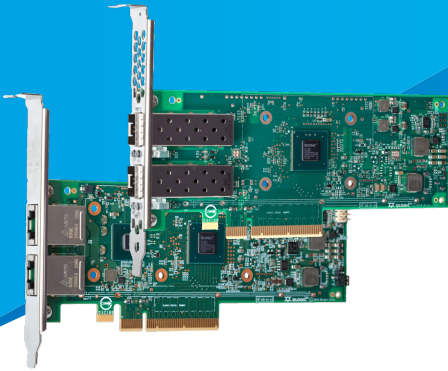


Full iSCSI Hardware Offload Boosts Virtual Server Performance

Cavium FastLinQ 41000 Series 10GbE
Converged Network Adapters



iSCSI hardware offload enables up to 45% better CPU performance, boosting virtual server density and performance

KEY BENEFITS

Cavium FastLinQ® 41000 Series Converged Network Adapters:

- Hardware offloads for iSCSI storage data traffic enable up to 45% more CPU cycles for higher virtual machine density and greater performance.
- Over 2.9 million iSCSI IOPS for high performance environments.
- Superior to software initiator solutions which consume CPU cycles for I/O processing and limit virtual environments.
- Line-rate 10GbE performance across all adapter ports.
- Industry-leading iSCSI storage transactional performance.
- Available with both 10G SFP+ and 25G SFP28 optical/DAC and 10GBASE-T RJ45 interfaces. The 25G SFP28 optical/DAC interfaced adapters can also run at 10GbE speeds.
- Support iSCSI Extensions for RDMA (iSER) using RoCE, RoCEv2 or iWARP.

EXECUTIVE SUMMARY

Cavium FastLinQ 41000 Series Converged Network Adapters (CNAs) support simultaneous LAN (TCP/IP) and SAN [Fibre Channel over Ethernet (FCoE) and iSCSI] traffic at 10Gbps Ethernet (10GbE) line rate speeds. Cavium FastLinQ 41000 Series CNAs also optimize host CPU usage with full hardware offloads that free CPU cycles for use with other applications and allow greater virtual machine density.

High Performance and Minimal CPU Utilization

Software-based iSCSI initiators consume CPU cycles when handling I/O-intensive workloads, leaving little headroom for growing applications and virtual environments. Unlike software-based solutions, Cavium FastLinQ 41000 Series CNAs fully offload the iSCSI and TCP/IP stacks.

As a result, Cavium FastLinQ 41000 Series CNAs do not compete for CPU processing cycles with upper-layer applications such as e-mail or Web applications—the iSCSI performance is unaffected by application workload. This enables up to 45% more CPU cycles for greater performance in virtual and physical environments.

High Reliability and Unified Management

The iSCSI header/data digest computation with FastLinQ 41000 Series CNAs prevents data corruption that can occur in large networks with multiple switch hops so they can be used in a wide variety of IP network topologies.

