◆ TECHNOLOGIES

Innovative Network Solutions

SSL/IPSEC Hardware-Accelerator-Board
Security Acceleration

Overview

Niagara 810 security accelerator product is a new addition to the Interface Masters accelerator board product line. Niagara 810 is ideal for accelerating encrypt/decrypt functions and demanding asymmetric protocol operations for a wide variety of networking applications such as secure routers, web-servers, and server load balancers. This card is offered in two flavors supporting PCI-e 2.0 x16 or PCI-e 2.0 x8 and provides market-leading performance for SSL, IPsec, WLAN or combinations of these protocols, freeing up the CPU cycles for other applications.

The solution delivers 8 Cavium CN1620 chips per board for leading-edge encryption and hardware acceleration offload on a single PCI-e card. The The CN1620 delivers performance of 2.5 Gbps for full SSL and IPsec protocol offload and 1024bit exponent RSA at 17K RSA operations per second, ensuring optimization for applications such as integrated firewall/VPN appliances, L4+ switches, wireless WAN switches, 3G infrastructure equipment, and SAN appliances.



Features

- Supports 8 Cavium Nitrox 1620 chips per card
- Full, single-operation protocol offload for IPsec or SSL protocols
- Concurrent multi-protocol operations on a single card
- Support for wide performance range with same API and drivers
- Highest performance single PCI Card SSL Offload processing in the industry
- Hardware Random Number Generator
- Software development kit with low level drivers, diagnostics, APIs, source code and documentation available from Cavium Networks

System

Supports 2 flavors: PCI-e 2.0 x16 and PCI-e 2.0 x8

Benefits

- Highest cryptographic offload performance in the industry to free up CPU for maximum application processing
- Supports very large number of user connections/sec at minimal cost per connection
- Simple, proven system addition for high performance
 IPsec VPN and SSL processing functionality
- Single slot form factor ensures minimum system real estate impact
- Great flexibility for combination of SSL, IPsec and WLAN security protocols on a single card

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)
Max Power	Less than 55W

Dimensions

	mm	inches
Length	195.580	7.700
Height	68.326	2.690

Ordering Part Numbers

Part Number	Description
Niagara 810	PCI-e, SSL/IPSEC Hardware Accelerator Board supporting 8 Cavium Nitrox 1620 chips

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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