# 2-Port 10G Network Adapter for OCP 3.0

User Manual Ver. 2.00

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# Chapter 1: Introduction

### 1.1 Product Introduction

OCP 3.0 card is the latest form factor designed to provide a wide range of networking options as well as other I/O technologies. Our 2-Port 10G OCP 3.0 Network Adapter is a flexible and scalable GbE solution providing two RJ45 ports. Based on Broadcom network controller BMC57416 with performance-enhancing features and power management technologies, this OCP 3.0 Network Adapter provides a quality networking choice for data centers while reducing CPU utilization and power consumption. With the TruFlow feature, VM density is increased by up to 50%, freeing more CPU cycles for additional virtual machines.

### 1.2 Features

- OCP 3.0 Form Factor
- PCIe Gen3 x8 host interface
- Compliant with OCP NIC 3.0 specification
- 2x 10GbE RJ45 connectors
- TruFlow<sup>TM</sup> engine for intelligent flow processing to increase server VM density and accelerate vSwitch processing
- Industry's most secure PCIe NIC solution leveraging Broadcom's BroadSAFE® technology to provide unparalleled platform security via Silicon Root of Trust
- TruManage<sup>TM</sup> enhances server manageability and security for data center deployments
- Support for advanced networking technologies including RoCE, SDN, NFV and virtualization
- Supports SR-IOV Based Virtualization
- 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)

### 1.3 System Requirements

- Windows® Server 2022/2025
- Linux kernel versions 2.6 or newer
- Airflow Requirements : 150 LFM at 55°C

## 1.4 Product Diagram



## 1.5 Package Contents

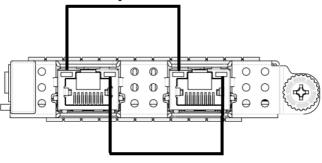
- 1 x 2-Port 10G Network Adapter for OCP 3.0
- 1 x User Manual

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# Chapter 2: Getting Started 2.1 Hardware Layout

Link / Speed LED



### **Activity LED**

#### Link/Activity Indicator:

| LED              | Description  |
|------------------|--|
| Link / Speed LED | Indicates Link Speed:<br>• Green=10 Gb/s; Amber=1Gb/s<br>• Not illuminated=No link |
| Activity LED     | Indicates Network Card Activity:<br>• Blinking = Active<br>• Off= No activity      |

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### 2.2 Hardware Installation

- 1. Power down your server.
- 2. Unplug the power cord.
- 3. Remove the OCP 3.0 adapter blank from the available OCP slot.
- 4. To install the OCP, carefully align the card's bus connector with the selected OCP slot on the server. Push the OCP firmly into the server.
- 5. Tighten the thumb screw to secure the card.
- 6. Reconnect the power cord.

# 2.3 Driver Installation for Windows

The following section shows you how to install 2-Port 10G OCP 3.0 Network Adapter driver on Windows operating systems.

## 2.3.1 Installation for Windows

- 1. Go to URLhttp://www.sunrichtech.com.hk/
- 2. Search N-1130, download the driver.
- 3. Follow the on-screen instructions to finish installing the driver.

### 2.3.2 Installation for Linux

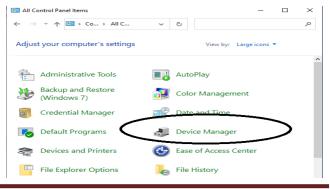
- 1. Go to URL http://www.sunrichtech.com.hk/
- 2. Search N-1130, download the driver.
- 3. Follow Readme.txt which is in the driver folder to finish installing the driver.

### 2.4 Hardware Verify

### 2.4.1 Verifying for Windows

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

#### Start > Control Panel > Device Manager



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 Expand "Network adapters" item, and you can read "Broadcom NetXtreme E Dual-port 10GBASE-T OCP 3.0 Ethernet Adapter" in the Device Manager.

Broadcom NetXtreme-E Dual-port 10GBASE-T OCP 3.0 Ethernet Adapter
Broadcom NetXtreme-E Dual-port 10GBASE-T OCP 3.0 Ethernet Adapter #2

### 2.4.2 Verifying for Linux

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

# lsmod | grep bnxt\_en

# 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,...