Broadcom® now offers a quad-port Network Daughter Card (NDC), with two 1 Gigabit (GbE) and two 10 Gigabit (10GbE) Ethernet connectivity ports for Dell® PowerEdge® 12G rack servers. It leverages Broadcom’s long-standing industry leadership in Ethernet, providing the highest level of performance, efficiency, and scalability for the enterprise data center.

For more effective utilization of the 10GbE bandwidth, the Broadcom 57800-based rack NDC offers Switch Independent Partitioning which enables the segmentation of each 10GbE port into two virtual ports, with flexible allocation of bandwidth to each port. This allows IT organizations to improve resource utilization while lowering infrastructure and operational costs.

Virtualization, cloud computing, High-Performance Computing (HPC), convergence, and clustering initiatives are increasing workload demands. The Broadcom 57800S-based rack NDC is the solution of choice for workload-intensive computing environments, providing a reliable, high-performance 10GbE connectivity solution.

### Features
- Quad-port connectivity (two 1GbE and two 10GbE) for Dell PowerEdge 12G rack servers
- x8 PCI Express® (PCIe™) V2.0 (5 GT/s) support
- Full line-rate performance across all ports
- Broad OS and hypervisor support
- Full iSCSI and FCoE hardware offload
  - FCoE-ready
- Full TCP/IP hardware offload
  - Microsoft® Chimney-compliant
- Network boot support:
  - iSCSI remote boot
  - FCoE boot from SAN
  - Preboot eXecution Environment (PXE) 2.0
- Switch Independent Partitioning with up to two partition assignments per 10GbE link
- Broadcom Advanced Control Suite (BACS) management application
- Integration into Dell’s embedded management framework (iDRAC7 and Lifecycle Controller)
- MSI and MSI-X support
- IPv4 and IPv6 offloads
- PCI-SIG SR-IOV ready
- Comprehensive stateless offloads
- RX/TX multiqueue
- Receive Side Scaling (RSS)
- Transmit Side Scaling (TSS)
- Support for VMware® NetQueue™ and Microsoft® VMQ
- VLAN support with VLAN tagging
- Jumbo Frame support
- Network Teaming, Failover and Load Balancing:
  - Smart Load Balancing (SLB)
  - Link Aggregation Control Protocol (LACP) and Generic Trunking
- Data Center Bridging (DCB)

### Overview

Broadcom® now offers a quad-port Network Daughter Card (NDC), with two 1 Gigabit (GbE) and two 10 Gigabit (10GbE) Ethernet connectivity ports for Dell® PowerEdge® 12G rack servers. It leverages Broadcom’s long-standing industry leadership in Ethernet, providing the highest level of performance, efficiency, and scalability for the enterprise data center.

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Benefits

- **Accelerates Server Performance:**
  - Boosts network performance with full line-rate performance across all ports.
  - Increases server performance with full hardware offload for storage traffic.
  - Delivers highest networking performance and lowest CPU utilization with TCP/IP offload (TOE).
  - Optimizes server processing performance by reducing CPU overhead and lowering interrupt latency through the use of the MSI-X standard.
  - Boosts performance in Windows® and Linux® environments by directing interrupts to the server’s CPU cores, leveraging Transmit/Receive Side Scaling (TSS/RSS).

- **Robust Virtualization Capabilities:**
  - Superior network performance with support for VMware NetQueue and Microsoft VMQ technologies.
  - Enhances network management and efficiency with support for VLAN/VLAN tagging.

- **Streamlines Deployment and Management:**
  - Increases network flexibility, scalability, and capacity with Switch Independent Partitioning, segmenting 10GbE ports and reallocating their bandwidth and resources to address application’s performance requirements.
  - Simplifies deployment and management complexity—Broadcom Ethernet solutions available across a wide range of Dell server platforms.
  - Unifies the NIC and storage management using Dell iDRAC and Lifecycle Controller management framework or Broadcom Advanced Control Suite (BACS).
  - Provides dual-port 10GbE and dual-port 1GbE connectivity for deployment flexibility.

Specifications

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Ordering Information

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<td>Broadcom 57800S Quad-Port 10GBASE-T (2x1GbE + 2x10GbE) Rack Converged Network Daughter Card</td>
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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](http://www.broadcom.com).