DATA SHEET

CONNECT

# OneConnect® OCe11101-EX/EM and OCe11102-EX/EM

High performance 10Gb Ethernet Network Adapter

Uncompromising Low Packet Performance for Cloud and Multi-tenant Computing Environments



# **Optimized Network Connectivity**

The OCe11100-EX and -EM 10GbE adapters deliver accelerated performance which is critical in highly transactional and Cloud/multi-tenant environments. Protocol offload for stateless TCP/IP and TCP Chimney provides maximum bandwidth with minimum use of CPU resources.

#### Greener data centers

The Emulex family of OCe11100-EX and -EM network adapters delivers industry-leading performance and scalability per watt, reducing requirements for power and cooling.

# Simplified Management

#### **OneCommand Manager application**

The OneCommand Manager application enables centralized management of Emulex OneConnect network adapters, UCNAs and HBAs throughout the data center from a single 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

Support for Preboot eXecution Environment (PXE) makes these adapters an ideal solution for diskless deployments.

#### **Key Features**

Superior performance

- TCP/IP stateless offloads
- TCP Chimney Offload

Energy-efficient design

- Industry-leading performance per watt
- Complements data center "green" initiatives

Easy to deploy and manage with OneCommand® Manager application

- One management console for network and storage
- Integrated management of Emulex Universal Converged Network Adapters (UCNAs) and Host Bus Adapters (HBAs)
- Over 12 million ports administered with Emulex management software

# **Key Benefits**

Optimized for Cloud/Multi-tenant environments

- Maximizes I/O bandwidth with high-performance 10GbE ports
- Same firmware, drivers and management as OneConnect 10GbE blade and LAN on motherboard (LOM) solutions

# Enterprise-ready

 Backed by field-proven Emulex reliability and support





# OneConnect® OCe11101-EX/EM and OCe11102-EX/EM

#### Standards

- PCI Express base spec 2.0,
  PCI Bus Power Management Interface, rev. 1.2,
  Advanced Error Reporting (AER)
- · IEEE 802.3ae (10Gb/s Ethernet)
- · IEEE 802.1q (VLAN)
- · IEEE 802.1p (QoS/CoS)
- · IEEE 802.3ad (Link Aggregation)
- · IEEE 802.3x (Flow Control)
- · PHP hot plug-hot swap

#### Architecture

- · 10Gb/s Ethernet link speed per port
- PCIe Express 2.0 (single port x4, dual port 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); Receive Side Scaling (RSS); TCP Segmentation Offload (TSO);
   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), switch fault tolerance (SFT), adaptive load balancing (ALB), teaming support

## Comprehensive OS Support

- · Red Hat Enterprise Linux Server
- · Novell SUSE® Linux Enterprise Server
- · CentOS

#### Hardware Environments

· x86, x64 and PPC processor families

#### Interconnect

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

#### **Physical Dimensions**

- · Short, low-profile form factor card
- · 167.64mm x 68.91mm (6.60" x 2.71")
- Standard height bracket (low profile brackets ship with adapter)

#### **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

High performance 10Gb

Ethernet Network Adapter

- · UL recognized to UL 60950-1 2nd edition
- · CUR recognized to CSA22.2, No. 60950-1-07
- $\cdot$  Bauart-certified to EN60950-1 2nd edition
- FCC Rules, Part 15, Class A
- · ICES-003. Class A
- EMC Directive 2004/108/EEC (CE Mark)
- EN55022:2010, Class A
- EN55024:2010
- 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

- OCe11101-EM
- Single-port, 10GBASE-SR (short reach optical)
- · OCe11101-EX
- Single-port, 10GBASE-CR (direct attach copper)
- · OCe11102-EM
- Dual-port, 10GBASE-SR (short reach optical)
- · OCe11102-EX
- Dual-port, 10GBASE-CR (direct attach copper)

Some of these products may not be available in the U.S. Contact your supplier for more information.



World Headquarters 3333 Susan Street, Costa Mesa, CA 92626 +1714 662 5600 Bangalore, India +91 80 40156789 | Beijing, China +86 10 84400221

Dublin, Ireland+35 3 (0) 1 652 1700 | Munich, Germany +49 (0) 89 97007 177 Paris, France +33 (0) 158 580 022 | Tokyo, Japan +81 3 5325 3261

Wokingham, United Kingdom +44 (0) 118 977 2929

www.emulex.com