Interface Masters
T E C H N O L O G I E S
Innovative Network Solutions

Niagara 32714L
Quad Port Fiber 10 Gigabit Ethernet NIC
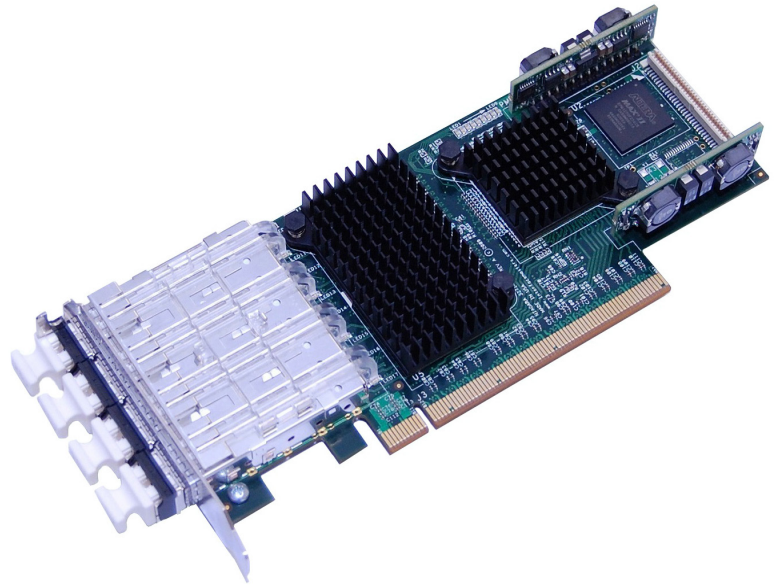*Low Profile PCI-e Server Adapter Card*

Overview

Niagara 32714L Quad Port 10 Gigabit Ethernet Server Adapter is built on Intel's 82599 Ten Gigabit technology & Interface Masters' sterling design and customer service.

Niagara 32714L Quad Port 10 Gigabit Ethernet NIC is designed to integrate with PCI Express compatible servers and high-end appliances providing high speed networking for any mission-critical application.

Features

Niagara 32714L provides features that are essential in today's data centers:

- Intel 82599EB Dual MAC & PHY Ethernet controller
- PCI-e x16 (Gen 2.0) compatible
- Peak bandwidth 40 Gb/s in each direction on PCI Express bus
- Handles 80 Gigabit per second traffic load
- Dual Integrated PHY for full-duplex 10 Gbps Ethernet Support per port
- Four SFP+ Connectors for Multi-Mode or Single-Mode Support
- Option for 10GE/1GE Dual Speed Fiber Support (using special SFP modules)
- TCP/UDP/IP checksum offload and TCP segmentation
- Layer 2, 3 and 4 Advanced packet filtering capabilities (IPv4, IPv6)
- Low-profile form factor
- Low power consumption (21W)
- Full RoHS compliance
- FCC Class A and CE certification
- Digital Optical Monitoring support (DOM) according to the industry-standard SFF-8472. DOM gives the end user the ability to monitor real-time parameters of the SFP+, such as optical output power, optical input power, temperature, laser bias current, and transceiver supply voltage.

Component Specifications

The Intel 82599EB provides support for:

- PCI Express 2.0 (5 GT/s)
- Low Power (6.2W)
- Protocols: TCP, UDP & SCTP
- Support for transmission and reception of packets up to 15.5 KBytes (Jumbo Frames)
- Optimized queues: 128 Transmit (Tx) and Receive (Rx)
- Enhanced Virtualization Support
    » Intel® VT-c, VMDq and VMDc & PCI SIG IOV
- Intel® I/OAT Acceleration v3.0
    » VM Direct Assignment (VT-d)
- Data Center Ethernet
    » VLAN Tagging, Stripping and Packet Filtering (802.1q)
    » Flow Interrupt Priority (802.3ar)
    » Priority Grouping (802.1P)
    » Auto-negotiation support (802.3ap)
    » Integrated LinkSec security engines (802.1ae)
- End-to-End Congestion Mgmt (802.1 PAR)
- IEEE 1588/802.1as Support
    » Time Manageability interfaces
        ⇨ RMII, SMBus, PXE, iSCSI Boot
- Layer 2 & 3 Security: IPSec & LinkSec
- FCoE Transmit Segmentation and offload
- SNMP and RMON statistic counters

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	170.18	6.700
Height	67.26	2.648

Table 3 - Ordering Part Number

Part Number	Description
Niagara 32714L16-SR	Quad Port 10 Gigabit NIC with SFP+ pluggable modules for Multi-Mode Fiber – Low Profile
Niagara 32714L16-LR	Quad Port 10 Gigabit NIC with SFP+ pluggable modules for Single-Mode Fiber – Low Profile

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.

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