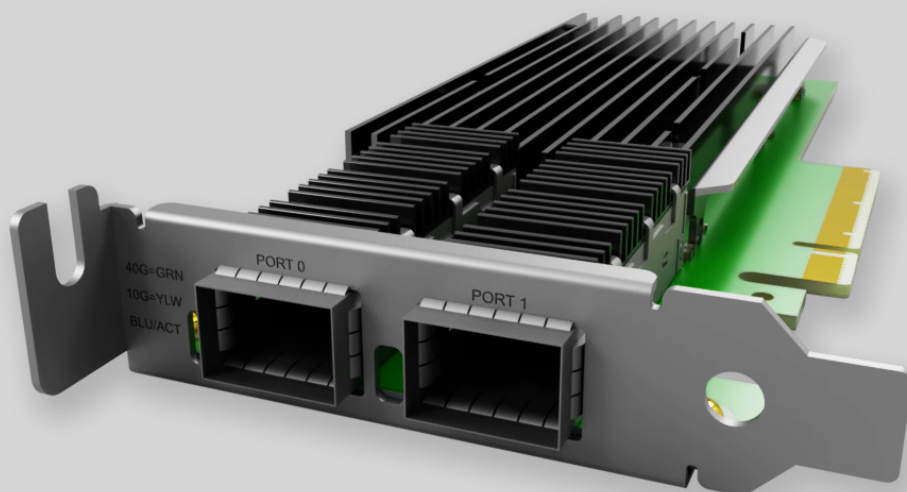


## Key Highlights:

- **NIC Category:** Dual Port 40G QSFP+ PCIe
- **Controller:** Intel® XL710
- **System Interface Type:** PCIe v3.0 x8 (8GT/s)
- **Ports:** 2x40G QSFP+
- **Data rate per port:** 40/10GbE
- **Network Operating Systems (NOS):** Windows 64-bit, Linux, FreeBSD
- **Performance:** Load balancing on multiple CPUs
- **Unified Networking:** iSCSI, NFS
- **Clock:** Time Sync (IEEE 1588\*, 802.1as)
- **Bracket Height:** Low Profile & Full Height



## Network Interface Card: 40G-NIC-XL710-20

### Product Description:

EDGE Optic 40G-NIC-XL710-20 is Dual Port 40G Gigabit Ethernet QSFP+ PCI-Express Network Interface Card which is based on Intel® XL710 Chipset.

40G-NIC-XL710-20 card with use of it's load balancing functions provides superior performance on multi-core processor servers, can offer leading network virtualization features, several remote boot options and wide manageability features. 40G-NIC-XL710-20 backwards compatibility with 10GbE speeds gives users great flexibility in network design, additionally card support synchronization of internal clocks according to a network master clock.

40G-NIC-XL710-20 can run on most network operating systems and can be used as a compatible alternative for Intel, HPE, Dell, Lenovo, IBM, Cisco, Broadcom, Marvel, Qlogic, Emulex, Mellanox, Supermicro and many other brand Network Interface Cards.

When combined with a wide selection of EDGE Optic - Optical Transceiver Modules and Direct-Attach Cables (DAC) can provide superior flexibility in connectivity and network design.

