input I/F | PCI Express 2.0 |
| Output I/F | USB 3.0 |
| Output Connector | 19 Pin box header |
| TDP | 1.12W (3.3V x 340mA) |
| Dimension (WxLxH) | 30.0 x 50.9 x 8.45 mm |
| Temperature | Operation: STD: 0°C ~ +70°C. W/T: -40°C ~ +85°C Storage: -55°C ~ +95°C |
| Environment | Vibration: 5G @7~2000Hz, Shock: 50G @ 0.5ms |
| Notes | Please download driver from MyInnodisk website. Windows: XP(32 bit), 7(32/64 bit), Vista Linux: Kernel v2.6.0, v2.6.8 *After Win8 and Linux Kernel v2.6.31 supports built-in xHCI 1.0. |

Order Information

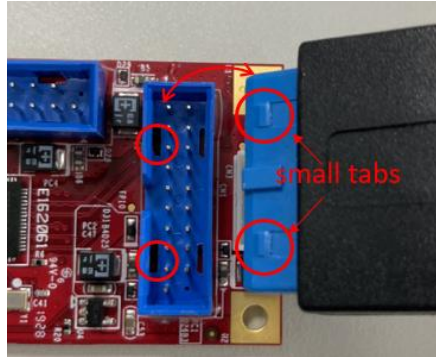
EMPU-3401-C1(Standard Temp.)

EMPU-3401-W1(Wide Temp.)

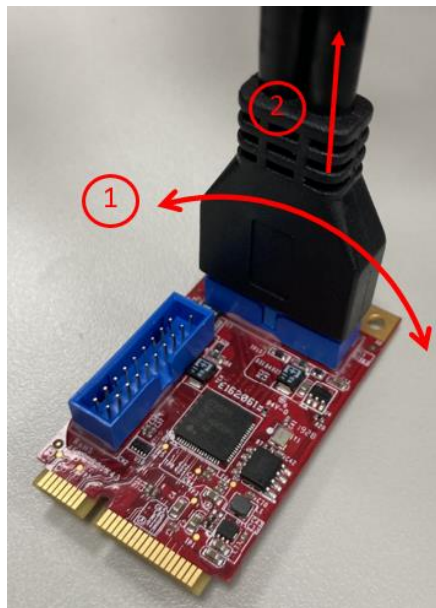
mPCIe to four USB 3.0 Module

How to Unplug USB 3.0 19pin Connectors from Mainboard

The USB 3.0 19pin connector is a standard connector that is not designed for multi-times plug/unplug usage. The purpose of the USB 3.0 19pin connector is to securely connect when the cable is plugged in, not to allow users to unplug easily. Therefore, there are small tabs located on the cable connector that clips into the pin header connector from the inside.



To pull off the USB 3.0 cable, DO NOT unplug the USB cable from the module directly, Wiggle Left- Right to release the small tabs from sockets then unplug the cable, refer to the below pictures for example:



One USB 3.0 Port



Four USB 3.0 Port

