1 Port PCI Express 10 Gigabit Ethernet Network Card - PCIe x4 10Gb NIC

StarTech ID: ST10000SPEX

The ST10000SPEX PCI Express 10 Gbps Network Card lets you add a 10-Gigabit Ethernet port to your server or high-powered workstation through a PCI Express x4 (or higher) slot.

With rising demand on network resources due to large file transfers, increase in network users and multimedia content, more bandwidth is often required at various levels of your infrastructure. This 10 Gb NIC offers a cost-effective solution for your file or application server or even a high-powered workstation to transfer more data, faster.

Fully compliant with the IEEE 802.3an 10GBASE-T standard, the card offers added bandwidth over standard Cat 6a cabling, to meet your network needs without an overhaul of your infrastructure wiring, or a costly upgrade to fiber. The 10 Gbps network card also offers compatibility with VMWare® ESXi 5.0/5.1 and Microsoft Hyper-V® virtualization software and iSCSI support to combine LAN and SAN functions.

For peak operating efficiency, the 10GBASE-T card features the Tehuti TN4010 chipset, compliant with 802.3az Energy Efficient Ethernet and with significantly reduced power consumption versus the popular Intel® X540-AT1 chipset. The reduced power consumption also helps to minimize heat generated by the card, to avoid increasing the operating temperature within your server case.

Power Consumption Benchmark

	ST10000SPEX (Tehuti TN4010)	Intel X540-AT1	Speed
	4.50W	10.8W	@ 10 Gbps
Power Consumption	3.3.W	7.7W	@ 1 Gbps
	2.48W	6.4W	@ 100 Mbps

The card also supports 16K Jumbo Frames, 802.1q VLAN tagging and is backward compatible with 1 Gbps and 100 Mbps network connections. For added 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.

Backed by a StarTech.com 2-year warranty and free lifetime technical support.

Applications

- Add 10Gbps network connectivity to file or application servers and high-performance workstations
- Upgrade your onboard network adapter to 10 Gigabit for faster communication
- Create a video / audio editing console with 10 Gbps access to network storage

Features

- 10Gbps PCIe networking over standard Cat 6a cabling
- IEEE 802.3az compliant energy-efficient chipset
- Virtualization (VMWare® ESXi 5.0/5.1 and Microsoft Hyper-V®) and iSCSI support
- Compliant with PCI Express Rev 2.0 specification, using PCIe x4 (or higher) slot
- Backward compatible with 1 Gbps and 100 Mbps networks
- Up to 16K Jumbo Frame support
- Supports 802.1q VLAN Tagging
- Supports Checksum Offload (IP, TCP, UDP) and Large send Offload
- Configured with standard profile bracket, low profile/half-height bracket included

Technical Specifications

Warranty	2 Years
Ports	1
Interface	RJ45 (10 Gigabit Ethernet)
Bus Type	PCI Express
Card Type	Standard Profile (LP bracket incl.)
Industry Standards	IEEE 802.3an (10GBASE-T), IEEE 802.3ab (1GBASE-T), IEEE 802.3u (100BASE-T), IEEE 802.3az (EEE – Energy Efficient Ethernet) PCI Express Rev 2.0
Chipset ID	Tehuti - TN4010 Marvell - 88X3110
Connector Type(s)	1 - PCI Express x4 Male
External Ports	1 - RJ-45 Female
Maximum Data Transfer Rate	10 Gbps
Compatible Networks	100/1000/10000 Mbps (10Gb)
Full Duplex Support	Yes
Jumbo Frame Support	16K max.
Supported Protocols	IEEE 802.3ad (link aggregation), IEEE 802.1q (VLAN tagging), RFC 2819 (RMON MIB statistics)
OS Compatibility	Windows® 8 / 8.1 (32/64bit), 7 (32/64) Windows Server® 2012, 2008 R2 Linux 2.6.24 and up (Tested up to 3.5) VMWare® ESXi 5.0/5.1 and Microsoft Hyper-V®
System and Cable Requirements	Available PCI Express x4 slot
Product Length	3.3 in [83 mm]
Product Width	0.7 in [19 mm]
Product Height	4.7 in [120 mm]
Product Weight	1.7 oz [49 g]
Shipping (Package) Weight	5.2 oz [146 g]
Included in Package	1 - 1 Port PCI Express 10GBase-T Network Card
Included in Package	1 - Low Profile Bracket
Included in Package	1 - Driver CD

Included in Package   1 - Instruction Manual

Certifications, Reports and Compatibility