

LREC9812AF-2SFP+

Dual SFP+ Port Fiber 10 Gigabit PCI Express Server Adapter (BCM 57810S Based)

OVERVIEW

LREC9812AF-2SFP+ leverages Broadcom's long-standing industry leadership in Ethernet, providing the highest level of performance, efficiency, and scalability for the enterprise data center.

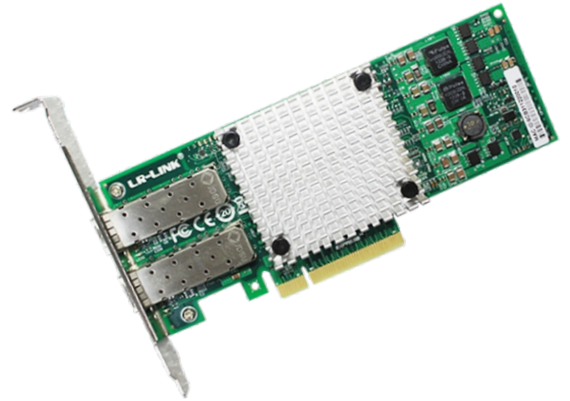
IT initiatives such as virtualization, cloud computing, High-Performance Computing (HPC), convergence, and clustering are increasing data center workload demands. The LREC9812AF-2SFP+, based on Broadcom BCM57810S, is the solution of choice for workload intensive computing environments, providing a reliable, high-performance 10GbE connectivity solution.

FEATURES

Dual-port 10GbE connectivity for rack and tower servers
 x8 PCI Express® (PCIe™) V2.0 (5 GT/s) support
 Full line-rate performance across all ports
 Broad OS and hypervisor support
 Full iSCSI and FCoE hardware offload
 Full TCP/IP hardware offload
 – Microsoft® Chimney-compliant
 Network boot support:
 – iSCSI remote boot
 – FCoE boot from SAN
 – Preboot eXecution Environment (PXE) 2.0
 Broadcom Advanced Control Suite (BACS) management application
 Integration into HP's Virtual Connect™ and HP ProActive Insight architecture.
 MSI and MSI-X support
 Ipv4 and IPv6 offloads
 PCI-SIG SR-IOV support
 Comprehensive stateless offloads
 RX/TX multiqueue
 Transmit Side Scaling (TSS)
 Support for VMware® NetQueue™ and Microsoft VMQ
 VLAN tagging support
 Jumbo Frame support for frames larger than 1500 bytes
 Network Teaming, Failover and Load Balancing:
 – Smart Load Balancing (SLB)
 – Link Aggregation Control Protocol (LACP) and Generic Trunking
 Data Center Bridging (DCB)

HIGHLIGHTS

Delivers full line-rate 10GbE performance across all ports.
 Consolidates network traffic and storage traffic over converged 10GbE connections.
 Boosts host CPU efficiency with hardware offload for network (TCP/IP) and storage (FCoE/iSCSI) data traffic.
 Streamlines administrative tasks: Broadcom Advanced Control Suite (BACS) management application and integration into HP's Virtual Connect and HP ProActive Insight architecture.
 Improves reliability and interoperability—leverages Broadcom's market-proven Ethernet architecture and software.



BENEFITS

Accelerates Server Performance:
 – Boosts network performance with full line-rate 10GbE throughput across all ports.
 – Increases server performance with full hardware offload for storage traffic.
 – Delivers highest networking performance and lowest CPU utilization with TCP/IP offload (TOE).
 – Maximizes server processing performance by reducing CPU overhead and lowering interrupt latency through the use of the MSI-X standard.
 – Boosts performance in Windows® and Linux® environments by directing interrupts to the server's CPU cores, leveraging Transmit/Receive Side Scaling (TSS/RSS).
 Robust Virtualization Capabilities:
 – Superior network performance with support for VMware NetQueue and Microsoft VMQ technologies.
 – Enhances network management and efficiency with support for VLAN/VLAN tagging.
 Streamlines Deployment and Management:
 – Simplifies deployment and management complexity—Broadcom Ethernet solutions available across a wide range of HP server platforms.
 – Unifies the NIC and storage management using HP's Virtual Connect and HP ProActive Insight architecture.

SPECIFICATIONS

Form factor	PCI Express short, low-profile card—167.64 mm x 68.91 mm (6.60" x 2.71")
Data rate	10 Gbps per port, per direction
Bus type	x8 PCI Express 2.0 (5.0GT/s)
MAC controller	MAC controllerBroadcom BCM57810S
Connector	SFP+

OS Support—Networking and iSCSI

Microsoft	Windows Server® 2008, 2008 R2 and 2012, all editions
Linux	Red Hat® Enterprise Linux (RHEL) 5.9/5.8, 6.4/6.3 Novell® SUSE® Linux Enterprise Server (SLES) 10 SP4/SP3, 11 U3/U2
VMware	vSphere™ 5.x
Citrix	XenServer 6.1

MANAGEMENT

Broadcom	BACS management application, WMI, and Broadcom Management API (BMAPI)
Hewlett Packard	Virtual Connect and HP ProActive Insight architecture

ENVIRONMENTAL REQUIREMENTS

Operating temperature	32°F to 131°F (0°C to 55°C)
Storage temperature	- 40°F to 149°F (-40°C to 65°C)
Relative humidity	5% to 95% noncondensing
MAC controller	MAC controllerBroadcom BCM57810S

MANAGEMENT

Certifications	RoHS,FCC,CE
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MANAGEMENT

PCI Express base specification 2.0	IEEE 802.3ae 10GbE Ethernet over optical fiber
PCI bus power management interface (rev 1.2)	IEEE 1588—Precision Time Protocol (PTP)-Ready
Advanced Error Reporting (AER)	IEEE 802.1q—VLAN tagging support
TCP segmentation/large send offload	IEEE 802.3x—Flow control
ACPI v2.0	Teaming support
SMBus 2.0	MSI-X supports independent queues

Operating system support

M/N	Description
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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 25GBASE-SR/LR Server Adapter
- LR-LINK PCIe 40GBASE-SR/LR Server Adapter
- LR-LINK PCIe 100GBASE-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+,QSFP+;100M,1G,10G,25G,40G,100G;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,manufactured by 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 and sensitive content related, please contact our Lianrui company, we'll delete them, thank you.

SHENZHEN LIANRUI ELECTRONICS CO.,LTD

ADD:C4 Bldg., Xintang Industry Zone, Baishixia Fuyong Town, Bao'an District Shenzhen China 518103
Tel:86-755-33671531 Fax: 86-755-29082065
Product sales: lrlink@lr-link.com
Technical Support: support@lr-link.com
OEM & ODM service: info@lr-link.com
WEB: www.lr-link.com

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