

Sierra 3351

Quad Port 10Gb Ethernet NIC with Encryption Acceleration

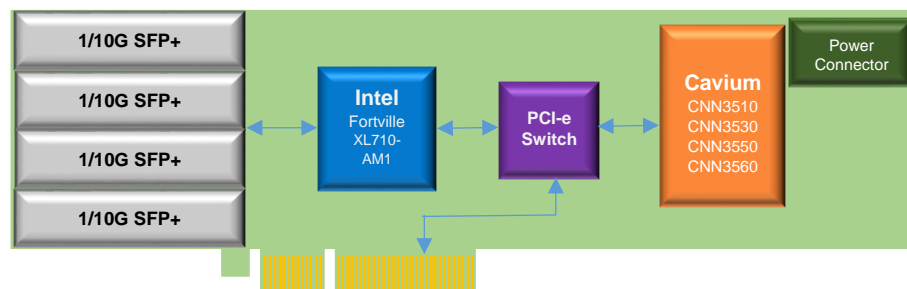
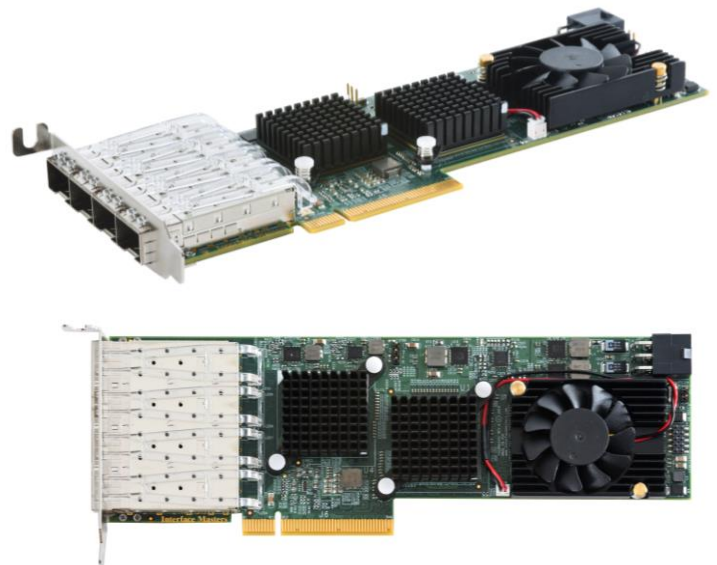
Product Brief

OVERVIEW

Sierra 3351 is a low profile quad-port SFP+ Fiber NIC with encryption offload. This high performance NIC is based on Cavium's Nitrox III series IPsec and SSL acceleration technology and Intel's XL710 10 Gigabit Ethernet controller. Sierra 3351 supports several members of the Cavium Nitrox III family including CNN3510, CNN3530, CNN3550 and CNN3560.

Sierra 3351 is designed to integrate with PCI Express compatible servers and high-end security appliances. Fully compatible with Intel drivers and Software Development Kits and supported by Cavium Nitrox III Software Development Kit, Sierra 3351 supports high speed networking and hardware assisted encryption off-load in mission-critical applications such as network security appliances, data analytics platforms, data center virtualization, secure data center to data center file transmission, Software Defined Networks and Network Function Virtualization services.

In partnership with Cavium, Interface Masters offers this combined Network Interface Card with market leading Nitrox III encryption off-load technology.



Block Diagram of Sierra 3351

PRODUCT FEATURES

- PCI-e x 8 Gen 3.0 compatible server adapter
- Quad-port SFP+ connector for multi-mode or single-mode support
- Peak bandwidth 8 GT/s in each direction per PCI Express lane
- Cavium Nitrox III family series support for SSL/IPSEC hardware acceleration offload
- Intel FTXL710-AM1 quad MAC & PHY Ethernet controller with DPDK support for networking, SDN and NFV application acceleration
- Virtualization support
- Integrated PHY for full and half-duplex 10Gb support
- TCP/UDP/IP checksum offload and TCP/UDP segmentation
- IEEE 802.1q, 802.3ab, 802.3x compliant
- Layer 2, 3 and 4 advanced packet filtering capabilities (IPv4, IPv6)
- Low profile form factor
- Low power consumption
- Full RoHS compliance
- FCC class A and CE certification

ENVIRONMENTAL	
Operating Temperature	0° to 40°C (32°F – 104°F)
Storage Temperature	-20°C – 65°C (-4°F – 149°F)
Operating Humidity	0% to 90%; non-condensing

DIMENSIONS		
	Millimeter	Inches
Length	196.85	7.75
Height	68.91	2.713

POWER CONSUMPTION		
Board with Different Options	Power Consumption (W)	
	Maximum	Typical
Board populated with CNN3510-C5 (500 MHz)	46.08	36.86
Board populated with CNN3530-C10 (500 MHz)	48.33	38.66
Board populated with CNN3550-C20 (500 MHz)	51.70	41.36
Board populated with CNN3550-700-C20 (700 MHz)	60.25	48.20
Board populated with CNN3560-700-C20 (700 MHz)	62.50	50.00

ORDERING INFORMATION	
Part Number	Description
NED3351-E4-NSP0913AS	Quad port 10G Ethernet adapter with Cavium Nitrox encryption / compression, PCI-E Gen 3 x8, Intel XL710 controller, no SFPs installed, Cavium CNN3550-500, half height, full length, short bracket installed
NED3351-E4-NSP0914AS	Quad port 10G Ethernet adapter with Cavium Nitrox encryption / compression, PCI-E Gen 3 x8, Intel XL710 controller, no SFPs installed, Cavium CNN3550-700, half height, full length, short bracket installed
NED3351-E4-NSP0913AL	Quad port 10G Ethernet adapter with Cavium Nitrox encryption / compression, PCI-E Gen 3 x8, Intel XL710 controller, no SFPs installed, Cavium CNN3550-500, half height, full length, long bracket installed
NED3351-E4-NSP0914AL	Quad port 10G Ethernet Adapter with Cavium Nitrox encryption / compression, PCI-E Gen 3 x8, Intel XL710 controller, no SFPs installed, Cavium CNN3550-700, half height, full length, long bracket installed
SFP modules and direct attach cables	Contact Interface Masters for a full selection of SFP and SFP+ optical modules, and Twin-Ax direct attach cables

CUSTOMIZATION SERVICES

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



ABOUT INTERFACE MASTERS TECHNOLOGIES, INC.

Interface Masters Technologies is a leading provider of high speed networking solutions focused on Gigabit, 10 Gigabit, 40 Gigabit and 100 Gigabit Ethernet networking solutions. For over 20 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 located in San Jose, CA.

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 Rev A

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