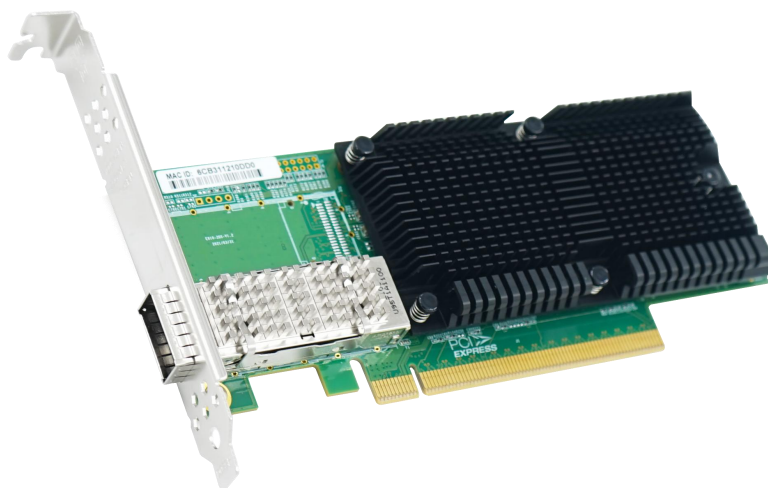


LRES1019PF-QSFP28

— PCIe x16 Single-port 100G QSFP+ Ethernet Network Adapter (Intel Chip Based)

Overview



LRES1019PF-QSFP28 is a PCI express v4.0 x16 single-port 100G ethernet network adapter developed by Shenzhen Lianrui Electronics Co., Ltd. on the basis of the Intel chip. It is supplemented by the expansion function of hardware acceleration data packet processing, and the application queue technology is introduced. This technology can realize the NVMe support of Fabric TCP. It also has selective support for the iWARP and RoCEv2 functions of RDMA. This adapter can at the same time, it is backward compatible with PCIe v3.0 & v2.0. The adapter card achieves a dual-port bidirectional communication transmission rate with a theoretical throughput of 400GB on a PCI express v4.0 x16 bus.

The ethernet optical fiber network card with independent intellectual property rights (LRES1019PF-QSFP28) launched by Shenzhen Lianrui Electronics Co., Ltd., the network card adopts the application queue technology function to ensure that each application can request its own queue. That is to say, the data between each other is no longer confused, with an interface speed of up to 100Gbps, which can be widely used in data center services, cloud computing, storage and other network equipment that can handle various workloads with high throughput, and combined in actual operation The use of program queues can reduce application latency and increase throughput.

The fiber optic network card provides scalable ADQ technology to improve the performance scalability and predictability of critical workloads by dedicating specific resources to critical workloads. ADQ uses an optimized application thread to device data path to implement application-specific data control, information and rate limiting functions.

LRES1019PF-QSFP28 adopts Intel's main control with extensive compatibility and performance guarantee, supports PCIe v4.0 and is backward compatible with PCIe v3.0. The multi-function port configuration technology of the EPCT enables the adapter to be configured at a variety of rates, such as: 1*100G, 2*50G, 2*25G, 4*10G, to meet the requirements of a variety of occasions.

Key Features

- PCI Express v4.0 x16 single-port 100G fiber Ethernet network adapter card.
- iWARP and RoCEv2 Remote Direct Memory Access (RDMA)
- Intel® Ethernet Adaptive Virtual Function (Intel® Ethernet AVF)
- Enhanced server virtualizations: 256 VFs, 768 VSIs
- IEEE 1588 Precision Time Protocol (v1 and v2) with per-packet time stamping.

Specifications

Controller	Intel Chip
Baffle Height	Half height & full height baffle
Power Consumption	Cu cable, 19.2W; Fiber model, 27.1W
System Support	Windows Server 2016 R2/2019 R2
	CentOS/RHEL 7.x or later
	Ubuntu 16.x or later
	FreeBSD 11.x/12.x or later
Bus Type	PCI Express v4.0 x16, Compatible with PCI Express v3.0
Data rate	10/25/50/100GbE
Connector	1*QSFP28

Technical Features

Protocol Support	IEEE 802.3bj 100GBASE Ethernet IEEE 802.3cd 50Gb/s IEEE 802.3ae 10GBase-X IEEE 802.3x Full Duplex and flow control IEEE 802.3az IEEE 802.1Q VLAN IEEE 802.1Qaz IEEE 802.1Qbb IEEE 802.1bd IEEE 1588 v1&v2
iSCSI	Yes
WoL	No
Jumbo Frames	Yes
DPDK	Yes
PXE	Yes
FCoE	No
RDMA (iWARP, RoCEv2)	Yes
Network virtualization	SR-IOV、VxLAN、GENEVE、GRE

