Marvell Extends NVMe-OF Ethernet SSD Technology Leadership

Enables Toshiba Memory's industry first in-form factor NVMe-oF Ethernet SSD and unveils next generation, fully integrated SSD controller solution

SANTA CLARA, Calif., Aug. 7, 2019 /PRNewswire/ -- Marvell (NASDAQ: MRVL) today announced an expansion of its revolutionary NVMe over Fabrics™ (NVMe-oF™) portfolio. The breakthrough solutions include one powering the Toshiba Memory native NVMe-oF Ethernet solid state drive (SSD) with Marvell's NVMe-oF SSD converter controller, delivering the world's first direct-to-Ethernet SSD. The second is a landmark Marvell® NVMe-oF Ethernet SSD controller, optimized to expedite SSD makers' time to market and drive broad data center adoption of Ethernet Bunch of Flash (EBOF) architectures.

As data reaches near exponential growth proportions, demand for greater storage bandwidth and capacity within infrastructure is rising commensurately. Customers are grappling with the stress that these demands are creating on power consumption, design complexity and system costs. With the advent of NVMe™ and NVMe-oF, data centers are migrating from older, legacy protocols to innovative methods of accessing storage media. By utilizing a simple, low power and compute-less Ethernet fabric instead of a traditional PCIe® approach, data centers can optimize their infrastructure and make hardware investments far more cost-effectively in the face of increasing storage requirements.

Marvell first announced its revolutionary Ethernet-based technology at last year's Flash Memory Summit, and the technology is being advanced by multiple storage end users, server and storage system OEMs and SSD makers. The new Toshiba Memory 2.5" in-form factor Ethernet SSD is the first market-ready product to integrate Marvell's NVMe-oF SSD converter controller technology. These SSDs can be used with Marvell's Ethernet switch products, enabling optimal storage disaggregation, eliminating costly CPU and DRAM components and increasing overall data center storage performance.

"Today's milestone continues our relationship with Marvell and reflects our shared vision of bringing to market innovative, Ethernet-based solutions to optimize scalability, flexibility and overall data center manageability," said Alvaro Toledo, vice president, SSD marketing & product planning for Toshiba Memory America, Inc. "Our 2.5-inch form factor, dual-ported 25GbE NVMe-oF Ethernet SSD demonstration built with BiCS FLASH™ 3D flash memory leverages Marvell's NVMe-oF converter controller, and enables seamless capacity, scalability and outstanding performance."

Building on strong market demand, today Marvell unveiled an even more highly integrated solution for the scalable, high-performance disaggregation of storage from compute with the industry-first NVMe-oF Ethernet controller. Marvell's innovative solution will enable a new class of enterprise and data center SSDs that significantly lower total cost of ownership (TCO). The Marvell NVMe-oF Ethernet SSD controller, 88SS5000, fully integrates with Marvell's data center Ethernet switches including the Prestera® family of packet processors, bringing to market a next-generation infrastructure solution for moving, processing, storing and securing the world's data.

"Our new NVMe-oF Ethernet SSD controller represents another industry first from Marvell and marks a key milestone in advancing our end-to-end Ethernet storage strategy," said Nigel Alvares, vice president of marketing for the Flash Business Unit at Marvell Semiconductor, Inc. "By integrating the powerful capabilities of our NVMe-oF Ethernet technology with our best-in-class SSD controller technology, our customers will benefit from substantial reductions in power, space and overall cost. We look forward to continued ecosystem collaboration for broad adoption of our disruptive EBOF architecture."

"We're excited to collaborate with Marvell on enabling their latest data center SSD controller innovation with our TLC, QLC and BiCS FLASH™ Gen. 4 devices," said Hiroo Ohta, technology executive, Toshiba Memory Corporation. "The combination of our products will help illustrate the significant value proposition of NVMe-oF Ethernet SSDs for data centers."

For more information, visit the following Marvell webpages: NVMe-oF SSD converter controller and NVMe-oF Ethernet SSD controller.

Marvell will showcase its leading-edge NVMe-oF Ethernet SSD controller at the Flash Memory Summit, August 6-8 at the Santa Clara Convention Center (Expo Booth #511, Exhibit Hall A). Nigel Alvares' conference keynote, "Innovative Chipset Solutions for Accelerating the Data Economy" takes place today at 2:10 p.m. PT.

About Marvell

Marvell first revolutionized the digital storage industry by moving information at speeds never thought possible. Today, that same breakthrough innovation remains at the heart of the company's storage, processing,

networking, security and connectivity solutions. With leading intellectual property and deep system-level knowledge, Marvell's semiconductor solutions continue to transform the enterprise, cloud, automotive, industrial and consumer markets. To learn more, visit: https://www.marvell.com

Marvell Media Relations

Kristin Hehir
Senior Manager, Public Relations
408-222-8744
kristinh@marvell.com

Hanna Kang
Senior Manager, Public Relations
408-222-3780
hhkang@marvell.com

View original content to download multimedia:http://www.prnewswire.com/news-releases/marvell-extends-nvme-of-ethernet-ssd-technology-leadership-300897756.html

SOURCE Marvell
