

## Overview

The Niagara 2948-12XL-OCP is a modular 10GbE / 40GbE switch system based on Broadcom StrataXGS Trident II switch SOC. The system is targeted to be used as a 10GbE Top of Rack (ToR) or Leaf Switch and is compliant with version 1.0 of the Open Compute Project (OCP) Open Network Switch Specification. It is designed to be compatible with 19" Enterprise Rack specification and the 21" OCP Open Rack specification.

The platform is optimized for high capacity switching and enabling cloud, Web 2.0, enterprise and service provider applications. By enabling use of embedded as well as server class standard Linux distributions as the foundation for network operating systems that can run on this platform, a plethora of software defined networking (SDN) applications such as network automation, network monitoring, network instrumentation, network virtualization as well as specialized network functions can be deployed on this platform. Modular pluggable options for various CPU options make this platform highly flexible.

The Open Switch Platform is optimized for cost and power and meets the requirements for Leaf and Spine Switches that can be used by large data center, cloud computing and telecom service providers. It has been designed to meet the small form 1U form factor to maximize the space in the rack for compute and storage. It has also been designed to provide the flexibility necessary to meet the perceived use cases for Leaf and Spine Switches for the foreseeable future.

The switch can be configured with up to 72 ports of 10GbE or 48 ports of 10GbE and 12 ports of 40GbE. The port modularity design allows for flexibility in network requirements addressing different applications and implementations. The Niagara 2948-12XL -OCP is designed to support different software solutions including OpenFlow, L2-L3 switching, and other software defined networking applications. The modular control CPU is capable of supporting different control plane processor architectures including:

- X86
- MIPS
- PPC
- ARM

The system can support an optional data plane offload processor capable of processing up to 40Gbps.



## System Characteristics

- Based on Broadcom Trident II
  - » Modular up to 72 ports of 10GE fiber
  - » Modular up to 12 ports of 40GE fiber
- Serial console and Ethernet management port
- Redundant Power Supplies
- Hot Pluggable fan
- 1U form factor
- Support for SFP+ (SR or LR) and QSFP+ (SR or LR)
- Modular Control processor supporting:
  - » X86
  - » MIPS – Broadcom XLP316
- Optional Data plane processor
  - » MIPS – Broadcom XLP432

## Highly Reliable System

- Niagara 2948-12XL utilizes two redundant hot swappable power supplies for maximum reliability.
- Niagara 2948-12XL utilizes advanced design and power efficiency techniques for optimal operation.

## Environmental

<b>Operating Temperature</b>	0 to 45 °C or 32 to 113 °F
<b>Operating Humidity</b>	5 to 95%
<b>Maximum Power Consumption</b>	500 Watts
<b>Airflow</b>	200 lf/m

## Dimensions

	mm	inches
<b>Length</b>	622.30	24.50
<b>Height</b>	44.45	1.75
<b>Width</b>	438.15	17.25

## Ordering Part Numbers

Part Number	Description
Niagara 2972	72 Ports 10GbE Managed Switch
Niagara 2948-12XL	48 Ports 10GbE & 12 ports 40GbE Managed Switch

## 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.

[Interface Masters Technologies](#) is a leading vendor in the network monitoring and visibility market including Bypass, TAP, switches and smart NICs products, based in the heart of the Silicon Valley.

Interface Masters' expertise lies in Gigabit, 10GbE and 40GbE 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 PacketMaster® Network Packet Broker, specialized 10GE internal server adapter cards, switches, 10Gb and 40Gb external intelligent Network TAP and Bypass and failover systems.

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



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