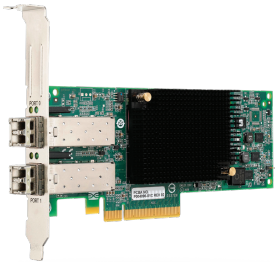


# OneConnect™ OCe10102-N

High-performance 10Gbps Network Adapter

**SIMPLIFIED  
NETWORKING,  
TRUSTED SAN  
INTEROPERABILITY  
AND INCREASED  
BUSINESS  
AGILITY**



## Optimized Network Connectivity

The OCe10102-N is a high-performance, dual-port network adapter for 10Gbps Ethernet (10GbE) networks. Protocol offload for stateless TCP/IP and TCP Chimney provide maximum bandwidth with minimum use of CPU resources.

## Emulex OneConnect Universal CNA platform

The OCe10102-N is a member of the Emulex OneConnect Universal Converged Network Adapter (UCNA) platform that also includes support for Fibre Channel over Ethernet (FCoE) and iSCSI protocol offloads. By using a common infrastructure for Ethernet and storage networks, data centers can reduce capital expense (CapEx) for adapters, switches and cables, and operational expense (OpEx) for power, cooling and IT administration.

## Greener data centers

The Emulex OneConnect UCNA platform delivers industry-leading performance and scalability per watt, reducing requirements for power and cooling. Protocol offload enables efficient use of computing resources, supports more virtual machine (VMs) per CPU, and reduces the number of servers required to support data center demands.

## Advanced error checking

End-to-end data protection with hardware parity, CRC, ECC and other advanced error checking and correcting ensure that data is safe from corruption.

## Key Features

### Superior performance

- TCP/IP stateless offloads
- TCP Chimney Offload

### Energy-efficient design

- Industry-leading performance per watt
- Complements data center “green” initiatives

### One platform for network and storage connection

- Part of OneConnect family that includes FCoE and iSCSI support
- Simplifies I/O hardware choices for IT managers

### Easy to deploy and manage with OneCommand™ Manager application

- One management console for network and storage
- Integrated management of Emulex UCNAs and Host Bus Adapters (HBAs)
- Over 7 million ports administered with Emulex management software

## Key Benefits

### Optimized for convergence

- Maximizes I/O consolidation with high-performance 10GbE ports
- One network infrastructure reduces CapEx
- One management console reduces OpEx
- Leverages existing IT investments

### Optimized for server virtualization with vEngine™ technology

- More VMs per server with TCP offload

### Enterprise-ready

- Hardware parity, CRC, ECC and other advanced error checking
- Backed by field-proven Emulex reliability and support



OneConnect™



OneCommand™

# OneConnect™ OCe10102-N

High-performance 10Gbps Network Adapter



## SPECIFICATIONS

### Simplified Management

#### OneCommand Manager application

The OneCommand Manager application enables centralized management of Emulex OneConnect UCNAs and HBAs throughout the data center from a centralized management console. The OneCommand Manager application provides a graphical user interface (GUI) and a scriptable command line user interface (CLI), which drive administration efficiency and business agility.

#### Network boot and installation

Support for Preboot eXecution Environment (PXE) makes the OCe10102-N an ideal solution for blade servers and other diskless deployments.

### Streamlined installation

A single installation of drivers and applications for Windows servers eliminates multiple reboots and ensures that each component is installed correctly and OneConnect UCNAs are ready to use.

