## **Interface Masters**

## TECHNOLOGIES

Innovative Network Solutions

# Niagara 4NE-76-4TX

-Quad-Port-Copper Gigabit Ethernet-NIC with Optional Cavium Nitrox

## Overview

Niagara 4NE-76-4TX Quad Port Gigabit Ethernet Server Adapter is built on Intel's Gigabit technology, Cavium's Nitrox IPsec and SSL acceleration technology & Interface Masters' sterling design and customer service. Niagara 4NE-76-4TX supports several members of the Cavium Nitrox family including CN1605, CN1610 & CN1620.

Niagara 4NE-76-4TX Quad Port Copper Gigabit Ethernet NIC is designed to integrate with PCI Express compatible servers and high-end appliances providing high speed networking and Security acceleration for any mission-critical application.

#### Features

- Intel 82576 Dual MAC & PHY controller
- Choice of Cavium CN1605 / CN1610 / CN1620
- PCI-e x4 (Gen. 2)
- Copper 10/100/1000 base T Support
- Four RJ45 Connectors
- 12.3W maximum power (Includes CN1620)
- ROHS Compliant
- EMC, FCC Class A, UL (Safety) Certifications

## **Component Specifications**

The Intel 82576 provides support for:

- PCI Express rev2.0 Gen 1
- Low Power 2.4W
- Protocols: TCP, UDP & SCTP
- Queues per port: (16) Tx & (16) Rx Queues
- Enhanced Virtualization Support
  - » VMDq2 & PCI SIG IOV



- Intel<sup>®</sup> 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

#### The Cavium Nitrox chip family provides support for:

- SSL, IPSec, TCP/UDP/IP checksum offload and TCP segmentation on chip
- up to 2.5Gbps Full SSL Throughput (RC4+MD5)
- up to 2.5Gbps Full IPsec or CCMP wireless Packet Processing (AES/3DES+SHA1)
- up to 17k RSA 1024-bit Exponent with CRT

## Table 1 - Environmental

## Table 2 - Dimensions

Operating Humidity	0%–90%, non-condensing		mm	inches
Operating Temperature	0°C – 50°C (32°F - 122°F)	Length	170.942	6.73
Storage Temperature	-20°C – 65°C (-4°F – 149°F)	Height	106.0958	4.177

## Table 3 - Ordering Part Number with Cavium CN16xx

Part Number	Description
Niagara 4NE-76-4TX-SCN1605	Quad 1G NIC with copper ports & Cavium CN1605
Niagara 4NE-76-4TX-SCN1610	Quad 1G NIC with copper ports & Cavium CN1610
Niagara 4NE-76-4TX-SCN1620	Quad 1G NIC with copper ports & Cavium CN1620

#### Table 4 - Ordering Part Number without Security

Part Number	Description
Niagara 4NE-76-4TX	Quad 1G NIC with copper ports

#### **Product Line**

#### About Us

- Network Interface Cards with Bypass
- Network Interface Cards without Bypass
- External Bypass Products
- SSL/IPSec Cards
- Embedded Switches
- Embedded Platforms
- Development Tools

## About 03

Interface Masters Technologies is a leading vendor in the Bypass Networking market, based in the heart of the Silicon Valley. Interface Master's expertise lies in Gigabit and 10 Gigabit networking solutions that integrate with monitoring, inline networking, security, central office and other mission-critical IT appliances. Flagship product lines include specialized internal server adapter cards, embedded switch cards, and external intelligent Network Bypass and failover systems that increase network reliability and inline appliance availability. Offering over 70 products based on Fast Ethernet, Gigabit Ethernet, and 10 Gigabit Ethernet, Interface Master's adds value to the mission-critical IT sector requiring Security, UTM, Storage Area Networks (SAN), Intrusion Detection & Prevention, QoS, Packet Classification and WAN Acceleration appliances. Company Headquarters are located in San Jose, California with satellite offices in Hong Kong, Germany and the UK.



#### **Contact Interface Masters**

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