Technical Features

Protocol Support	IEEE 802.3bj 10GBASE Ethernet IEEE 802.3cd 50Gb/s IEEE 802.3ae 10GBase-X IEEE 802.3x Full Duplex and flow control IEEE 802.3az IEEE 802.1Qaz IEEE 802.1bd	IEEE P802.3by 25Gb/s IEEE 802.3AS IEEE 802.1Q VLAN IEEE 802.1Qbb IEEE 802.1x IEEE1588 v1&v2
iSCSI	Yes	
WoL	No	
Jumbo Frames	Yes	
DPDK	Yes	
PXE	Yes	
FCoE	No	
RDMA (iWARP,RoCEv2)	Yes	
Network virtualization	SR-IOV、VxLAN、GENEVE、GRE	

Environment Features

Operating Temperature	0 °C to +55 °C (-40 °F to +131 °F)
Storage Temperature	-55 °C to +105 °C (-67 °F to +221 °F)
Storage Humidity	Maximum: 90% non-condensing relative humidity at 35 °C

Physical Features

Size (mm)	171.5*120*21
Weight (g)	*

LED Indicators

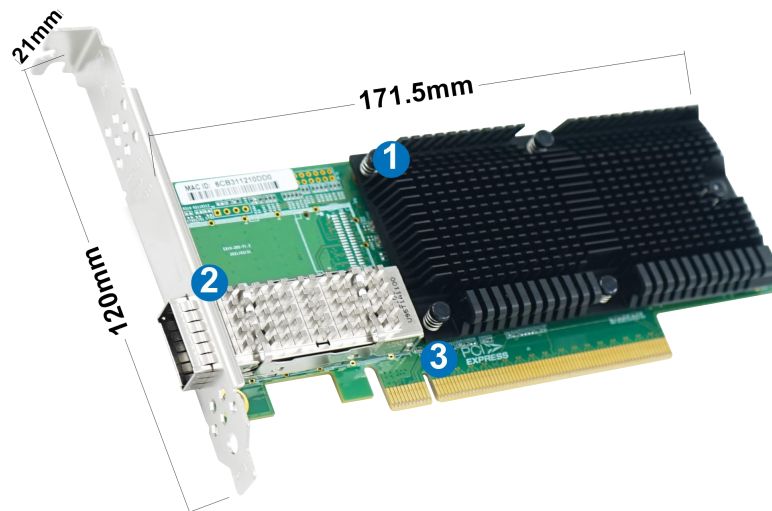
LED Indicators	100Gbps, Yellow Link + Green Blink
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Order Information

P/N	Description
LRES1019PF-QSFP28	PCIe x16 Single-port 100G QSFP28 Ethernet Network Adapter (Intel Chip Based)

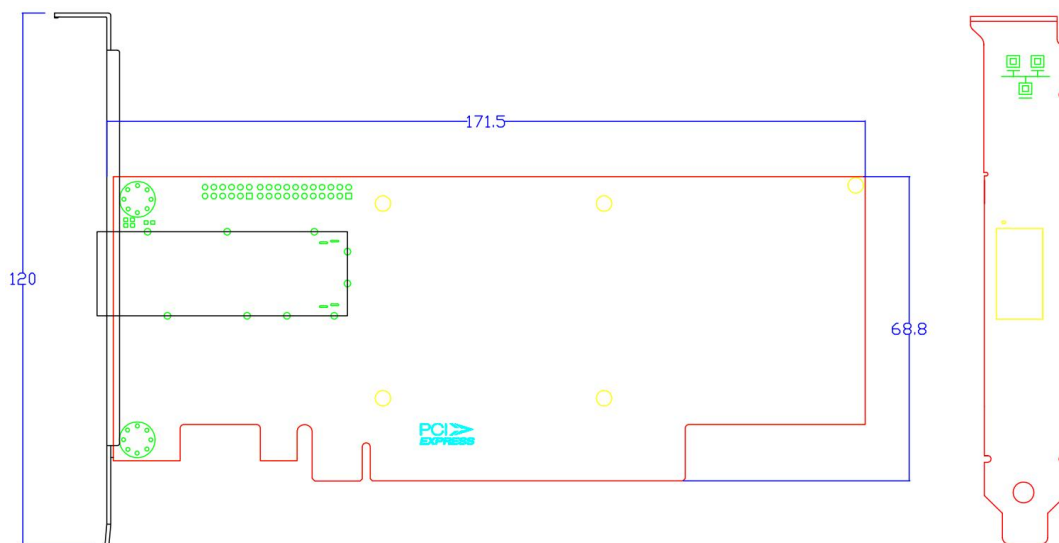
PS: Above details are only for reference, if there is any change, no prior notice.

Product Structure



1. Heat Sink
2. 1*100G QSFP28 Connector
3. PCIe x16 Connector

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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 M.2 10/100/1000Mbps Desktop Adapter
- § LR-LINK Mini 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 Electronics 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.

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