

## 10Gb/s Ethernet Network Adapter Provides Flexibility and Performance for Data Centers

The OneConnect™ OCe10102-N Ethernet adapter provides highly optimized 10 Gigabit Ethernet (10GbE) network connectivity with protocol offloads for stateless TCP/IP and TCP Offload Engine (TOE) that deliver superior networking performance and server efficiency. As part of the OneConnect Universal Converged Network Adapter (UCNA) product family, the OneConnect OCe10102-N maximizes virtual machine (VM) deployments and significantly improves data center networking efficiencies.

### 1. Single Framework for Simplified Version Management and Testing



The OneConnect UCNA product family provides a single 10GbE framework for network and storage connectivity. All OneConnect UCNAs use the same network interface card (NIC) drivers, firmware and boot code with consistent NIC teaming and TCP offload support. The unified OneConnect framework provides simplified version management and testing that streamlines deployments and lowers data center Operational Expense (OpEx). Competing products are partial solutions—OneConnect is the only product family that supports TCP/IP, TOE, iSCSI and Fibre Channel over Ethernet (FCoE) with universal 10GbE connectivity.

### 2. Superior Server Performance with TCP Chimney Offload Support



Benchmarks with Windows Server 2003 and 2008 show more than a 50% reduction in CPU usage when OneConnect TOE support is enabled with TCP Chimney Offload. As shown by these results, OCe10102-N Ethernet adapters deliver substantial server efficiency beyond basic TCP/IP stateless offloads, optimizing performance for virtualized servers and high-bandwidth applications and thus lowering data center Capital Expense (CapEx).

### 3. Unified Management for Networking and Storage Reduces OpEx



The OneCommand™ Manager application enables management of Emulex OneConnect UCNAs and LightPulse Host Bus Adapters (HBAs) throughout the data center from a centralized console. Using the OneCommand Manager application, administrators can manage high-performance connections for networking and storage (Fibre Channel, FCoE, and iSCSI) with a single view of the entire network. The OneCommand Manager application provides centralized discovery, monitoring, reporting and management of both local and remote adapters from a secure remote client. In-depth management capabilities include remote firmware and boot code upgrades, beaconing, statistics and advanced diagnostics.

### 4. Scalability and Performance for Virtualization



OneConnect protocol offloads provide greater CPU efficiency, enabling up to 20% more VMs per host server than competing products. With high-performance, dual-port 10GbE connectivity, a single OCe10102-N Ethernet adapter provides the equivalent bandwidth of 20 Gigabit Ethernet adapters, providing significant CapEx savings for adapters, cabling and switch ports.



## 5. Future Proofing

The OneConnect UCNA product family supports Ethernet, iSCSI and FCoE with a single hardware platform. Customers who purchase OCe10102-N Ethernet adapters will have an option to enable iSCSI or FCoE storage connectivity as requirements change.

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Protocol Offload	Emulex UCNA	Brocade CNA	QLogic CNA	QLogic NIC	Intel NIC	Broadcom NIC
FCoE	✓	✓	✓			
iSCSI	✓					✓
TOE, TCP Chimney	✓			✓		✓
TCP/IP (stateless)	✓	✓	✓	✓	✓	✓

With the OneConnect UCNA and the OneCommand Manager application products, Emulex is the only vendor with the features that data centers require to achieve networking and storage convergence.

Features	Emulex	QLogic	Brocade	Intel	Broadcom
Common NIC drivers for NIC, iSCSI and FCoE	✓				
Leverages existing Fibre Channel and NIC drivers	✓				
Broad storage interoperability support	✓	✓			
Unified storage management software	✓	✓	✓		
Unified NIC, iSCSI, FCoE and Fibre Channel management	✓				
CPU offload for all protocols	✓				
High performance per watt	✓				