### Standards

- PCI Express base spec 2.0, PCI Bus Power Management Interface, rev. 1.2, Advanced Error Reporting (AER)
- IEEE 802.3ae (10GBASE Ethernet Ports)
- IEEE 802.1q (Virtual LANs)
- IEEE 802.3ad (Link Aggregation)
- IEEE 802.3x (Flow Control)
- IEEE 802.1p (Quality/Class of Service)
- PHP hot plug-hot swap

### Architecture

- Dual-channel, 10Gb/s Ethernet Link speed
- PCIe Express 2.0 (x8, 5GT/s), MSI-X support
- Integrated data buffer and code space memory

### Ethernet Features

- IPv4/IPv6 TCP, UDP checksum offload; Large Send Offload (LSO); Large Receive Offload; Receive Side Scaling (RSS); IPv4 TCP Chimney Offload
- VLAN insertion and extraction
- Jumbo frames up to 9000 Bytes
- Preboot eXecution Environment (PXE) 2.0 network boot support
- Interrupt coalescing
- Load balancing and failover support including adapter fault tolerance (AFT), adaptive load balancing (ALB), teaming support and IEEE 802.3ad

### Comprehensive OS Support

- Windows Server
- VMware ESX
- Red Hat Enterprise Linux Server
- Novell SUSE® Linux Enterprise Server
- Oracle Solaris

### Hardware Environments

- x86, x64 servers
- Sun SPARC servers

### Interconnect

- Copper
  - SFP+ Direct Attached Twin-Ax Copper interface
  - Standards compliant passive copper cables up to 5m and active copper cables up to 10m
- Optical
  - Optics: 10GBASE-SR short wave lasers with LC type connector

### Physical Dimensions

- Short, low-profile form factor card
- 167.64mm x 68.91mm (6.60" x 2.71")
- Standard bracket (low profile available)

### Environmental Requirements

- Operating temperature: 0° to 55° C (32° to 131° F)
- Storage temperature: -40° to 70° C (-40° to 158° F)
- Relative humidity: 5% to 95% non-condensing

### Agency Approvals

- Class 1 Laser Product per DHHS 21CFR (J) and EN60825-1
- UL recognized to UL 60950-1 2nd edition
- CUR recognized to CSA22.2, No. 60950-1-07
- Bauart-certified to EN60950-1 2nd edition
- FCC Rules, Part 15, Class A
- ICES-003, Class A
- EMC Directive 2004/108/EEC (CE Mark)
  - EN55022, Class A
  - EN55024
- Australian EMC Framework (C-Tick Mark)
  - AS/NZS CISPR22, Class A
- VCCI (Japan), Class A
- KCC (Korea), Class A
- BSMI (Taiwan), Class A
- EU RoHS Compliant (Directive 2002/95/EC)
- China RoHS Compliant

### Ordering Information

- **OCe10102-NM**
  - Dual-channel, 10GBase-SR (short reach optical)
- **OCe10102-NX**
  - Dual-channel, 10GBase-CR (direct attach copper)
- **OC-Storage-01A**
  - FCoE/iSCSI enablement - 1 license
- **OC-Storage-10A**
  - FCoE/iSCSI enablement - 10 licenses

**World Headquarters** 3333 Susan Street, Costa Mesa, CA 92626 +1 714 662 5600  
**Wokingham, UK** +44 (0) 118 977 2929 | **Munich, Germany** +49 (0) 89 97007 177  
**Paris, France** +33 (0) 158 580 022 | **Beijing, China** +86 10 68499547  
**Tokyo, Japan** +81 3 5325 3261 | **Bangalore, India** +91 80 40156789

Emulex Connects™ Servers, Storage and People

[twitter.com/emulex](https://twitter.com/emulex) [friendfeed.com/emulex](https://www.facebook.com/emulex) [bit.ly/emulexlinks](https://www.linkedin.com/company/emulex) [bit.ly/emulexfb](https://www.bit.ly/emulexfb)

**EMULEX**®

[www.emulex.com](http://www.emulex.com)

©2011 Emulex, Inc. All rights reserved. This document refers to various companies and products by their trade names. In most, if not all cases, their respective companies claim these designations as trademarks or registered trademarks. This information is provided for reference only. Although this information is believed to be accurate and reliable at the time of publication, Emulex assumes no responsibility for errors or omissions. Emulex reserves the right to make changes or corrections without notice. This report is the property of Emulex and may not be duplicated without permission from the Company.