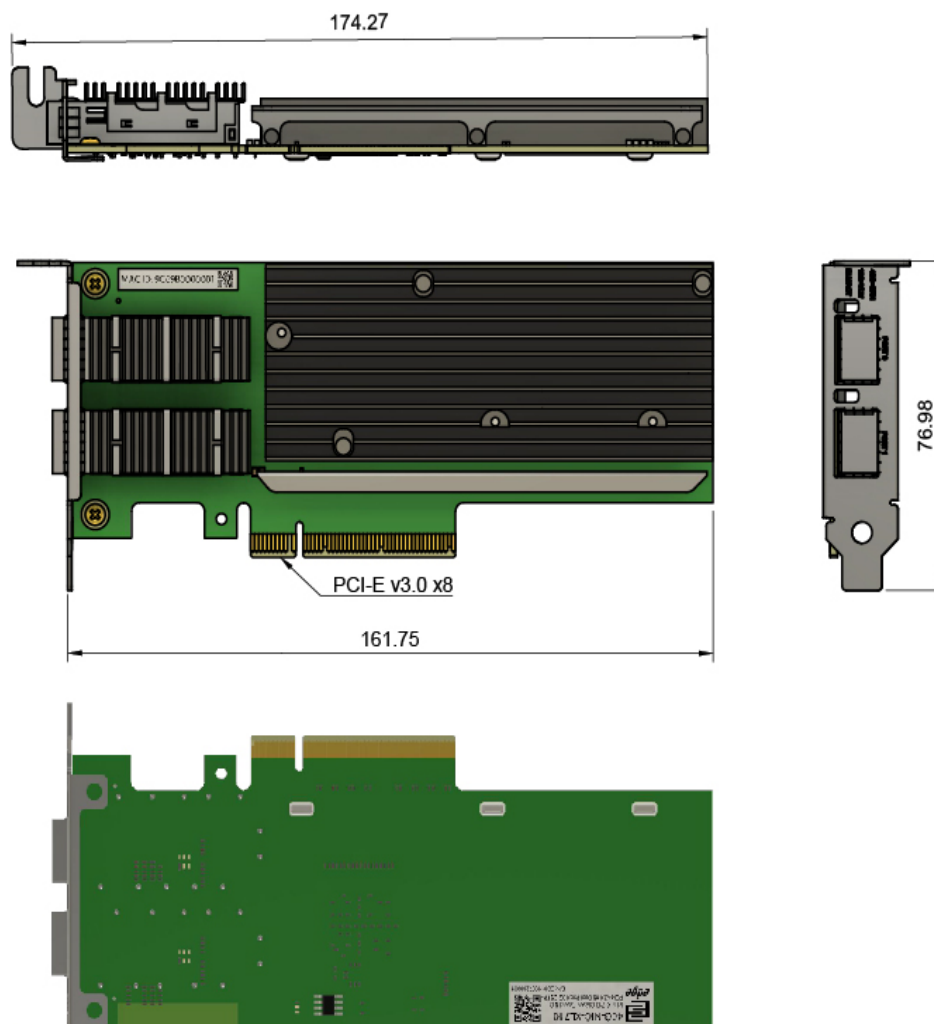


## Product Specification:

Parameter	Value
Product type:	Network Interface Cards
NIC Category:	Dual Port 40G QSFP+ PCIe
Controller Silicon:	Intel® XL710
Controller type:	Ethernet
Connector type:	QSFP+
Number of ports:	2
Data rate per port:	40/10GbE
Interconnection Distance:	Per QSFP+ used
Bus interface:	PCIe v3.0 x8
Bus transfer rate:	8GT/s
Storage Over Ethernet:	iSCSI, NFS
Clock:	Time Sync (IEEE 1588*, 802.1as)
Network Operating Systems (NOS):	<ul style="list-style-type: none"> <li>Windows 64-bit: 2008 R2, 2012, 2012 R2, 2016, 2019</li> <li>Linux: RHEL 6.x/7.x, SUSE 11.x/12.x, Ubuntu 14.x/16.x</li> <li>FreeBSD: 10.x/11.x</li> </ul>
LED Status Indicators:	<ul style="list-style-type: none"> <li>LINK (solid) and ACTIVITY (blinking)</li> <li>LINK SPEED (green= 40 Gbps; yellow=10 Gbps)</li> </ul>
Power:	<ul style="list-style-type: none"> <li>Power consumption (max): 9.5W</li> <li>Operating voltage: 3.3V and 12V</li> </ul>
Environmental Specifications:	<ul style="list-style-type: none"> <li>Operating temperature: 0 °C to 55 °C</li> <li>Air Flow Minimum of 150 LFM and 400 LFM (LR4)</li> <li>Storage temperature: -40 °C to 70 °C</li> <li>Relative Humidity: 5% to 90% (non-condensing)</li> </ul>
Physical Characteristics:	<ul style="list-style-type: none"> <li>Dimensions (W x H): 146mm x 69mm</li> <li>Ships with low-profile bracket attached to interface card. Standard bracket included in packaging.</li> </ul>
I/O, Virtualization, Manageability and Advanced Software Features:	As per NIC controller
Compliance:	CE, FCC, ROHS



## Mechanical Dimensions:



## Supported Optical Modules And Cables:

40G-NIC-XL710-20 network interface card supports wide variety of 40G/10G optical modules and cables. Below are listed some of the most popular ones:

