

LREC9802BF-2SFP+

— PCIe x8 Dual-port 10G SFP+ Internet Network Adapter V2 (Intel 82599 Based)

Overview



LREC9802BF-SFP+ is a PCIe x8 dual-port fiber optic 10G Ethernet network adapter developed by Linkreal CO.,LTD. based on the Intel 82599 host solution. The adapter has two fully integrated 10Gb Ethernet Media Access Controller (MAC) and SFP+ ports. In addition to the product's ability to manage the Ethernet MAC and PHY layers, it can also manage the flow of packets passing through. The LREC9802BF-SFP+ can share tasks for server hosts such as TCP/UDP/IP checksums, offloads, compute tasks, and TCP segmentation through hardware acceleration.

The LREC9802BF-2SFP+ provides hardware enhancements such as smart queuing technology optimized for multi-core processors, and implements on-chip support for load balancing, enabling higher levels of 10 Gigabit Ethernet scalability. Intel Virtualization Technology (VT-c), which includes network-level features, significantly improves overall system performance in virtual server environments. Intel VT-c technology includes hardware optimization features that significantly reduce I/O bottlenecks, improve throughput and reduce latency. Intel VT-c's component, Virtual Machine Device Queuing (VMDq), significantly improves performance and reduces CPU utilization by offloading data-sorting loads from the virtual machine monitor (VMM) to the network controller. Enhanced features include offloading inter-VM switching within the server, virtual machine direct connectivity (VMDc) to VMs.

The LREC9802BF-2SFP+ offers several hardware-optimized features including for I/O virtualization and supports unified networking to transform the data center with outstanding reliability, scalability and mobility. Allowing local area network (LAN), storage area network (SAN), and IPC traffic to share the same Ethernet network provides higher performance levels for high-bandwidth applications in the evolving virtualized data center.

Key Features

1. based on Intel 82599 main control chip development;
2. Supporting 1Gbps and 10Gbps;
3. PCIe 2.0 x8 bus interface, compatible with x16.

Specifications

Controller	Intel 82599
Cable medium	Fiber Optics
Cable Type	1000BASE-SX、1000BASE-LX 10GBASE-SR、10GBASE-LR、10GBASE-ER
Bracket Height	Low Profile & Full Height
Power (max)	8.9W
System Support	Windows 7, 8/8.1, 10, 11
	Windows Server 2003 / R2
	Windows Server 2008 / R2
	Windows Server 2012 / R2
	Windows Server 2016 / R2
	Windows Server 2019 / R2
	Windows Server 2022 / R2
	Linux Stable Kernel version 2.6.x / 3.x / 4.x or later
	CentOS / RHEL 6.x / 7.x or later
	Ubuntu 14.x / 16.x or later
	FreeBSD 9 / 10 / 11 or later
	UOS V20 or later
	Vmware ESX/ESXi 5.x / 6.x or later
Bus Interface	PCIe v2.0 (5.0GT/s) x8 , compatible with x16
Data rate per port	1 / 10Gbps
Connector	2*10G SFP+
Power Supply	PCIe

Technical Features

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

Environment Features

Operating Temperature	0℃ to 55℃ (32°F to 131°F)
Storage Temperature	-40℃ to 70℃ (-40°F to 158°F)
Storage Humidity	Maximum: 90% non-condensing relative humidity at 35 ℃
Certification	FCC, CE, RoHS

Physical Features

PCB Size(L x W x H)	138.7 x 68.9 x 1.6mm
Package Size(L x W x H)	222 x 147 x 28mm
Weight(g)	*

