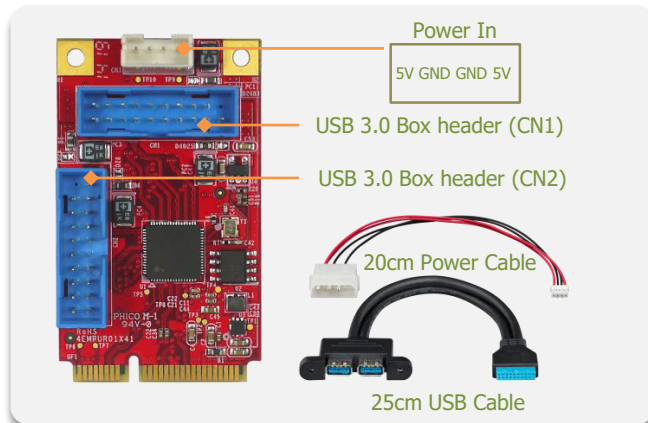


EMPU-3401

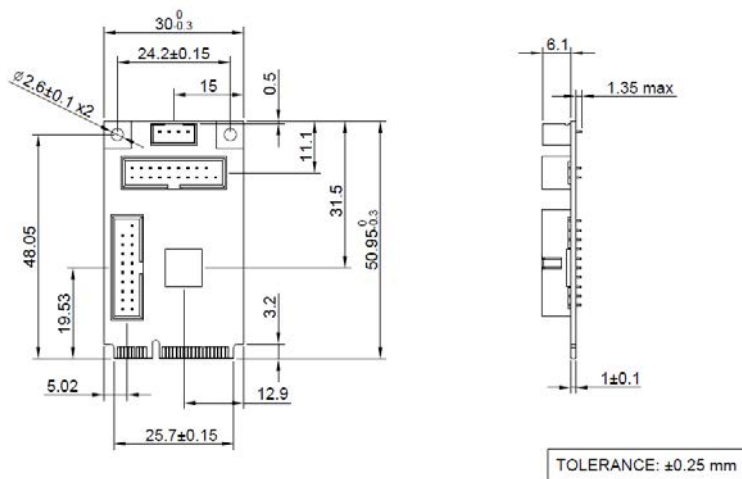
mPCIe to four USB 3.0 Module



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



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

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.

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prior notice.

November 24, 2022

Order Information

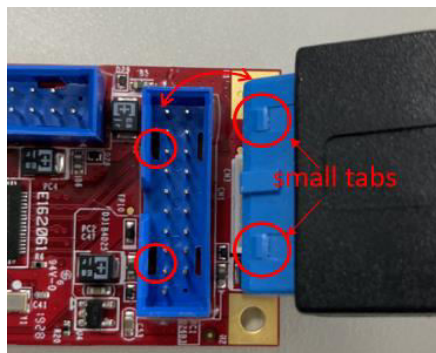
EMPU-3401-C1(Standard Temp.)

EMPU-3401-W1(Wide Temp.)

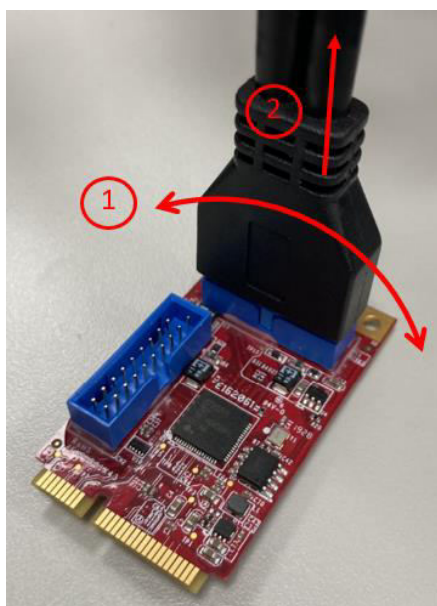
mPCIe to four USB 3.0 Module

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

