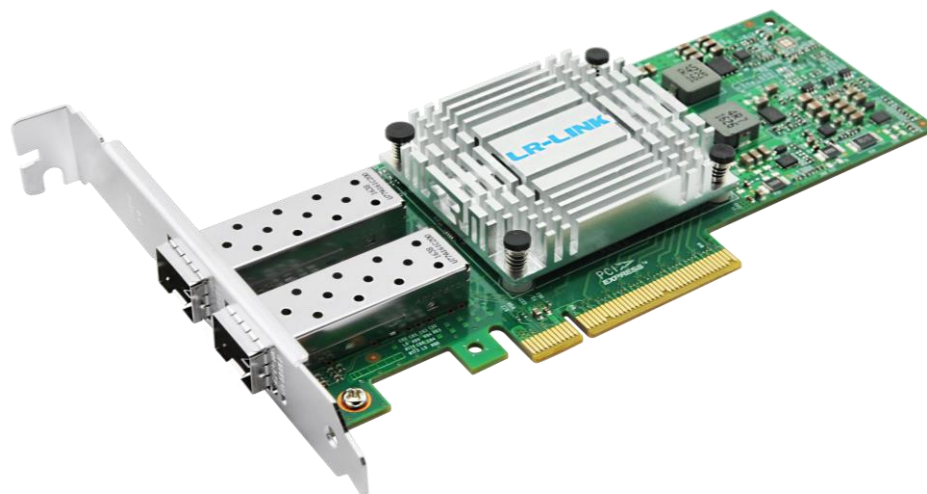


## LREC9812BF-2SFP+

— PCIe x8 Dual-port 10G SFP+ Ethernet Network Adapter (Intel X710 Based)

### Overview



LREC9812BF-2SFP+ is a Dual port 10G SFP+ Ethernet PCI Express x8 server adapter independently developed by Shenzhen Lianrui Electronics Co., Ltd. based on the Intel X710 chip solution. It is also compatible with x16 channels. The server adapter card meets the needs of next-generation data centers by providing unparalleled features for server and network virtualization. Provides reliable performance in flexible LAN and SAN networks. The adapter has a flexible dual-port 10GbE link rate on a PCI Express v3.0 x8 slot for use in environments where multiple network needs are deployed. The adapter is primarily designed for servers and high-end devices.

The adapter can bundle and aggregate multiple ports simultaneously to achieve fault tolerance and redundancy to ensure network performance and expand network bandwidth. It can perform real-time self-detection and route communication from the failed port to other members in the same group. Run to achieve uninterrupted, high-performance communication. In addition to stateless offloading, the adapter card can also be distributed to the CPU core on network traffic, improving network throughput. At the same time, the LSO and GSO are offloaded from the host software, thereby reducing the CPU overhead check. Free up CPU resources to handle other applications. The adapter is the ideal solution for deploying multiple networks and deploying critical network applications and environments on high-performance servers. The adapter is based on the Intel Intel X710 Ethernet MAC+PHY (Media Access Controller and Physical Interface Transceiver) dual port controller.

The LREC9812BF-2SFP+ server adapter is designed for superior performance in multiprocessor systems. It is applied to meet the needs of network traffic and data offloading, processing and virtualization and big data computing in the new and old server markets in the current and future. When used with Microsoft's Receive Side Extension or Extensible I/O in Linux, the card effectively balances the network load between multiple central processing units (CPUs).

The LREC9812BF-2SFP+ supports Intel® PRO Smart Install and the new Intel® PROSet designed for Microsoft Device Manager to simplify installation and management.

