# **Interface Masters**

# Niagara 32710-T

◆ TECHNOLOGIES **Innovative Network Solutions** 

Dual Port 10 Gigabit Copper NIC with Bypass Low Profile PCI-e Server Adapter Card

### Overview

Niagara 32710-TX Low Profile Dual Port 10GBASE-T Ethernet Server Adapter is built on Intel's X540 Ten Gigabit technology & Interface Masters' sterling design and customer service.

Niagara 32710-TX is designed with a builtin programmable bypass circuit to provide maximum uptime for the network. The bypass circuit takes the Niagara 32710-TX ports offline in case of either power or software failure. The bypass circuit works in absence of power.

Niagara 32710-TX Low Profile Dual Port 10GBASE-T 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 X540 Dual MAC & PHY Ethernet 10GBASE-T controller
- Peak bandwidth 5 Gb/s in each direction per PCI Express lane
- Handles 40 Gigabit per second traffic load
- Integrated PHY for full and half-duplex 10 Gbps **Ethernet Support**
- Triple Speed Support: 100 Mbps/1 Gbps/10 Gbps speeds Data Center Ethernet:
- PCI-E x8 (Gen 2.0) compatible
- Two 10GBASE-T ports
- 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 dual port gigabit copper card
- TCP/UDP/IP checksum offload and TCP segmentation
- Layer 2, 3 and 4 Advanced packet filtering capabilities (IPv4, IPv6)
- Efficient low profile form factor 6.0 inches in length and 2.47 inches in height
- Low power consumption 12.5W maximum power
- Full RoHS compliance
- FCC Class A and CE certifiable

# **Component Specifications**

The Intel X540 provides support for:

- PCI Express 2.1 (5 GT/s)
- Low Power 12.5W
- Protocols: TCP & UDP
- Support for transmission and reception of packets up to 15.5 KBytes (Jumbo Frames)
- Optimized gueues: 128 Transmit (Tx) and Receive (Rx)
- - » VLAN Tagging, Stripping and Packet Filtering (802.1g)
  - » 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: IPSec & MACsec Security Engines
- Data Center Bridging (DCB) with FCoE stateless ofloads
- SNMP and RMON statistic counters

#### **Environmental**

Operating Temperature	0 to 40 °C (32 to 104 °F)
Storage Temperature	-20°C – 65°C (-4°F – 149°F)
Operating Humidity	5 to 85%
Airflow	200 lf/m

#### **Dimensions**

	mm	inches
Length	152.40	6.00
Height	62.738	2.47

## **Ordering Part Numbers**

Part Number	Description
Niagara 32710-TX	Dual Port 10 Gigabit Copper NIC with bypass

#### **Product Line**

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

## About Interface Masters Technologies, Inc.

<u>Interface Masters Technologies</u> is a leading vendor in the network monitoring and high speed networking markets. Based in the heart of the Silicon Valley, Interface Masters' expertise lies in Gigabit, 10 Gigabit and 40 Gigabit Ethernet network access and network connectivity solutions that integrate with monitoring systems, inline networking appliances, IPS, UTM, Load Balancing, WAN acceleration, and other mission-critical IT and security appliances.

Flagship product lines include <u>hardware load-balancers</u>, <u>specialized 10GE internal server adapter cards</u>, switches, <u>10 Gigabit external intelligent Network TAP</u> and <u>Bypass</u> and <u>failover</u> systems that increase network visibility capabilities, network reliability and inline appliance availability.

Company Headquarters is located in San Jose, CA with satellite offices in Hong Kong and Europe.



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