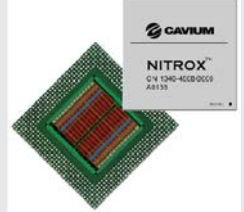


Accelerator Boards

# NITROX™ XL Security Acceleration Board

Mini-PCI Board for IPsec, SSL and Wireless Applications - Product Brief



## OVERVIEW

The NITROX Mini PCI Board enables system designers to quickly integrate high performance IPsec, SSL or Wireless security protocol processing into their systems. The NITROX Mini-PCI Board can be used with a wide variety of networking equipment like home gateways, wireless appliances, SME routers, switches, web-servers, server load balancers, firewalls, storage and VPN gateways.



NITROX Mini-PCI Board

## FEATURES

### System Performance

- 200 Mbps IPsec performance
- 3000 (180-bit exp) Diffie-Hellman Ops
- Support for IPv4 and IPv6
- 200 Mbps of 802.11i (CCMP) packet processing (AES CTR w/CBC MAC)
- 1750 (1024-bit exp) SSL TPS
- 200 Mbps SSL processing (ARC4 + MD5)
- RSA and Diffie-Hellman
- DES, 3DES, AES (256-bit, all modes), ARC4
- MD5, SHA-1, HMAC-MD5, HMAC-SHA-1

## PRODUCT SPECIFICATION

### Industry standard Mini PCI interface

- Standard Mini-PCI Type III (A form factor)
- 32-bit 33 MHz, 3.3V

### Dimensions

- 2.0 x 2.3 inches

### Operating Data

- Operating Temperature: 0° C to 55° C
- Power Consumption: 2W, no heat sink required

FCC Class A certified, CE compatibility

## BENEFITS

IPsec protocol processing

Wireless security protocol processing

SSL protocol processing

Multiple algorithms supported

100 Mbps hardware random number generator

## SOFTWARE

### Operating Systems

- Linux, BSD and Windows
- Software Development Kit with low level drivers, diagnostics, APIs, source code and documentation

### SSL Systems

- Modified OpenSSL using Cavium's TurboSSL modifications

### IPsec Systems

- Modified KAME, Free S/WAN and support for CheckPoint with Cavium's TurboIPsec modifications

## NITROX XL Security Acceleration Boards

Part Number	System Interfaces	Performance				
		RSA 1024b ops/s	DH 180b ops/s	IPsec Mbps (3DES+SHA-1)	SSL Rec Mbps (ARC4+MD5)	COMP Mbps (AES CTR w/CBC MAC)
CN501-183-NMB	Mini-PCI Type III A	900	1,550	100	100	100
CN505-183-NMB	Mini-PCI Type III A	1750	3,000	200	200	200



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