## Key Features

- Dual SFP+ Connectivity
- PCI Express (PCIe) v3.0 (8.0GT/s) x8 lanes
- Network Virtualization
- PXE boot
- IEEE 802.1q VLAN support with VLAN tag insertion
- Low profile & full-height bracket

## Specifications

Controller	Intel X710
Baffle Height	Full height & half height
Fiber Type	10000Base-SR, 10000Base-LR, 10000Base-Cu
Power Consumption	7.4W
System Support	Windows 7/8/8.1/10
	Windows Server 2008 R2/2012 R2/2016 R2/2019 /2019 R2
	Linux Stable Kernel version 3.x/4.x or later;
	Linux CentOS/RHEL 6.5 / 7.x or later
	Ubuntu 14.x/15.x/16.x or later
VMware ESX/ESXi 4.x/5.x/6.x or later	
Bus Type	PCI Express v3.0 (8.0GT/s) x8 , compatible with x16
Data Rate Supported per port	10000MbE
Connector	2*SFP+

## Technical Features

Standards Compliant	IEEE802.3ae 10 Gigabit Ethernet over fiber IEEE 802.3x Full Duplex and flow control IEEE 802.1AS IEEE 802.1Q VLAN IEEE 802.3AD IEEE 1588 IEEE 802.3az - Energy Efficient Ethernet
PXE	Yes
iSCSI	Yes
FCoE	No
DPDK	Yes
WoL	No
VMDq	Yes
Jumbo Frames	Yes
RSS	Yes
PCI-SIG*SR-IOV	Yes

## Environment Features

Operating Temperature	0 °C to 55 °C (-13 °F to 158 °F)
Storage Temperature	-40 °C to 70 °C (-40 °F to 158 °F)
Storage Humidity	Maximum: 90% non-condensing relative humidity at 35 °C

## Physical Features

Size(mm)	116*120*21
Weight(g)	119

## LED Indicators

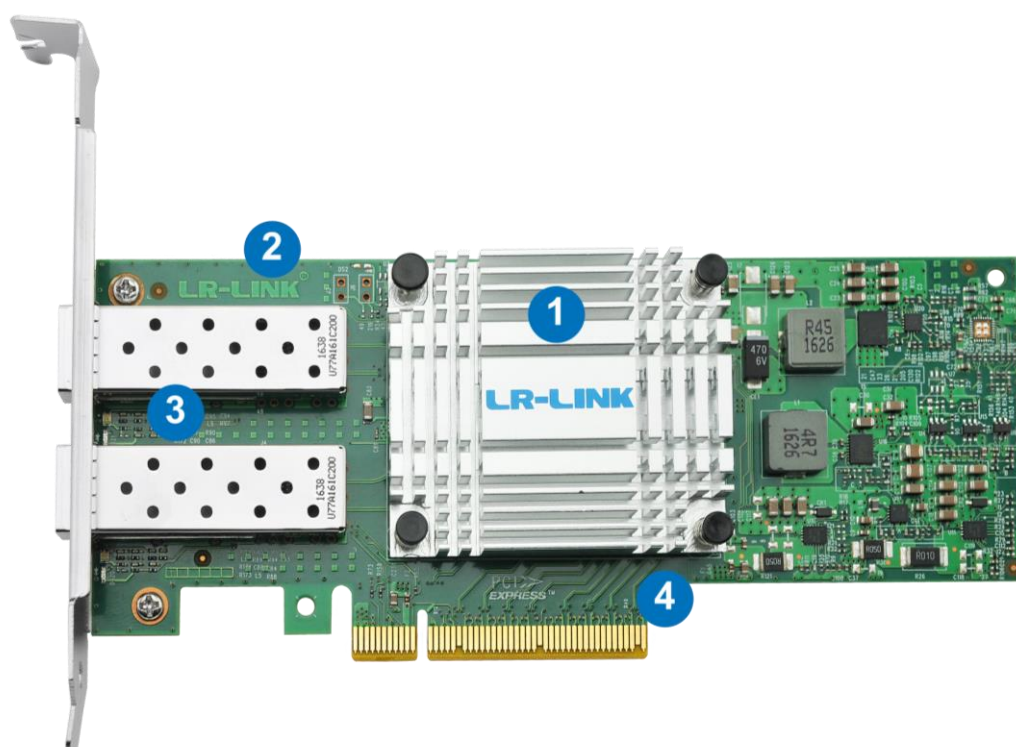
LED Indicators	Yellow Link + Green Blink
----------------	---------------------------

## Order Information

P/N	Description
LREC9812BF-2SFP+	PCIe x8 Dual-port 10G SFP+ Ethernet Network Adapter 2*SFP+ (Intel X710 Based)