LED Indicators

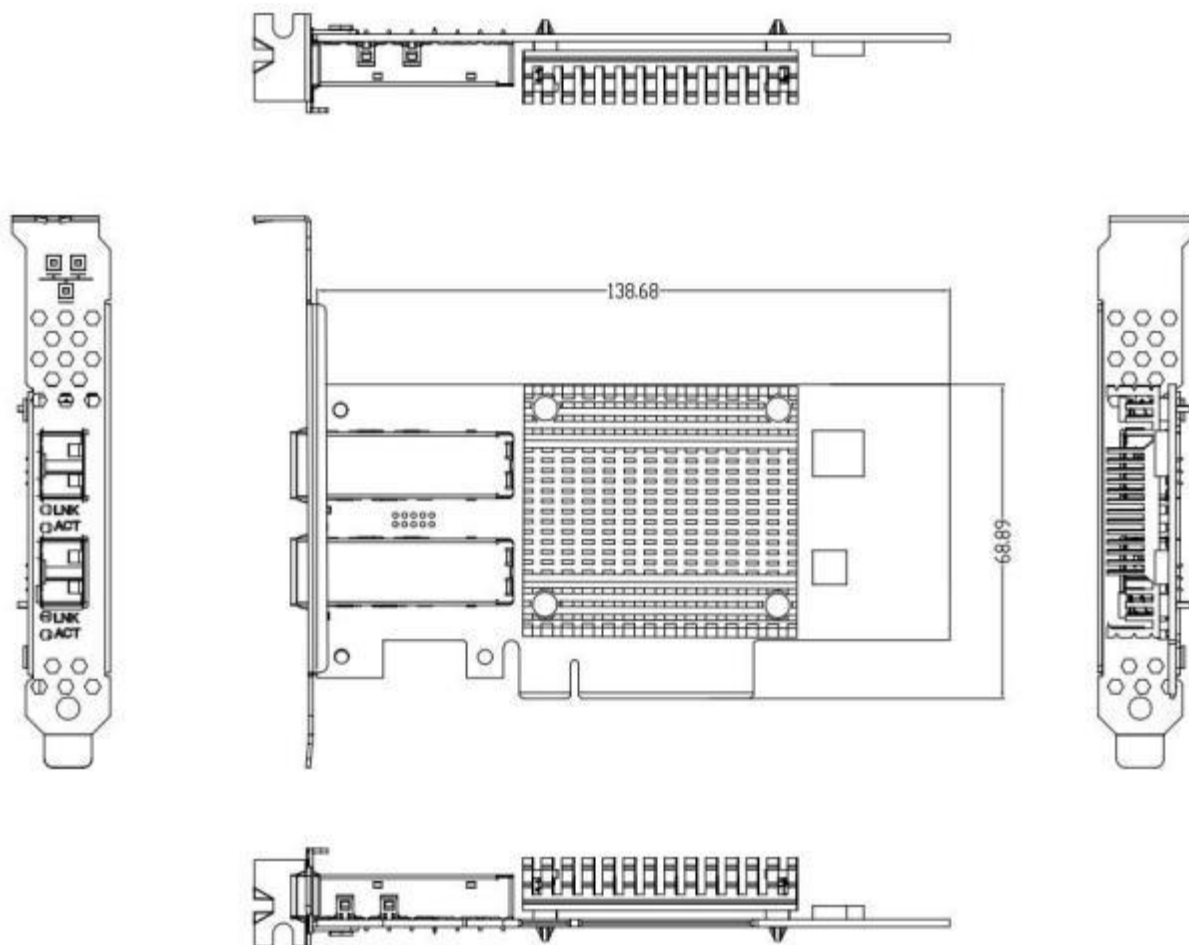
1G	LINK	Orange Link + Green Link
	ACT	Orange Link + Green Blink
10G	LINK	Green Link + Green Link
	ACT	Green Link + Green Blink

Order Information

P/N	Description
LREC9802BF-2SFP+	PCIe x8 Dual-port 10G SFP+ Internet Network Adapter V2 (Intel 82599 Based)

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

Product Structure



PS: The depictions provided of our products are not to scale and are intended for illustrative purposes only.

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: <https://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:

<https://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.

<https://www.lr-link.com/contactus.html>

Linkreal Co.,LTD.

Linkreal 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, manufactured by 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, intellectual property rights and brand names etc.mentioned in specifications are only referenced. There is no infringement meaning. If there is any important and sensitive content related, please contact our company, we'll delete them, Thank you.

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The logo for LR-LINK, featuring the letters "LR-LINK" in a bold, blue, sans-serif font.

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