# 4-Port 10G SFP+ Network Adapter for OCP 3.0

**User Manual** 

Ver. 1.00

All brand names and trademarks are properties of their respective owners.

## **Contents:**

Chapter 1: Introduction	
1.1 Product Introduction	
1.2 Features	3
1.3 Requirements	4
1.4 Package Contents	4
Chapter 2: Getting Started	5
2.1 Hardware Layout	
2.2 Hardware Installation	7
2.3 Driver Installation	7
2.3.1 Installation for Windows	7
2.3.2 Installation for Linux	9
2.4 Verifying the installation	10
2.4.1 Verifying for Windows	10
2.4.2 Verifying for Linux	

## Chapter 1: Introduction

#### 1.1 Product Introduction

This 4-Port 10G SFP+ OCP 3.0 Network Adapter is a flexible and scalable 10GbE solution providing 4 SFP+ ports. Based on Intel XL710-BM1 network controller with performance-enhancing features and power management technologies, this adapter provides a quality networking choice for data centers while reducing CPU utilization and power consumption. With the added NC-SI feature, this adapter can also function as a secure networking port for server remote management.

#### 1.2 Features

- OCP 3.0 Form Factor
- Four 10GbE with SFP
- Intel XL710-BM1 Controller
- Supports SR-IOV Based Virtualization
- Data Plane Developer Kit for efficient packet processing (DPDK)
- PCIe Gen3 x8 host interface
- Compliant with OCP NIC 3.0 specification
- Supports 4C+ connector
- Supports OCP 3.0 scan chain, FRU NVM and NC-SI

- OCP 3.0 SFF form factor with Pull Tab (Internal Lock option by demand)
- Supports 10GBASE-SR/LR and DAC modules
- Supports PXE and UEFI preboot

#### 1.3 Requirements

Windows Server 2019/Windows Server 2022

## 1.4 Product Diagram



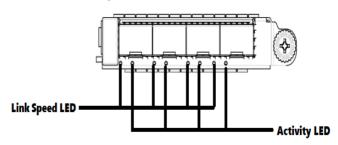
## 1.5 Package Contents

• 1 x 4-Port 10G SFP+ Network Adapter for OCP 3.0

• 1 x User Manual

# Chapter 2: Getting Started

### 2.1 Hardware Layout



Link/Activity Indicator:

LED	Description
Link Speed LED	Indicates Link Speed:
	• Green = 10Gbps • Amber = 1Gbps
	• Off = No Link
Activity LED	Indicates Network Card Activity:
	• Solid Green = Network port is connected
	• Flashing Green = Network port is active

#### 2.2 Hardware Installation

- 1. Turn off the power to your computer.
- 2. Unplug the power cord.
- 3. Remove the slot bracket from the available OCP slot.
- To install the OCP, carefully align the card's bus connector with the selected OCP slot on the motherboard. Push the OCP firmly into the motherboard.
- 5. Reconnect the set screws of the OCP card bracket to secure the card.
- 6. Reconnect the power cord.

#### 2.3 Driver Installation

The following section shows you how to install 4-Port 10G SFP+ Ethernet Adapter for OCP 3.0 driver on different operating systems.

#### 2.3.1 Installation for Windows

- 1. Go to URL http://www.sunrichtech.com.hk/
- 2. Search N-840, download the driver.
- 3. Follow the on-screen instructions to finish installing the driver.

#### 2.3.2 Installation for Linux

- 1. Go to URL http://www.sunrichtech.com.hk/
- 2. Search N-840, download the driver.
- Follow Readme.txt which is in the driver folder to finish installing the driver.

## 2.4 Verifying the installation

#### 2.4.1 Verifying for Windows

 Click on the "Device Manager" tab in the Windows Control Panel.



 Expand "Network adapters" item, and you can read "Intel(R)Ethernet Converged Network Adapter X710" in the Device Manager.

Network adapters

🚅 Intel(R) Ethernet 10G 4P X710 OCP

Intel(R) Ethernet Converged Network Adapter X710

🚅 Intel(R) Ethernet Converged Network Adapter X710 #2

🚅 Intel(R) Ethernet Converged Network Adapter X710 #3

## 2.4.2 Verifying for Linux

 You can check whether the driver is loading by using following commands:

# lsmod | grep i40evf-x.x.x

# ifconfig -a

If there is a device name, ethX, shown on the monitor, the linux driver is load. Then, you can use the following command to activate the ethX.

# ifconfig ethX up, where X=0,1,2,...