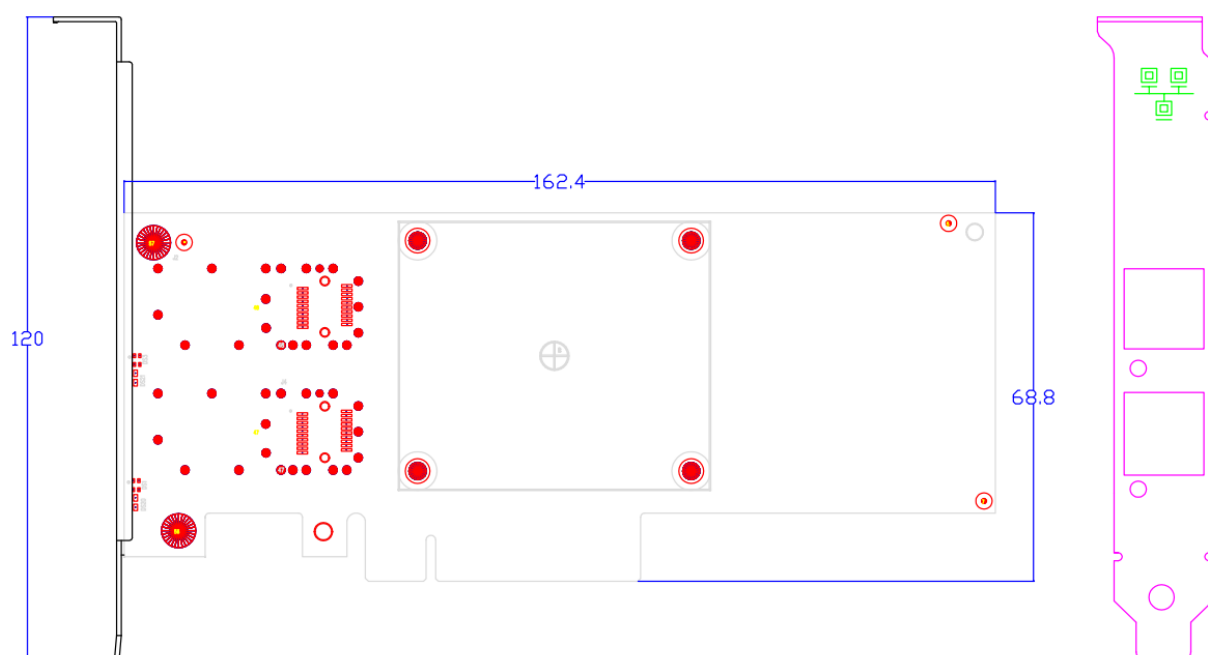
PS: Above details are only for reference, if there is any change, no prior notice.

## Product Structure



1. Heat Sink
2. LR-LINK LOGO
2. 2\*10G SFP+ Connector
- 3 . PCIe x8 Bus

PS: Above details are only for reference, if there is any change, no prior notice.



PS: Above details are only for reference, if there is any change, no prior notice.

## 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-SX/LX Server Adapter
- § LR-LINK PCIe 25GBASE-SX/LX Server Adapter
- § LR-LINK PCIe 40GBASE-SX/LX Server Adapter
- § LR-LINK PCIe 100GBASE-SX/LX 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 100/1G/10Gbps Server Adapter
- § LR-LINK PCIe 1G/2.5G/5G/10Gbps Server Adapter

## Download Drivers

To get the drivers, please visit us at <http://www.lr-link.com/support/driver.html>.

## 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/productchoose.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/contactus.html>

## Shenzhen Lianrui Electronic Co.,LTD.

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

## Declaration

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.

---

SHENZHEN LIANRUI ELECTRONICS CON.,LTD.

ADD:C4 Bldg.,Xintang Industry Zone,Baishixia FuyongTown,Baoan District Shenzhen China

Tel:+86(0)755-33671531 33671533 Fax:+86(0)755-29082065

Product Sales [lrlink@lr-link.com](mailto:lrlink@lr-link.com)

Technical Support [support@lr-link.com](mailto:support@lr-link.com)

WEB [www.lr-link.com](http://www.lr-link.com)



Copyright © Shenzhen Lianrui Electronics CO.,LTD,2006-2020. All rights reserved