2-Port 100G QSFP56 Network Adapter for OCP 3.0

User Manual

Ver. 1.00

Contents:

Chapter 1: Introduction

1.1 Product Introduction

The N-1170 Broadcom 2-Port 100G QSFP56 OCP 3.0 Network Adapter —built on Broadcom's BCM57508 controller —enables highly-scalable, feature-rich networking solutions in servers. It caters to enterprise and cloud-scale applications, including high-performance computing, telco, machine learning, storage disaggregation, and data analytics. By combining a high-bandwidth Ethernet controller with optimized hardware acceleration engines, it enhances network performance and server efficiency. Notably, features like TruFlow™ boost VM density, and on-chip tunneling protocols improve throughput while reducing CPU utilization.

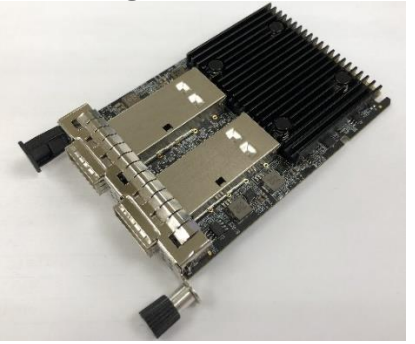
1.2 Features

- OCP 3.0 Form Factor
- PCIe Gen4 x16 host interface
- Compliant with OCP NIC 3.0 specification
- TruFlow™ engine for intelligent flow processing to increase server VM density and accelerate vSwitch processing
- Industry's most secure OCP 3.0 adapter solution leveraging Broadcom's BroadSAFE® technology to provide unparalleled platform security via Silicon Root of Trust
- New end-to-end congestion avoidance and management to anticipate and eliminate congestion before it happens
- Support for advanced networking technologies including RoCE, SDN, NFV and virtualization
- TruManage™ enhances server manageability and security for data center deployments
- Multi-host allows multiple compute and storage nodes to seamlessly connect to a single Ethernet adapter for cloud-scale networking and storage applications

1.3 System Requirements

- Windows® Sever 2019/2022/2025
- Linux kernel versions 2.6.x or newer
- VMware ESXi 7.0 or above
- FreeBSD
- Airflow Requirements: 400 LFM at 55℃

1.4 Product Diagram

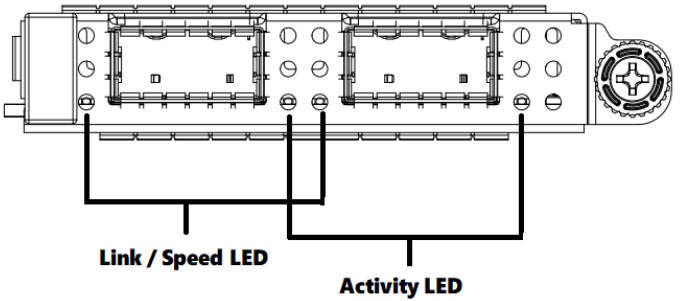


1.5 Package Contents

- 1 x 2-Port 100G QSFP56 OCP 3.0 Network Adapter
- 1 x User Manual

Chapter 2: Getting Started

2.1 Hardware Layout



LED Indicator:

LED	Description
Link / Speed LED	Indicates Link Speed: • Green = 100 Gb/s; Amber = 50/25Gb/s • Not illuminated=No link
Activity LED	Indicates Network Card Activity: • Blinking = Active • Off= No activity

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 100G QSFP56 OCP 3.0 Network Adapter driver on Windows operating systems.

2.3.1 Installation for Windows

1. Go to URL http://www.sunrichtech.com.hk/
2. Search N-1170, download the driver.
3. Follow the on-screen instructions to finish installing the driver.

2.3.2 Installation for Linux

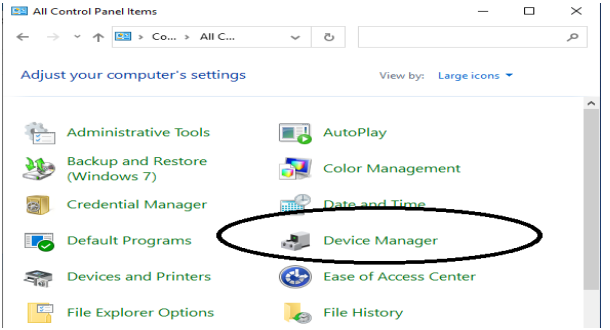
1. Go to URL http://www.sunrichtech.com.hk/
2. Search N-1170, download the driver.
3. Follow Readme.txt which is in the driver folder to finish installing the driver.

2.4 Hardware Verify

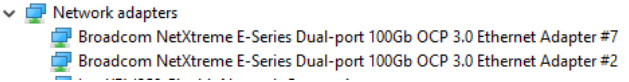
2.4.1 Verifying for Windows

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

Start > Control Panel > Device Manager



2. Expand **“Network adapters”** item, and you can read **“Broadcom NetXtreme E-Series Daul-Port 100Gb OCP 3.0 Ethernet Adapter”** in the Device Manager.



2.4.2 Verifying for Linux

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

   # 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,…