The Broadcom® Fibre Channel over Ethernet (FCoE) offering is based on Broadcom's hardware offload architecture, which is designed to deliver world-class performance, low CPU utilization, and high reliability with unified networking and storage management. The benefits include:

- Outstanding levels of performance across simultaneous L2 networking, TCP/IP offload, and FCoE CNA data traffic offload.
- Low CPU utilization: Broadcom FCoE CNA offload architecture minimizes the CPU overhead so that valuable CPU cycles are available to process user applications.
- Highest reliability: FCoE CNA function adheres to the highest reliability standards for the data center, from advanced error checking in the 10GbE network controllers to supporting Data Center Bridging (DCB) standards to avoid congestion—all coupled with multipathing support.
- Unified networking and storage management: The BACS management application provides a single management dashboard for network and storage I/O management.

**Features**

- Data Center Bridging
  - IEEE 802.1Qbb: Priority-based Flow Control (PFC)
  - IEEE 802.1Qaz: Enhanced Transmission Selection (ETS)
- Fibre Channel over Ethernet
  - FCoE protocol with full hardware offload
- FCoE CNA features
  - Supports FCoE initialization Protocol (FIP) and FCoE EtherTypes
  - Supports fabric-provided MAC addressing (FPMA)
  - Supports boot from SAN
  - Supports large concurrent port logins and exchanges (4096 each)

**Benefits**

- Cutting-edge performance
  - Over 2.5 million FCoE IOPS
  - Concurrent, bidirectional line-rate performance across both ports
- Robust, seamless management using centralized, cross-platform management application suite
- World-class, optimized performance for high throughput, high I/O per second, and low CPU utilization
  - Offloaded and accelerated FCoE for block storage with high I/O per second and high bandwidth
  - Frees host CPU to run application code
  - No need to compete with host applications for resources
  - Minimal load on host memory subsystem with zero copy
  - Adaptive interrupt coalescing
  - Avoids bottlenecks by using RSS (distributing network processing across multiple CPUs)
  - Interrupt distribution in a multi-CPU system using MSI/MSI-X
About Broadcom

Broadcom Corporation (NASDAQ: BRCM), a FORTUNE 500® company, is a global leader and innovator in semiconductor solutions for wired and wireless communications. Broadcom® products seamlessly deliver voice, video, data, and multimedia connectivity in the home, office, and mobile environments. With the industry's broadest portfolio of state-of-the-art system-on-a-chip and embedded software solutions, Broadcom is changing the world by Connecting everything®. For more information, go to www.broadcom.com.

Unified Management Application

- Centralized, cross-platform management suite for configuration and management across all protocols.
- Integrated multiprotocol dashboard with all management functions across iSCSI HBA, TOE, L2, and FCoE HBA.
- Comprehensive DCB and FCoE configuration and control.

For more information, visit: http://go.broadcom.com/adapters

These charts show the relative performance of the Broadcom FCoE CNAs versus the leading competitors and the relative CPU effectiveness (IOPS per CPU%) of the Broadcom FCoE CNAs with hardware offload versus the Intel® non-hardware offload adapter. Source: Demartek® Labs, June 2012. Environment: Intel Xeon® E5-2690 8-core server, running the Microsoft® Windows® 2008 R2 SP1.