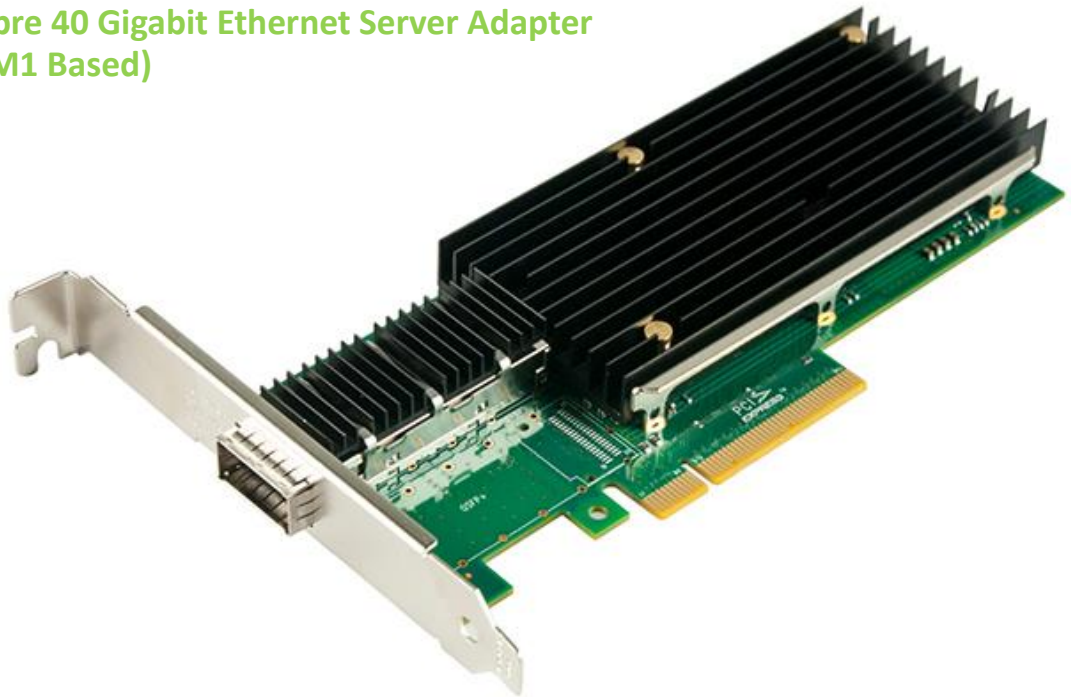


NIC-PCIE-1QSFP+-PLU

PCI Express Fibre 40 Gigabit Ethernet Server Adapter
(Intel XL710AM1 Based)



Description

The PLUSOPTIC NIC-PCIE-1QSFP+-PLU 40 Gigabit Ethernet PCI Express server adapter is designed for Servers and high-end appliances. NIC-PCIE-1QSFP+-PLU offer simple integration into any PCI Express X8 to 40Gigabit Networks. The performance is optimized so that system I/O is not the bottleneck in high-performance networking applications.

The PLUSOPTIC NIC-PCIE-1QSFP+-PLU is based on the Intel XL710AM1 Ethernet controller with two fully integrated Gigabit Ethernet Media Access Control (MAC) and XLPPI Interface. In addition to managing MAC and PHY Ethernet layer functions, the controller manages PCI Express packet traffic across its transaction, link, and physical/logical layers. Using hardware acceleration, the controller offloads tasks from the host, such as TCP/UDP/IP checksum calculations and TCP segmentation.

The PLUSOPTIC NIC-PCIE-1QSFP+-PLU is the ideal solution for implementing multiple network segments, mission-critical high-powered networking applications and environments within high performance servers.

Key Features

Performance Features:

- Support for jumbo frame up to 9.5KB
- Flow control support
- Priority Flow Control (draft IEEE 802.1Qbb)
- Enhanced Transmission Selection (draft IEEE802.1az)
- Statistics management and RMON
- 802.1q VLAN support
- DCB/DCB-X support
- Message Signal interrupts (MSI-X)
- Storage - Enabling competitive performance with native OS intelligent offload solutions, including NAS, iSCSI and FcoE

Host Interface:

- PCI Express X8 lanes
- Support PCI Express Base Specification 3.0 (8GT/sec)

LAN and Virtualization Features:

- Network Virtualization offloads for VXLAN and NVGRE
- Unified Networking Providing a single wire for LAN and storage: NAS (SMB, NFS) and SAN (iSCSI,FCoE)
- Virtual Bridging Support – VEPA/802.1Qbg, BPE/802.1Qbh
- Physical Functions – Up to 8 per port, up to 16 per device
- Support for 128 Virtual Device Queues (VMDq) per port
- Hardware Queue Pairs – Up to 1.5K (non-RDMA); up to 256K (RDMA)
- Virtualization - Alleviating hypervisor I/O bottlenecks by providing flow separation for Virtual Machines (VMs)

TCP/IP/L2 features:

- Receive Side Scaling (RSS)
- Large Send Offload (LSO)
- TCP/UDP/IP/SCTP Checksum Offload
- IPV4, IPV6

Technical Specifications

QSFP+ 40Gigabit Ethernet Technical Specifications Adapter:	
QSFP+ (Quad Small Formfactor Pluggable) supports:	XLPPi interfaces supports 40GBase-R PCS and 40 Gigabit PMA in order to connect with QSFP+ to 40GBase-SR4 / 40GBase-LR4 / 40G Direct Attach Cable
IEEE Standard /Network topology: with 40GBase-SR4 QSFP+	Fibre 40Gigabit Ethernet, 40GBASE-SR4 (850nm LAN PHY).
IEEE Standard /Network topology: with 40GBase-LR4 QSFP+	Fibre 40Gigabit Ethernet, 40GBASE-LR4 (1310nm LAN PHY)
Operating Systems Support	
Operating system support:	Windows Linux
General Technical Specifications	
Interface Standard:	PCI-Express Base Specification Revision 3.0 (8 GT/sec)
Board Size:	165mm X 69mm(6.496" X 2.717") PCB thickness is 0.062 inch
PCI Express Card Type:	X8 Lane
PCI Express Voltage	+12V +- 8%
PCI Connector:	X8 Lane
Controller:	Intel XL710AM1
Holder:	Metal Bracket
Weight:	130gr (4.568 oz)
Power Consumption	3.600W
Operating Humidity:	0%–90%, non-condensing
Operating Temperature:	0°C – 45°C (32°F – 113°F)
Storage:	-40°C–65°C (-40°F–149°F)
EMC Certifications:	FCC PART 15B CE EN 55022: 2010 CE EN 55024: 2010 CE EN 61000-3-2:2014 CE EN 61000-3-3:2013 CE IEC 62321-2:2013

	CE IEC 62321-1:2013 CE IEC 62321-1:2013
LEDs	
LEDs:	Link 10G: Green Link 40G: Yellow Act: Blue; Blink on Activity
Connectors:	(1) QSFP+ cage: MOLEX, P/N 75586-0010, or compatible.

Ordering Information

P/N	Description
NIC-PCIE-1QSFP+-PLU	Fibre 40 Gigabit Ethernet PCI Express x8 Server Adapter (Intel XL710AM1 Based)