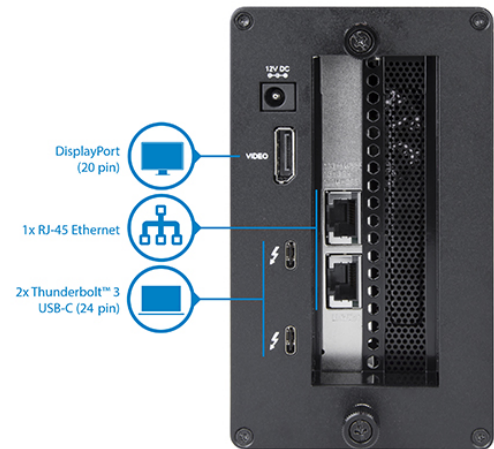# Thunderbolt 3 to 2-port 10GbE NIC Chassis

Product ID: BNDTB310GNDP

This Thunderbolt™ 3 to 10GbE NIC lets you connect your Thunderbolt 3 enabled device to a 10 Gigabit Ethernet network. This adapter combines the StarTech.com Thunderbolt 3 PCIe Expansion Chassis (TB31PCIEX16) and the 2-port PCI Express 10G NIC (ST10GPEXNDPI), giving you one DisplayPort output, one additional Thunderbolt 3 port and two 10GbE ports.

Reliable, high-performance and versatile multimode connectivity

This 10G network card utilizes the Intel® X550 chipset with Intel® Virtualization Technology for connectivity, delivering the power, performance and enhanced capabilities you need for dependable network connections.

Install and assemble with ease

Requiring only a Phillips type screwdriver, you can assemble this Thunderbolt 3 to 10GbE NIC chassis in minutes. It connects easily through a single Thunderbolt 3 port on your computer.

Change up your chassis

The Thunderbolt 3 chassis not only pairs well with the 10GbE NIC -- the card can be swapped for other PCIe cards to help support other functionality and performance. With the extra TB3 port and DP output built into the chassis, you will always have the ability to hook up extended displays to multitask effortlessly.

The TB31PCIEX16 and ST10GPEXNDPI are backed by a StarTech.com 2-year warranty.

Certifications, Reports and Compatibility

RoHS Compliant
Available

Applications

- Upgrade your workstation to provide enhanced performance, advanced features and greater reliability
- Upgrade a 10/100/1000 Ethernet port on your computer to 10GbE networking
- Ideal for high-demand database servers and mission-critical systems that need redundant network connectivity
- Add networking capabilities to an old system with no Ethernet port

Features

- Add 10GbE connectivity to your Thunderbolt 3 desktop or laptop computer
- 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
	Air Flow Rate	14.06 CFM
	Bus Type	PCI Express
		Thunderbolt 3
	Card Type	Standard Profile (LP bracket incl.)
	Chipset ID	Chassis: Intel - Alpine Ridge DSL6540 PCIe Card: Intel - X550AT
	Fan Bearing Type	Sleeve Bearing
	Fan(s)	Yes
	Fans	1 - 92 mm
	Industry Standards	IEEE 802.3an (10GBASE-T) IEEE 802.3ab (1GBASE-T) IEEE 802.3u (100BASE-T) PCI Express Rev 3.0
		Thunderbolt 3
	Interface	RJ45 (10 Gigabit Ethernet)
		Thunderbolt
	Noise Level	24.55 dB
	Ports	5
Performance	Auto MDIX	Yes
	Bandwidth	3.94 GB/s (x4 PCIe 3.0)
	Compatible Networks	10 Gbps/5G/2.5G/1G/100 Mbps
	Full Duplex Support	Yes
	Jumbo Frame Support	9K max.
	Maximum Data Transfer Rate	40 Gbps (Thunderbolt 3)
	Promiscuous Mode	Yes
	Supported Protocols	IEEE 802.3X (Flow Control Support) IEEE 802.1q (VLAN tagging)
	Type and Rate	Thunderbolt 3 - 40 Gbit/s
Connector(s)	Connector Type(s)	1 - PCI Express x4 Male
	External Ports	2 - RJ-45 Female
		2 - Thunderbolt™ 3 USB-C (24-pin) Female
		1 - DisplayPort (20 pin) Female
	Internal Ports	1 - PCI Express x16 Female

Software	OS Compatibility	Windows® 7, 8, 8.1, 10 Windows Server® 2008 R2, 2012, 2012 R2, 2016
Special Notes / Requirements	**Note**	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.
	System and Cable Requirements	Thunderbolt 3 equipped computer with a Thunderbolt 3 port.
Power	Center Tip Polarity	Positive
	Input Current	2A
	Input Voltage	100 ~ 240 AC
	Output Current	5.417A
	Output Voltage	12 DC
	Plug Type	N
	Power Consumption (In Watts)	65
	Power Source	AC Adapter Included
Environmental	Humidity	Chassis & PCIe Card: 20-80%RH
	Operating Temperature	Chassis: 5°C to 35°C (41°F to 95°F) PCIe Card: 5°C to 50°C (41°F to 122°F)

	Storage Temperature	Chassis: -20°C to 50°C (-4°F to 122°F) PCIe Card: -20°C to 60°C (-4°F to 140°F)
Physical Characteristics	Cable Length	19.7 in [500 mm]
	Color	Black
	Enclosure Type	Aluminum and Steel
	Product Height	3.2 in [82 mm]
	Product Length	11 in [280 mm]
	Product Weight	3.6 lb [1.6 kg]
	Product Width	5.6 in [142 mm]
Packaging Information	Shipping (Package) Weight	7.7 lb [3.5 kg]
What's in the Box	Included in Package	1 - Thunderbolt 3 PCIe expansion box
		1 - Thunderbolt 3 cable
		4 - rubber feet
		1 - network card
		1 - universal power adapter (NA/JP, UK, EU, ANZ)
		1 - low-profile bracket
		2 - quick-start guides

Product appearance and specifications are subject to change without notice.