

LREC9901BF-QSFP+

PCI Express Fiber 40 Gigabit Ethernet Server Adapter (Intel XL710BM1 Based)

DESCRIPTION

LR-LINK LREC9901BF-QSFP+ 40 Gigabit Ethernet PCI Express server adapter is designed for Servers and high-end appliances. LREC9901BF-QSFP+ 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.

LR-LINK LREC9901BF-QSFP+ is based on Intel XL710BM1 Ethernet controller with two fully integrated Gigabit Ethernet Media Access Control (MAC) and XLPP1 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.

LR-LINK LREC9901BF-QSFP+ 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 802.1 Qbb)
- Enhanced Transmission Selection (draft IEEE802.1 az)
- 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/802.1 Qbg, BPE/802.1 Qbh
- 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+	Fiber 40Gigabit Ethernet, 40GBASE-SR4 (850nm LAN PHY).
IEEE Standard /Network topology: with 40GBase-LR4 QSFP+	Fiber 40Gigabit Ethernet, 40GBASE-LR4 (1310nm LAN PHY)

Operating Systems Support

Operating system support	Windows Linux
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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 Connecto	X8 Lane
Controller	Intel XL710BM1
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.

Order Information

P/N	Description
LREC9901BF-QSFP+	Fiber 40 Gigabit Ethernet PCI Express x8 Server Adapter (Intel XL710BM1 Based)

PS: Above details are only for reference, if there are any changes, no inform will have.

COMPANION PRODUCTS

Fiber NIC

- LR-LINK PCI 100FX Desktop Adapter
- LR-LINK PCIe 100FX Desktop Adapter
- LR-LINK PCI 1000BASE-SX/LX Desktop Adapter
- LR-LINK PCIe 1000BASE-SX/LX Desktop Adapter
- LR-LINK PCIe 1000BASE-SX/LX Server Adapter
- LR-LINK PCIe 10GBASE-SR/LR Server Adapter
- LR-LINK PCIe 40GBASE-SR/LR Server Adapter

Copper NIC

- LR-LINK PCI 10/100Mbps Desktop Adapter
- LR-LINK PCIe 10/100Mbps Desktop Adapter
- LR-LINK PCI 10/100/1000Mbps Desktop Adapter
- LR-LINK PCIe 10/100/1000Mbps Desktop Adapter
- LR-LINK PCIe 10/100/1000Mbps Server Adapter
- LR-LINK PCIe 100/1Gbps/10Gbps Server Adapter

DOWNLOAD DRIVERS

To get the drivers, please visit us at <http://www.lr-link.com/ProductDriver/index1.shtml>

PRODUCT QUICK GUIDE

To know the network card basic knowledge to choose the suitable NIC you need, please visit us at: <http://www.lr-link.com/product.html>

CUSTOMER SUPPORT

LR-LINK customer Support Services offers a broad selection of programs including phone support and warranty service. For more information, contact us at Service and availability. <http://www.lr-link.com/service.shtml>

LianRui Electronic Co.LTD

A professional supplier of high-quality NIC:PCI,PCI-X,PCI-Express;SC,ST,LC,SFP,SFP+;100M,1G,10G,40G;single,dual,quad ports. all series fiber and copper NIC with nearly 150 specifications which can meet demands of various applications, continuously creates value for customers and partners as well as OEM/ODM services provided.

DECLARATION

Shenzhen Lianrui Electronics Co., Ltd is an efficient Ethernet adapter design company with independent research and development, using Intel,Broadcom, Mellanox, Marvell, VIA, Realtek and other manufacturers Ethernet controller, developed by our company's independent R & D design team,manufacturedby our company workshop, and then sell.

Our products specifications come from modifying the chip manufacturer's specifications released. Product features, technical parameters, technology right, intellectualproperty rights and brand names etc.mentioned in specifications are just referenced only. There is no infringement meaning.If there is any important andsensitive content related, please contact our Lianrui company, we'll delete them, thank you.

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