T E C H N O L O G I E S

Innovative Network Solutions

Quad Port Copper Gigabit Ethernet NIC with Bypass Server Adapter Card

Overview

Niagara 32264 Quad Port Gigabit Ethernet Server Adapter is built on Intel's 82576 Gigabit technology & Interface Masters' sterling design and customer service.

Niagara 32264 is designed with a builtin programmable bypass circuit to provide maximum uptime for the network. The bypass circuit takes the Niagara 32264 ports offline in case of either power or software failure. The bypass circuit works in absence of power.

Niagara 32264 Quad Port Copper Gigabit Ethernet NIC is designed to integrate with PCI Express compatible servers and high-end appliances providing high speed networking and bypass/failover capabilities for any missioncritical application.



Features

- Intel 82576EB Dual MAC & PHY ethernet controller
- Peak bandwidth 5 Gb/s in each direction per PCI Express lane
- 8 Gigabit per second of traffic when fully utilized
- PCI-E x4 (Gen 2.0) compatible
- Four RJ45 Connectors
- Passive Bypass which is essential during power loss or software failure
- Link Fault Detection (LFD) support
- Programmable "Fail-Closed" or "Fail-Open" while in the power-off state
- Programmable independent mode to function as a quad port gigabit copper card
- Integrated PHY for full and half-duplex 10/100/1000 Base-T Support
- TCP/UDP/IP checksum offload and TCP segmentation
- IEEE 802.1q, 802.3ab, 802.3u, 802.3x compliant
- Layer 2, 3 and 4 Advanced packet filtering capabilities (IPv4, IPv6)
- Efficient form factor 6.67 inches in length and 2.51 inches in height

- Low Power Consumption (9W maximum power)
- Full RoHS compliance
- FCC Class A and CE certification

Component Specifications

The Intel 82576 provides support for:

- PCI Express 2.0 (2.5GT/s)
- Low Power 2.4W
- Protocols: TCP, UDP & SCTP
- Queues per port: (16) Tx & (16) Rx Queues
- Enhanced Virtualization Support
 - » VMDq2 & PCI SIG IOV
- Intel® I/OAT Acceleration v3.0
 - » VM Direct Assignment (VT-d)
- Data Center Ethernet
 - » Traffic Classes (802.1q): 2
 - » Flow Interrupt Priority (802.3ar)
 - » Priority Grouping (802.1P)
- End-to-End Congestion Mgmt (802.1 PAR)
- IEEE 1588 Support
 - » Manageability interfaces
 - ⇒ RMII, SMBus, PXE, iSCSI Boot
- Layer 2 & 3 Security: IPSec & LinkSec

Table 1 - Environmental

Operating Humidity	0%–90%, non-condensing
Operating Temperature	0°C – 50°C (32°F - 122°F)
Storage Temperature	-20°C – 65°C (-4°F – 149°F)

Table 2 - Dimensions

	mm	inches
Length	169.30	5.2
Height	63.87	2.64

Table 3 - Ordering Part Number

Part Number	Description
Niagara 32264	Dual Port Copper Gigabit NIC with Bypass

Product Line

- External Bypass Systems/Switches 1Gb and 10Gb
- External 1GE and 10GE Aggregation TAP system
- Special Server Adaptors/NIC cards supporting
 - » Multi Port NIC cards Copper, Fiber MM and Fiber SM
 - » 10/100, Gigabit and 10 Gigabit -Supporting Fiber SX, LX, SR and LR
 - » NIC cards with Bypass and Security
 - » PCI-Express, PCI-X, PMC and PC104 Plus
- Gigabit and 10GE Embedded Switches

About Us

Interface Masters Technologies is a leading vendor in the Bypass and TAP Networking market, based in the heart of the Silicon Valley. Interface Master's expertise lies in Gigabit and 10 Gigabit Ethernet networking solutions that integrate with monitoring, inline networking, IPS, UTM, Load Balancing, WAN acceleration, and other mission-critical IT and security appliances. Flagship product lines include specialized 10GE internal server adapter cards, embedded switch boards, and 10 Gigabit external intelligent Network TAP, Bypass and failover systems that increase network monitoring capabilities, network reliability and inline appliance availability. Company Headquarters are located in San Jose, CA with satellite offices in Hong Kong and Germany.



Contact Interface Masters

227 Devcon Dr., San Jose, CA 95112 Phone: 408-441-9341 x122

Fax: 815-364-0888

Email: sales@interfacemasters.com Web: www.interfacemasters.com

Interface Masters