Quad-Port SFP Gigabit Ethernet Network Adapter

HotLava Systems' quad-port Gigabit Ethernet NIC delivers high port density and low latency network connectivity in a low-profile, space saving design.

Sumatra 8G4S-350

Benefits

- Connect workstations and servers with multiple media choices:
  - » TwinAx Direct Attach cable up 10 meters
  - » CAT5e cable up to 100 meters (with RJ45 copper transceiver)
  - » Fiber optic cable up to 120 kilometers
- Standard Intel drivers for easy installation without disruption of existing applications
- Wire speed bidirectional GbE performance
- Requires only one low-profile, half-length PCIe slot
- Available with full-height and low-profile mounting brackets
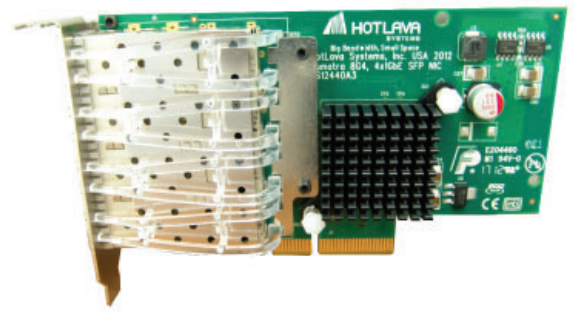
Highlights

- Quad-port SFP GbE port in one low-profile, sub half-length adapter
- 8 Gbps of full-duplex bandwidth
- PCIe Gen 2 (5GT/s), x4
- Interchangeable with standard MSA compliant optical or copper transceivers
- TAA (Trade Agreement Act) Compliant

Features

- Intel I350 Gigabit Ethernet Controller and drivers
- PCI-SIG SR-IOV support (Direct assignment)
  - » Up to 8 Virtual Functions per Port
- Virtual Machine Device queues (VMDq)
  - » 8 VMs per port (one queue per VM)
- 8 Tx and 8 Rx queues per port
- Teaming Support
- IEEE 802.3ad (Link Aggregation Control Protocol)
- Intel I/O Acceleration Technology
  - » Direct Cache Access (DCA)
  - » Low Latency Interrupts
  - » MSI-X support
  - » Receive Side Scaling (for Windows)
- Preboot eXecution Environment (PXE)
- iSCSI remote boot
- VLAN Support with VLAN tag insertion, stripping and packet filtering for up to 4096 VLAN Tags
- Intel PROSet Utility Support
- Advanced Packet Filtering
  - » 24 exact matched packets (unicast or multicast)
  - » 4096 -bit hash filter for unicast and multicast frames
  - » Promiscuous (unicast and multicast) transfer support mode
  - » Optional filtering of invalid frames

Product Specifications

Product Name	**Sumatra 8G4S-350**
Slot Type	PCI Express Gen 2 (5GT/s), x4
Media Connector	(4) SFP ports
Connector Type	LC connector
Network Topology	1000Base-T, 1000Base-SX, LX, EX, ZX, EZX, TwinAx DA
Form Factor	4.58 in x 2.73 in

Operating Systems Support

Windows Server 2003, 2008, 2012
Windows XP, Vista, 7, 8
Linux 2.6x+
FreeBSD 7.2+
OpenBSD
Novel ODI

NetBSD
VMWare ESX 4.x+
XenServer
Microsoft Hyper-V
Vyatta 6.3+
MikroTik RouterOS
Nexenta 3.x+

Features

One Intel I350 Ethernet Controller

Dual On-chip Buffers
 • Default transmit 20KB / port
 • Default receive 36KB / port

IEEE 1588 protocol and 802.1AS implementation
802.3az - Energy Efficient Ethernet (EEE)

Switch Fault Tolerance
Adaptive Load Balancing
Interrupt Moderation
Adapter Fault Tolerance
Receive Side Scaling (for Windows)
IPv6 offloading
Direct Cache Access (DCA)
I/O Acceleration Technology
DMA Coalescing

802.1Q VLAN Tagging
802.3x Flow Control
802.1p Class of Services
802.3ad Link Aggregation
TCP and UDP Checksum Offload
TCP Segmentation Offload
Virtual Machine Device queues (VMDq)
VLAN support with VLAN tag insertion, stripping and packet filtering for up to 4096 VLAN tags
9.5 KByte Jumbo Frames

Environmental

Operating Temp	0 to 55 °C with 50 LFM airflow
Storage Temp	-40 to 70 °C
Operating Humidity	5 to 85% non-condensing
Storage Humidity	90% non-condensing relative humidity at 35 °C
Power Consumption	6.0 Watts Max
RoHS 6 Complaint	Yes

Applications

Network Appliances

Unified Threat Management
SDN Router / Switch
Application Gateway
High Availability / Redundancy
DDOS Protection
Lightning Strike Isolation

Servers

Link Aggregation
High Availability / Redundancy
Backup Networks
Storage / Web / DNS
Switch Bypass

Virtualization

Increased Network Bandwidth
Multiple Dedicated VM Ports
Hypervisor Bypass

Video over IP

Surveillance
IPTV

SAN

iSCSI initiator
Increased Throughput
Switch Bypass

Traffic Generator

Increased Bandwidth
Maximum Connectivity

Ordering Information

Product Name	Part Number
Sumatra 8G4S-350 assembled with low-profile bracket	4S12470A3L
Sumatra 8G4S-350 assembled with full-height bracket	4S12470A3F