Thunderbolt 3 to PCIe USB 3.1 Adapter - Chassis + 4 Port Card

Product ID: BNDTBUSB3142

Connect your Thunderbolt 3 enabled computer to external USB 3.1 (Gen 2) devices using this Thunderbolt 3 to PCIe USB 3.1 adapter. Providing up to 10Gbps throughput, the adapter offers four USB 3.1 ports on two independent bus channels, an additional TB3 port, and a DisplayPort output. The adapter combines the StarTech.com USB 3.1 PCIe card (PEXUSB314A2V) and the TB3 chassis (TB31PCIEX16).

With two host controller chipsets, shared across two ports instead of four, this 4-port Thunderbolt 3 to USB 3.1 adapter dedicates up to 10Gbps for each set of two USB ports. It reduces performance bottlenecks and doubles your total available bandwidth to 20Gbps.

Thunderbolt 3 is the fastest connection available. By avoiding performance bottlenecks, you can accomplish more in the same amount of time. With 40Gbps of throughput and support for other high-performance PCIe cards, you can swap the card in and out, to add the peripherals you need connected to a Thunderbolt 3 desktop or laptop computer.

Requiring only a Phillips type screwdriver, this Thunderbolt 3 to PCIe USB 3.1 adapter can be assembled and connected in minutes.

The TB31PCIEX16 and PEXUSB314A2V are backed by a StarTech.com 2-year warranty.

Certifications, Reports and Compatibility

Applications

• Ideal for connecting your USB legacy and next-generation devices to a Thunderbolt 3 enabled computer

• Great for file backups, video editing, and data recovery, using high-bandwidth USB 3.1 Gen 2 external storage solutions

• For use with large external storage solutions

Features

• Transfer files and access USB 3.1 devices faster, with up to 10Gbps throughput

• Create an efficient work station with extra displays using the DisplayPort output and additional Thunderbolt 3 port

• Upgrade your peripherals without having to upgrade your chassis by just switching out your PCIe card

• Assemble and install easily with just a screwdriver

Hardware

Warranty	2 Years	
Fan(s)	Yes	
Fans	92 mm	
Ports	7	
Air Flow Rate	14.06 CFM	
Noise Level	24.55 dB	
Interface	Thunderbolt	
	USB 3.1 Gen 2	
Bus Type	Thunderbolt 3	
	PCI Express	
Card Type	Standard Profile	
Port Style	Integrated on Card	
Industry Standards	Thunderbolt 3	
	USB 3.1 Specification Rev. 1.0	
	USB Specification Rev. 2.0	
	PCI Express Base Specification Rev. 3.0	
	Intel xHCI Specification Rev. 1.1	
	UASP (USB Attached SCSI Protocol) Rev. 1.0	
Fan Bearing Type	Sleeve Bearing	

Chipset ID		Chassis: Intel - Alpine Ridge DSL6540
		PCIe Card: ASMedia - ASM1142

Performance

Maximum Data Transfer Rate		40 Gbps (Thunderbolt 3)
Bandwidth		3.94 GB/s (x4 PCIe 3.0)
Type and Rate		Thunderbolt 3 - 40 Gbit/s
		USB 3.1 Gen 2 - 10 Gbit/s
UASP Support		Yes

Connector(s)

Connector Type(s)		PCI Express x4
Internal Ports		LP4 (4 pin; Large Drive Power)
		SATA Power (15 pin)
		PCI Express x16
External Ports		Thunderbolt 3 USB-C (24-pin) (40Gbps)
		DisplayPort (20 pin)
		USB 3.1 USB Type-A (9 pin, Gen 2, 10 Gbps)

Software

OS Compatibility		Windows 7, 8, 8.1, 10<br / >macOS 10.12 - 10.13

Special Notes / Requirements

System and Cable Requirements		Thunderbolt 3 equipped computer with a Thunderbolt 3 port.
Note		USB power is limited to 900mA per port and is not recommended for charging external devices
		The expansion chassis does not support video cards.
		This expansion chassis does not provide full power delivery but will provide 15W of power, resulting in a slow charge to some laptops, such as MacBook Pro. When the dock is connected to your host laptop, a charging icon may appear on your laptop's screen. This is only sufficient enough to charge your laptop in sleep state, and charging will require an extended time period.

5K support can only be achieved using a Thunderbolt 3 5K monitor. DisplayPort 5K monitors will not work with this expansion chassis.

A 4K-capable display is required to achieve 4K x 2K resolution (4K is also known as 4K x 2K).

Certain monitors may be limited to 4K at 30Hz when connecting through DisplayPort. These monitors include the following models: Dell P2715Q, Viewsonic VX2475Smhl-4K, Philips 288P6LJEB, LG 31MU97C-B, Asus PB287Q (these models will need to be set to 4K at 30Hz).

When connecting a display to one of the Thunderbolt 3 USB-C ports, a USB-C video adapter might be required depending on the input of your display.

Secondary Thunderbolt 3 port can also be used to connect USB 3.1 (10Gbps) USB-Type C devices, such as USB 3.1 Hubs. Backwards compatible with USB 3.0 (USB 3.1 Gen 1), and USB 2.0.

Power

Power Source	AC Adapter Included
Input Voltage	100 - 240 AC
Input Current	2A
Output Voltage	12V DC
Output Current	5.417A
Center Tip Polarity	Positive
Plug Type	N
Power Consumption (In Watts)	65

Environmental

Operating Temperature	Enclosure: 5C to 35C (41F to 95F)
	PCIe Card: -20C to 60C (-4F to 140F)
Storage Temperature	Enclosure and PCIe Card: -20C to 50C (-4F to 122F)
Humidity	Enclosure and PCIe Card: 20-80%RH

Physical Characteristics

Color	Black

Material	Aluminum and Steel
Cable Length	19.7 in [50 cm]
Product Length	11.0 in [28 cm]
Product Width	5.6 in [14.2 cm]
Product Height	3.2 in [82 mm]
Weight of Product	3.6 lb [1.6 kg]

Packaging Information

Package Length	14.2 in [36 cm]
Package Width	11.4 in [29 cm]
Package Height	5.7 in [14.5 cm]
Shipping (Package) Weight	7.2 lb [3.3 kg]

What's in the Box

Included in Package	Thunderbolt 3 PCIe expansion box
	Thunderbolt 3 cable
	rubber feet
	universal power adapter (NA/JP, UK, EU, ANZ)
	4-port USB 3.1 card
	quick-start guides

*Product appearance and specifications are subject to change without notice.