

Interface Masters



Innovative Network Solutions

OVERVIEW

Interface Masters Technologies presents Tahoe 8828, a highly-flexible 1U networking appliance designed for enterprise installations. The appliance features Marvell's OCTEON TX2 ARM64® multicore processor family and supports a range of high-performance offload processing upgrade options, and a dedicated single-bay I/O module.

The optional high-performance offload processing upgrades include either an Intel® XEON®-D class processing module or just about any PCI x16 lane network card including advanced NVIDIA® GPUs (both options thermally validated using industry-leading Ansys® thermal simulation).

The field replaceable I/O module supports any of the following options: three (3) ports of 40/100G (QSFP28), six (6) ports of 1/10/25G (SFP28) or twelve (12) ports of 1G (SFP).

Interface Masters provides support for the Marvell SDK on multiple Linux distributions. Additional software and firmware enables rapid application development.

Target applications include network security appliance and offloads, edge routing, next-generation firewall (NGFW), Network intrusion detection (IDS) intrusion detection system, SD-WAN, Artificial Intelligence (AI), and Network Function Virtualization (NFV).



Tahoe 8828 (Product in Development)

PRODUCT FEATURES

CPU

- Marvell CN9670 OCTEON TX2 processor (CN9880 2.4GHz standard, 18-24 cores)
- 100 Gbps IPsec with 120-140G IP-FWDing

DRAM

- Three channels (support 48G to 96G DDR4)

Multiple Boot and Storage Options

- SPI Flash, eMMC, SSD and EEPROM
- M.2 SSD (16G to 1Tb storage)

High-Performance Offload Processing Modules

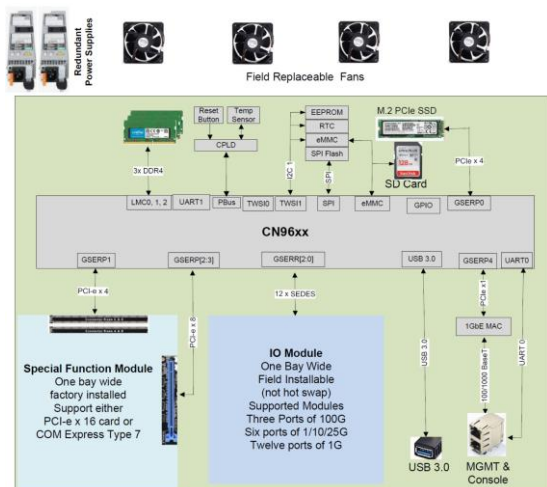
- DataSlammer® Intel XEON-D class CPU module including a range of ports, front facing UART, dedicated MGMT and console port
- NVIDIA GPU offload module

Optional I/O Modules

- Three (3) QSFP28 40/100G ports
- Six (6) SFP28 1/10/25G ports
- Twelve (12) SFP 1G ports

Additional Features

- Dedicated console and management ports
- Redundant hot-swap power supplies (AC or DC)
- Four field replaceable fans
- Stratum 3E Real Time Clock
- Strategically placed temperature sensors (multiple)
- External front facing USB 3.0
- Optional Trusted Platform Module (TPM) and Precision Time Protocol (PTP)



Block Diagram

ENVIRONMENTAL	
Operating Temperature	-5° to + 45°C (23°F to 113°F)
Operating Humidity	5 to 95%, non-condensing

DIMENSIONS		
	Inches	Millimeter
Length	18	457.2
Height	1.75	44.45
Width	16.80	426.72

ACCESSORIES	
TAC104	Standard Rack Mounting Ear
MCC05	Standard Management and console cabling
TAC103	Optional Standard Sliding Rails (24")
TAC110	Optional Long Sliding Rails (27.5"+)

ORDERING INFORMATION	
Part Number	Description
Tahoe8828-CN9670-AC	Tahoe 8828 with Marvell OCTEON TX2 CN9670 (2.4GHz), 48G DDR4 (3200MT/s), 128G SSD storage, redundant 550W AC power supplies and field replaceable fans.
Tahoe8828-CN9670-DC	Tahoe 8828 with Marvell OCTEON TX2 CN9670 (2.4GHz), 48G DDR4 (3200MT/s), 128G SSD storage, redundant 550W DC power supplies and field replaceable fans.
X86S-XD-1500-DataSlammer	DataSlammer® offload processing module Xeon D 1518 (16 cores) Four 10G ports Four 100/1000 copper ports One Console port One 100/1000 MGMT port One USB 3.0 Three SODIMM DDR4 at 2,400 MT/s
IM88281	Field installable single-wide I/O module supporting three (3) QSFP28 40/100G ports
IM88282	Field installable single-wide I/O module supporting six (6) SFP28 1/10/25G ports
IM88283	Field installable single-wide I/O module supporting twelve (12) SFP 1G ports

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Intel® and XEON®-D are registered trademarks of Intel

ARM64® registered trademarks of Arm Limited

NVIDIA® is a registered trademark of NVIDIA Corporation

Ansys® is a registered trademark of ANSYS, Inc

CUSTOMIZATION SERVICES

Hardware, Firmware, Linux O/S and application code development services available.



ABOUT INTERFACE MASTERS TECHNOLOGIES, INC.

Interface Masters Technologies is a leading provider of high-speed networking solutions focused on 1/10/25/40/100/200/400 Gigabit Ethernet networking solutions. For over 25 years, Interface Masters Technologies has been providing innovative networking solutions with customization services to OEMs, large enterprises and sophisticated end users. Interface Masters Technologies provides Ethernet switches, appliances, server adapter cards with high port density, networking offload and bypass functionality. Company headquarters are in San Jose, CA with satellite offices in Hong Kong and Europe.