Part Number	Description
40G-QSFP-150	40G QSFP+ Module (Tx/Rx 850/850nm, up to 44.8 Gbps, Max. 150m over MMF (OM4), 1.9 dB, Temp. 0-70C, MTP/MPO Connector)
40G-QSFP-300	40G QSFP+ Module (Tx/Rx 850/850nm, up to 44.8 Gbps, Max. 300m over MMF (OM4), 2.5 dB, Temp. 0-70C, MTP/MPO Connector)



Part Number	Description
40G-QSFP-10	40G QSFP+ Module (Tx/Rx 4 CWDM lines:1271,1291,1311,1331, up to 44.8 Gbps, Max. 10km over SMF, 9.7 dB, Temp. 0-70C, LC Connector)
40G-QSFP-40	Double Fiber 40G QSFP+ Module (Tx/Rx 4 CWDM lines:1271,1291,1311,1331, up to 44.8 Gbps, Max. 40km over SMF, 16.3 dB, Temp. 0-70C, LC Connector)
40G-PDAC-QSFP-0.5	40G QSFP to QSFP Twinax Passive Copper Cable (2.125-41.2 Gbps, Max. 1m, AWG 30, Temp. 0-70C)
40G-PDAC-QSFP-1	40G QSFP to QSFP Twinax Passive Copper Cable (2.125-41.2 Gbps, Max. 1m, AWG 30, Temp. 0-70C)
40G-PDAC-QSFP-3	40G SFP+ to SFP+ Twinax Passive Copper Cable (1.0625-10.52 Gbps, Max. 5m, AWG 30, Temp. 0-70C)
40G-PDAC-QSFP-5	40G QSFP to QSFP Twinax Passive Copper Cable (2.125-41.2 Gbps, Max. 5m, AWG 26, Temp. 0-70C)
40G-AOC-QSFP-10	40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 10m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)
40G-AOC-QSFP-15	40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 15m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)
40G-PDAC-QSFP-SFP-0.5	40G QSFP to 4xSFP+ Twinax Passive Copper Breakout Cable (2.125-41.2 Gbps, Max. 0.5m, AWG 30, Temp. 0-70C)
40G-PDAC-QSFP-SFP-1	40G QSFP to 4xSFP+ Twinax Passive Copper Breakout Cable (2.125-41.2 Gbps, Max. 1m, AWG 30, Temp. 0-70C)
40G-AOC-QSFP-SFP-10	40G QSFP to 4xSFP+ Active Optical Breakout Cable (2.125-41.2 Gbps, Max. 10m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)
40G-AOC-QSFP-SFP-15	40G QSFP to 4xSFP+ Active Optical Breakout Cable (2.125-41.2 Gbps, Max. 15m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)

For any assistance in selecting optical modules, DAC/AOC cables for your network interface card or if you didn't find an exact match for your project in above table please contact: [sales@edgeoptic.com](mailto:sales@edgeoptic.com)

## Compatibility:

EDGE Optic 40G-NIC-XL710-20 can be used as a compatible alternative for many Network Interface Cards which are manufactured by Intel, HPE, Dell, Lenovo, IBM, Cisco, Broadcom, Marvel, Qlogic, Emulex, Mellanox, Supermicro, Allied Telesis, Chelsio, Dlink, Silicom, Solarflare, Startech and others brands. If Network Interface Card from these brands use same Intel® XL710 Controller, EDGE Optic 40G-NIC-XL710-20 Card is 100% compatible alternative. Additionally if other manufacturer Network Interface Card has similar main technical characteristics, 40G-NIC-XL710-20 can be used as a compatible alternative.

For any questions will 40G-NIC-XL710-20 be compatible with your server or will it work as 100% alternative for your current Network Interface Card please write us to: [sales@edgeoptic.com](mailto:sales@edgeoptic.com)



## Drivers:

40G-NIC-XL710-20 card use Intel® XL710 Controller. Before using please acquire latest Intel® Ethernet Adapter Complete Driver Pack. Please follow this link to do so: <https://downloadcenter.intel.com/download/22283/-?product=83967>

## Warranty:

EDGE Optic's provides a limited warranty for **sixty (60)** months from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship.

