

# PCIe x8 to 10GbE LAN Card 2SFP (Intel Chipset) (ER3018)



## **Introduction:**

This EiRA PCI Express 8X Network Card adopts Intel third-generation WMB network controller 82599ES. By providing unparalleled features of virtualization, flexible features of LAN and SAN network, and proven reliable performance, it solves the high requirements of the generation data center, it has dual 10Gps SFP+ port which can setup a long-distance link with a file server or a remote workstation.

## **Features:**

- PCI-Express host interface specification v2.0 with 5GT/s BUS width
- PCI-Express lanes: x8
- Complies with dual port 10GbE SFP port
- Complies with the IEEE802.3ae specification
- Layer 2 functions: IEEE 802.3x Flow Control - IEEE 802.1q VLAN
- Supports Receive-side scaling (RSS)
- Supports IPv 4, IPv 6 protocols
- Supports Jumbo Frames up to 15.5K
- Supports Checksum offloading
- Statistics for management and RMON
- Support for virtual machines device queues
- Interrupt throttling control to limit maximum interrupt rate and improve CPU usage

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## Technical Specifications:

<b>Brand</b>	EiRA
<b>SKU Code</b>	ER3018
<b>Product model</b>	PCIe x8 to 10GbE LAN Card 2SFP (Intel Chipset)
<b>Chipset</b>	Intel 82599 ES
<b>PCIe Specification Revision</b>	PCIe v2.0
<b>Transfer Rate</b>	5GT/s BUS width
<b>Bracket Height</b>	Full Height bracket (low profile bracket included)
<b>Input Bus Interface</b>	PCIe x8/x16 Male
<b>Output Interface</b>	2 x 10GbE SFP port
<b>Cable Medium</b>	Fiber/ Copper
<b>Power Consumption</b>	5.1W max.
<b>Dimensions</b>	115 x 70 mm
<b>Weight</b>	107.4 gm
<b>System supported</b>	FreeBSD, Linux, VMWare ESXi, Win7/ Win-server2012/ Win-server2008/Win8/Win8.1/Win-server2016/win10/win11
<b>Warranty*</b>	1 year

## Package contents:

- 1 x Dual SFP+ PCIe Network card
- 1 x User's Manual
- 1 x CD Driver
- 1 x Low profile bracket

## System Requirements:

- FreeBSD, Linux , VMWare ESXi, Win7/ Win-server2012/ Win-server2008/ Win8/Win8.1/Win-server2016/win10
- Available PCI Express x8/x16 slot

## Cabling Requirements:

### Intel 10Gigabit adapters

- SFP+ Module Laser wavelength:850 nanometer (not visible)
- **LC Cable type:**
  - Multi-mode fiber with 50 micron core diameter, maximum length is 550 meters
  - Multi-mode fiber with 62.5 micron core diameter, maximum length is 275 meters

# PCIe x8 to 10GbE LAN Card 2SFP (Intel Chipset) (ER3018)

- Connector type: LC
- SFP+ Module laser wavelength:1310 nanometer(not visible)
- **LC Cable type:**
  - Multi-mode fiber with 9 micron core diameter, maximum length is 3K meters
- **10 Gigabit Ethernet over SFP+ Direct Attached cable(Twinaxial)**
  - Length 10 meters max.

## Hardware installation

1. Turn off the computer and unplug the power cord
2. Remove the computer cover and the adapter slot cover from the slot that matches your adapter
3. Insert the adapter edge connector into the slot and secure the bracket to the chassis
4. Replace the computer cover ,then plug in the power cord
5. Power on the computer

**Note:** select the correct slot, some systems have physical X8 PCI Express slots that actually only support lower speeds. Please check your system manual to identify the slot

## Install Drivers and software

### Windows Operating Systems

You must have administrative rights to the operating system to install the drivers.

1. insert the CD driver bound with Intel network driver into your CD-ROM drive
2. if the Found New Hardware Wizard screen is displayed, click **Cancel**
3. start the autorun located in the software package, the autorun may automatically start after you have extracted files.
4. Click **install Drivers and Software**
5. Follow the instructions in the install wizard to finish it

### Installing Linux Drivers from Source Code

1. Download and expand the base driver tar file.
2. Compile the driver module
3. Install the module using the modprobe command
4. Assign an IP address using the ifconfig command