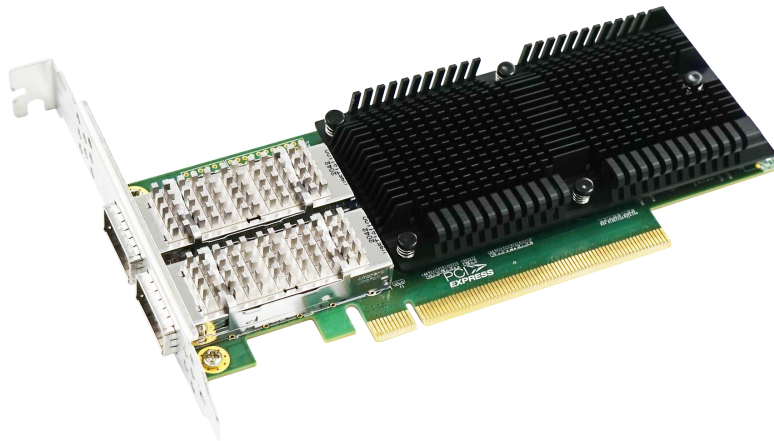


LRES1014PF-2QSFP28

— PCIe x16 Dual-port 100G QSFP28 Internet Network Adapter(Intel E810)

Overview



LRES1014PF-2QSFP28 is a PCIe4.0 x16 dual-optical port 100G Ethernet network adapter developed by Linkreal CO.,LTD. on the basis of Intel E810 master program. The product is complemented by hardware accelerated packet processing expansion features, while the introduction of application queuing technology, through which Fabric TCP can be realized through the NVMe support, but also on the RDMA iWARP and RoCEv2 functions with optional support, the adapter can be simultaneously backward compatible with PCIe3.0 and PCIe2.0.

LRES1014PF-2QSFP28 adopts the application queue technology to ensure that each application can request its own queue, i.e., the data between each other is no longer confused, with an interface speed of up to 100Gbps, which can be widely used in high throughput can handle a variety of workloads, data center services, cloud computing, storage, and other network equipment, in the actual operation of the use of program queues can reduce the number of applications. In practice, it can be used in combination with program queues to reduce application latency and increase throughput.

The LRES1014PF-2QSFP28 provides scalable ADQ technology to improve performance scalability and predictability for critical workloads by dedicating specific resources to critical workloads. ADQ uses optimized application thread-to-device data paths to enable application-specific data control, messaging, and rate-limiting features.

Key Features

1. Developed on the basis of Intel chip E810;
2. It supports 10G/25G/50G/100G multiple rates;
3. It can enhance DPDK to be more efficient and flexible in packet forwarding and packet processing.

Specifications

Controller	Intel E810
Cable medium	Fiber Optics
Cable Type	10GBASE-SR, 10GBASE-LR, 10GBASE-ER, 25GBASE-SR, 25GBASE-LR, 50GBASE-SR, 50GBASE-LR, 100GBASE-SR4, 100GBASE-LR4, 100GBASE-ER4
Bracket Height	Low Profile & Full Height
Power (min)	11.592 W
Power (max)	39.372W
System Support	Windows 10 /11
	Windows Server 2016 /2019 /2022
	Deepin 20 /20.6 /20.9
	VMware ESXi 6.7 /7.0
	Galaxy Unicorn v10
	RHEL/Centos 7.6 /7.9 /8.2 /8.3
	Ubuntu 16.04.3 /18.04.5
	Ubuntu 20.04.1 /22.04.2
	SUSE 12.5 /15.4
	FreeBSD 12.2 /13.2
	ZTE New Fulcrum 3.2.2
	ZTE New Fulcrum 5.0.5
	Asianux Server v7.0
	Zhongke Fangde server operating system
iKuai router	
Bus Interface	PCIe4.0 x16, compatible with PCIe3.0
Data rate per port	10/25/50/100Gbps
Connector	2*100G QSFP28
Power Supply	PCIe

Technical Features

Protocol Support	IEEE 802.3ae 10GBase-X IEEE 802.3z 1000BASE-X Gbit/s Ethernet IEEE 802.3x Full Duplex and flow control IEEE 802.3az Energy Efficient Ethernet (EEE) IEEE 802.3ap IEEE 802.3as IEEE 802.3bc IEEE 802.3bd IEEE 802.1p IEEE 802.1Q VLAN IEEE 802.1Qau IEEE 802.1Qaz IEEE 802.1Qbb IEEE 802.1Qbg IEEE 802.1Qbh IEEE 802.1X IEEE 802.1AE IEEE 802.1AEbn IEEE 802.1AS IEEE 802.1AX IEEE 802.3aq IEEE 802.3an
PXE\UEFI	Yes
DPDK	Yes
WoL	No
Jumbo Frames	Yes
VMDq、SR-IOV	Yes
Jumbo Frame(max)	9.5KB
RDMA	Yes
1588 PTP	Yes

Environment Features

Operating Temperature	0℃ to 105℃ (-32 ℉ to 221 ℉)
Storage Temperature	-40 ℃ to 115 ℃ (-40 ℉ to 239 ℉)
Storage Humidity	Maximum: 90% non-condensing relative humidity at 35 ℃
Certification	FCC, CE, RoHS

Physical Features

PCB Size(L x W x H)	68.76 x 170 x 1.6 mm
Package Size(L x W x H)	250 x 170 x 32 mm

LED Indicators

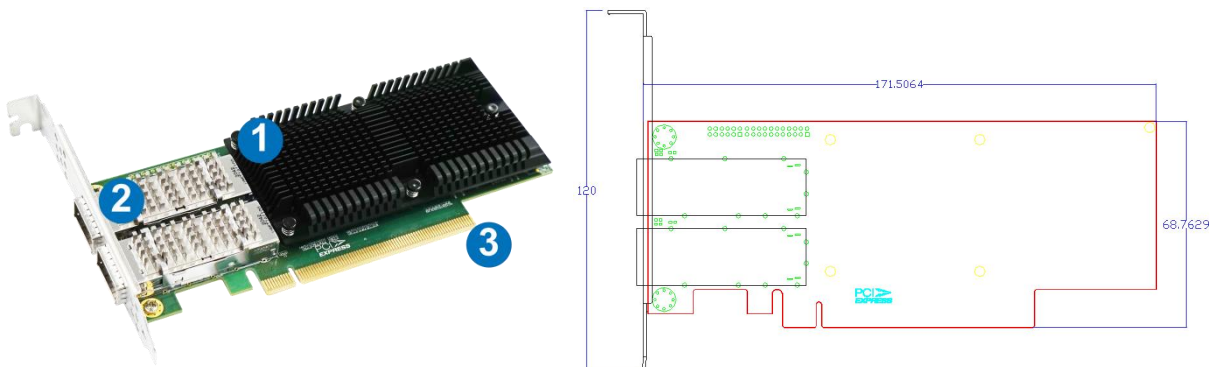
10G /25G /50G	Connection Status	Orange Link
	Transfer status	Orange Link + Green Blink
100G	Connection Status	Green Link
	Transfer status	Green Link + Green Blink

Order Information

P/N	Description
LRES1014PF-2QSFP28	PCIe x16 Dual-port 100G QSFP28 Internet Network Adapter (Intel E810)

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

Product Structure



1. Heat sink
2. 2*100G QSFP28
3. Golden fingers

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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