

Thunderbolt 3 PCIe Expansion Chassis, External Enclosure with One PCI Express Slot, PCIe Box for Laptops/Desktops/All-In-Ones, 5K/4K Output Via TB3/DP Ports, TAA Compliant

## Product ID: TB31PCIEX16



This Thunderbolt3 PCIe expansion chassis lets you add a PCI Express card to your laptop or desktop computer, through an external Thunderbolt 3 connection. The chassis also features a DisplayPort video output, so you can connect an additional monitor to your laptop, and supports Thunderbolt 3 daisy chaining, so you can expand your workstation even further.

The Thunderbolt 3 PCIe chassis makes it easy to expand your system with the capabilities you need to work at peak productivity. You can add many types of PCI Express cards, such as a PCIe USB 3.1/3.0/2.0 and USB-C, SSD, network, eSATA, FireWire or video capture cards. And, with the speed and bandwidth support of Thunderbolt 3 and PCIe 3.0, you can enjoy many of the same port additions you would from the PCI Express expansion slots of a desktop system.

The external PCIe enclosure features a dedicated DisplayPort output that lets you add an additional display to your laptop or desktop computer. The enclosure features a second Thunderbolt 3 (USB-C) port, that you can use to connect a secondary display (a USB-C video adapter may be required). With multiple extended displays, you can work more efficiently by multitasking faster, and avoid the hassle of continually repositioning several open windows or programs.

You can also use the second Thunderbolt 3 port to connect additional Thunderbolt, USB and DisplayPort devices to your system. You can daisy chain up to six Thunderbolt 3 devices and expand your workstation to suit your specific requirements.

Thunderbolt 3 is the fastest connection available, which means you don't have to deal with the performance bottlenecks of a slower connection, and can accomplish more in the same amount of time.

At up to 40Gbps this Thunderbolt 3 expansion chassis gives you the throughput to add displays to your laptop, access files quickly, and work without disruptions. It's easy to access and edit large uncompressed files such as videos and images on the fly, making it ideal for dynamic on-site production.

The TB31PCIEX16 is backed by a StarTech.com 2-year warranty and free lifetime technical support.





## **Certifications, Reports and Compatibility**

## **Applications**

• Add many types of PCIe cards, such as a PCIe USB 3.1/3.0/2.0 and USB-C, SSD, network, eSATA, FireWire or video capture cards to your Thunderbolt 3 laptop

• Add an external PCIe card to your Thunderbolt 3 equipped desktop computer

## Features

• THUNDERBOLT 3 PCIE EXPANSION CHASSIS: Add PCI Express support to a Thunderbolt 3/4 capable laptop / desktop computer; Increased productivity with Thunderbolt 3 and up to 40Gbps bandwidth; One external PCIe 3.0 x16 slot; Thunderbolt cable included

• EXPANDABILITY FOR LAPTOPS: Integrate video capture cards, high-speed fiber / ethernet connectivity, NVMe drives, FireWire cards, and more to unlock the potential of a notebook using this Thunderbolt 3 to PCIe chassis; Toolless design; Aluminum build

• 5K & 4K DISPLAY SUPPORT: Connect a display through the external PCIe enclosure; The DisplayPort and TB3 ports support various video outputs up to 4K/5K 60Hz (other video resolutions are also supported); PCIe Box does not support GPU graphic cards

• ROBUST POWER: The chassis delivers 25W via the PCIe slot and the LP4 port on the other side of the unit supports up to 30W between the 12V and 5V rails.; 12V 5A (65W) universal power adapter is included and is compatible w/ NA/JP, UK, EU, and ANZ regions

• COMPATIBILITY: Use single-width cards up to 8in (20.3cm) long; Built-in fan for active cooling; Daisy chain compatible with multiple TB3/4 devices; The chassis is driverless and is compatible with macOS, Windows; TAA-compliant

Hardware

Warranty

2 Years



	Fan(s)	Yes
	Fans	1 - 60 mm
	Ports	3
	Air Flow Rate	14.06 CFM
	Noise Level	24.55 dB
	Interface	Thunderbolt
	Bus Type	Thunderbolt 3
	Card Type	Standard Profile
	Industry Standards	Thunderbolt 3
	Fan Bearing Type	Sleeve Bearing
	Chipset ID	Intel - Alpine Ridge DSL6540
Performance	Maximum Data Transfer Rate	40 Gbps (Thunderbolt 3)
	Bandwidth	3.94 GB/s (x4 PCle 3.0 )
	Bandwidth Type and Rate	3.94 GB/s (x4 PCIe 3.0 ) Thunderbolt 3 - 40 Gbit/s
Connector(s)		
Connector(s)		
Connector(s)	Type and Rate	Thunderbolt 3 - 40 Gbit/s
Connector(s)	Type and Rate	Thunderbolt 3 - 40 Gbit/s 1 - PCI Express x16
Connector(s)	Type and Rate	Thunderbolt 3 - 40 Gbit/s 1 - PCI Express x16 2 - Thunderbolt 3 USB-C (24-pin) (40Gbps)
Software	Type and Rate Internal Ports External Ports	Thunderbolt 3 - 40 Gbit/s 1 - PCI Express x16 2 - Thunderbolt 3 USB-C (24-pin) (40Gbps) 1 - DisplayPort (20 pin) Windows 7, 8, 8.1, 10, 11 macOS 10.12 - 10.15, 11.0,
Software	Type and Rate Internal Ports External Ports	Thunderbolt 3 - 40 Gbit/s 1 - PCI Express x16 2 - Thunderbolt 3 USB-C (24-pin) (40Gbps) 1 - DisplayPort (20 pin) Windows 7, 8, 8.1, 10, 11 macOS 10.12 - 10.15, 11.0,
Software	Type and Rate Internal Ports External Ports OS Compatibility System and Cable	Thunderbolt 3 - 40 Gbit/s 1 - PCI Express x16 2 - Thunderbolt 3 USB-C (24-pin) (40Gbps) 1 - DisplayPort (20 pin) Windows 7, 8, 8.1, 10, 11 macOS 10.12 - 10.15, 11.0, 12.0, 13.0, 14.0, 15.0

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laptops, such as l your host laptop, screen. This is or sleep state, and o 5K support can o monitor. DisplayF		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.
	LED Indicators	1 - Power(Blue)
	Power Source	AC Adapter Included
	Input Voltage	100 - 240 AC
	Input Current	2A
	Output Voltage	12V DC

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	Ν
	Power Consumption (In Watts)	65
Environmental		

Operating Temperature

Indicators

5C to 35C (41F to 95F)



	Storage Temperature	-20C to 50C (-4F to 122F)
	Humidity	20-80%RH
Physical Characteristics		
	Color	Black
	Material	Aluminum and Steel
	Cable Length	19.7 in [500 mm]
	Product Length	11.0 in [28.0 cm]
	Product Width	5.6 in [14.2 cm]
	Product Height	3.2 in [8.2 cm]
	Weight of Product	3.6 lb [1.6 kg]
Packaging Information		
	Package Quantity	1
	Package Length	9.4 in [23.9 cm]
	Package Width	18.5 in [47.1 cm]
	Package Height	3.7 in [9.4 cm]
	Shipping (Package) Weight	6.2 lb [2.8 kg]
What's in the Box		
	Included in Package	1 - Thunderbolt 3 PCIe expansion box
		1 - Thunderbolt 3 cable
		4 - rubber feet
		1 - universal power adapter (NA/JP, UK, EU, ANZ)
		1 - quick-start guide

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