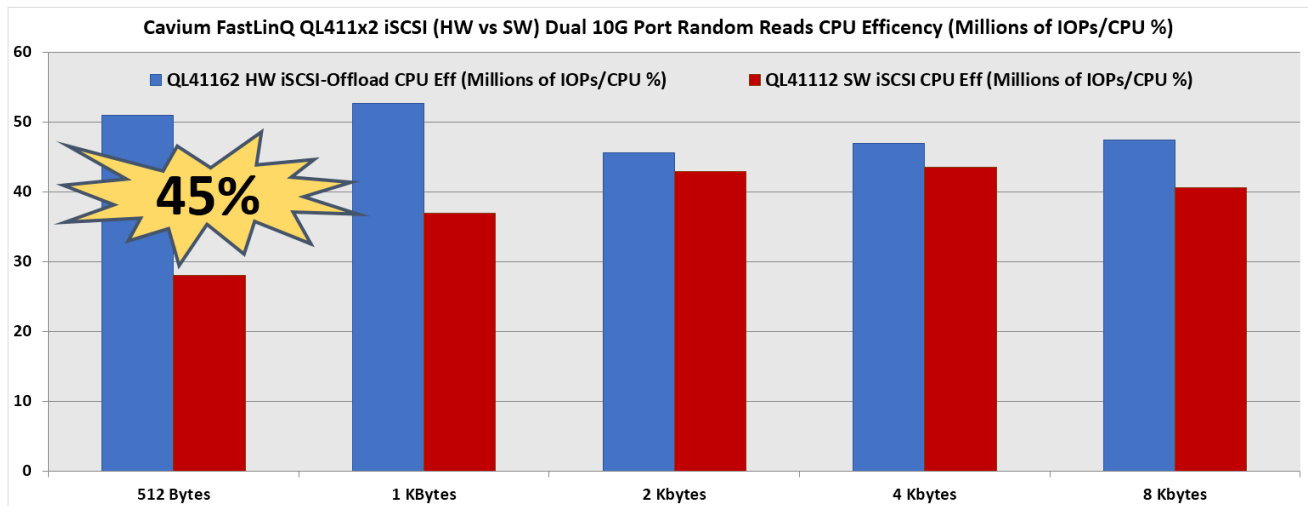


Figure 1. Cavium FastLinQ 41000 Series CNAs deliver up to 45% better performance by freeing valuable CPU cycles to power applications and more virtual machines. (Cavium's iSCSI offload versus Cavium 10GbE adapter with iSCSI software initiator)

Note: These statistics are based on Cavium conducted head-to-head performance benchmarks.

In addition, the QConvergedConsole® (QCC) for Linux and Windows provides local and remote graphical user interface (GUI) management for all Cavium adapters. The QCS command line interface (CLI) for Linux and Windows provides local and remote scriptable management for 57xx/57xx x/344x/844x/41xxx/45xxx Series adapters. The QCC VMware® vCenter™ GUI and ESXCLI Plug-Ins provide centralized GUI management of all Cavium adapters. The QCC PowerKit cmdlets for Microsoft PowerShell provide local and remote scriptable management for the 57xx/57xxx/344 x/844x/41xxx/45xxx adapters on Linux and Windows. These tools provide administrators with a single management platform for comprehensive network and storage I/O management.

TRUSTED SOLUTIONS

Cavium is a global leader and technology innovator in high-performance server and storage networking connectivity and application acceleration solutions. Cavium's leadership in product design and software stack maturity make it the top choice of leading OEMs, including Cisco®, Dell®, EMC®, Hitachi®, Hitachi Data Systems®, HP®, IBM®, Lenovo®, NetApp®, and Oracle®, as well as channel partners worldwide, for virtualized, converged, and cloud environment deployments.

Cavium offers complete solutions to some of the most complex issues facing the data center. For more information, visit the Solutions Web page, at <http://www.Cavium.com>.

ABOUT CAVIUM

Cavium, Inc. (NASDAQ: CAVM), offers a broad portfolio of infrastructure solutions for compute, security, storage, switching, connectivity and baseband processing. Cavium's highly integrated multi-core SoC products deliver software compatible solutions across low to high performance points enabling secure and intelligent functionality in Enterprise, Data Center and Service Provider Equipment. Cavium processors and solutions are supported by an extensive ecosystem of operating systems, tools, application stacks, hardware reference designs and other products. Cavium is headquartered in San Jose, CA with design centers in California, Massachusetts, India, Israel, China and Taiwan.



Follow us:

Corporate Headquarters Cavium, Inc. 2315 N. First Street San Jose, CA 95131 408-943-7100

International Offices UK | Ireland | Germany | France | India | Japan | China | Hong Kong | Singapore | Taiwan | Israel

Copyright © 2017 Cavium, Inc. All rights reserved worldwide. FastLinQ and QConvergeConsole are registered trademarks or trademarks of Cavium, Inc. All other brand and product names are registered trademarks or trademarks of their respective owners.

This document is provided for informational purposes only and may contain errors. Cavium reserves the right, without notice, to make changes to this document or in product design or specifications. Cavium disclaims any warranty of any kind, expressed or implied, and does not guarantee that any results or performance described in the document will be achieved by you. All statements regarding Cavium's future direction and intent are subject to change or withdrawal without notice and represent goals and objectives only.