1-Port PCIe 10GBase-T / NBASE-T Ethernet Network Card

Product ID: ST10GSPEXNB

This 5-speed network adapter card offers versatile and cost-efficient network connectivity. It lets you add an Ethernet port to your server or desktop computer and access your network at multiple speeds: 10G, 5G, 2.5G 1G and 100Mbps.

Cost-effective, multimode network connectivity

Designed for low-power, single-port network applications, the PCIe NIC offers a cost-effective and versatile networking solution by providing additional bandwidth to meet your network needs, without having to overhaul your infrastructure wiring. Fully compliant with 10GBase-T and NBASE-T™ specifications, the network card lets you add an Ethernet port to your server or high-powered workstation through a PCI Express x4 (or higher) slot. (10G network speeds require Cat6a cable. All other speeds require Cat5e cable.)

Advanced technology for optimal performance

The network controller card features advanced NBASE-T technology, supporting the latest multi-gigabit, including new Cisco® campus switches and Aruba Networks® access points. The card enables you to connect to NBASE-T based equipment at network speeds of 2.5Gbps or 5Gbps, over your existing Cat5e infrastructure, without having to upgrade to more expensive Cat6a.

NBASE-T technology accelerates the speed of twisted pair Cat5e copper cabling over a distance of up to 100 meters. The Ethernet network card also supports the more common 10G over copper, and 1G network connections using existing Cat 6/Cat5e or better cabling.

The 5-speed Ethernet network card is a powerful combination of the Tehuti™ TN4010 controller and the Marvell 88X3310P transceiver, providing low-power and high-performance NBASE-T solutions. The Tehuti 10GbE controller supports autonegotiation, which ensures the optimal speed over Cat5e/Cat6 is selected: 10GbE, 5GbE, 2.5GbE, GbE or 100Mbps (Fast Ethernet). The network card also offers compatibility with Microsoft Hyper-V® virtualization software and iSCSI support to combine LAN and SAN functions.

Operating efficiency and flexible use

The Tehuti TN4010 chipset, compliant with 802.3az Energy Efficient Ethernet, ensures peak operating efficiency with reduced power consumption. The decreased power consumption helps to minimize heat generated by the card, to avoid increasing the operating temperature within your server case.

The network card also supports advanced features including 9K Jumbo Frames and 802.1q VLAN tagging. For additional versatility, the controller card is equipped with a standard profile bracket and includes a low-profile/half-height bracket for installation in small form-factor computers.

The ST10GSPEXNB is backed by a StarTech.com 2-year warranty and free lifetime technical support.

Certifications, Reports and Compatibility

RoHS Compliant
Available

Applications

- A cost-effective way to add an Ethernet port to your server or desktop computer, with 5-speed network access
- The controller card utilizes advanced NBASE-T technology, enabling multigigabit connections over your existing Cat5e cabling
- Supports the latest multigigabit technology including new Cisco campus switches and Aruba Networks access points

Features

- Cost-effective and versatile Ethernet connectivity supporting five network speeds: 10G, 5G, 2.5G 1G and 100Mbps
- Compliant with 10GBase-T and NBASE-T specifications
- IEEE 802.3az compliant energy-efficient chipset
- Virtualization (Microsoft Hyper-V®) and iSCSI support
- PCIe 2.0 x4 interface
- Supports 2.5 and 5Gbps network speeds on Cat5e cabling, and 10Gbps on Cat6a
- Up to 9K jumbo frame support
- Supports 802.1q VLAN Tagging
- Full-duplex support
- Supports Auto-MDIX
- Supports Checksum Offload (IP, TCP, UDP) and Large Send Offload
- Configured with a standard profile bracket, includes a low profile/half-height bracket

Hardware	Warranty	2 Years
	Bus Type	PCI Express
	Card Type	Standard Profile (LP bracket incl.)
	Chipset ID	Tehuti - TN4010 Marvell - 88X3310P
	Industry Standards	IEEE 802.3an (10GBASE-T) IEEE 802.3ab (1000Base-T) IEEE 802.3u (100BASE-T) IEEE 802.3ad (Link Aggregation) IEEE 802.1q (VLAN tagging) PCI Express Rev 2.0
	Interface	RJ45 (10 Gigabit Ethernet)
	Ports	1
Performance	Auto MDIX	Yes
	Compatible Networks	10 Gbps/5G/2.5G/1G/100 Mbps
	Full Duplex Support	Yes
	Jumbo Frame Support	9K max.
	Maximum Data Transfer Rate	10 Gbps
	Promiscuous Mode	Yes
	PXE	No
	Supported Protocols	IEEE 802.3ad (link aggregation) IEEE 802.1q (VLAN tagging)
Connector(s)	Connector Type(s)	1 - PCI Express x4 Male
	External Ports	1 - RJ-45 Female
Software	OS Compatibility	Windows® 7, 8, 8.1, 10 Windows Server® 2008 R2, 2012, 2012 R2, 2016 Mac OS® 10.12 to 10.14 Linux 3.x to 4.14 *LTS Versions only* VMWare® ESXi 5.0/5.1/6.0/6.5
Special Notes / Requirements	System and Cable Requirements	Available PCI Express x4 slot
Indicators	LED Indicators	1 - Link/Speed 1 - Link/Activity
Environmental	Humidity	20% ~ 80% RH
	Operating Temperature	5°C to 50°C (41°F to 122°F)
	Storage Temperature	-20°C to 60°C (-4°F to 140°F)

Physical Characteristics	Color	Black
	Product Height	21 mm [0.8 in]
	Product Length	83 mm [3.3 in]
	Product Weight	54 g [1.9 oz]
	Product Width	120 mm [4.7 in]
Packaging Information	Shipping (Package) Weight	150 g [5.3 oz]
What's in the Box	Included in Package	1 - 1 Port PCIe 5-speed Ethernet network card
		1 - driver CD
		1 - low profile mounting bracket
		1 - instruction manual

Product appearance and specifications are subject to change without notice.