

Microsemi Announces Production Release of Second Generation High Performance Flashtec NVMe Controllers (NVMe2032/NVMe2016)

Devices Part of Company's Product Showcase at Flash Memory Summit Aug. 9-11 in Santa Clara, California

ALISO VIEJO, Calif., Aug. 4, 2016 /PRNewswire/ -- **Microsemi Corporation** (NASDAQ: MSCC), a leading provider of semiconductor solutions differentiated by power, security, reliability and performance, today announced the production release of its Flashtec NVM Express (NVMe)2032 and NVMe2016 controllers, enabling the world's leading enterprises and data centers to realize the highest performance solid state drives (SSDs) utilizing next-generation NAND technologies. Providing the highest capacity, performance and reliability to store critical data, the devices are the industry's first SSD controllers to integrate DDR4 DRAM, alleviating bottlenecks and maximizing throughput.



"Microsemi is pleased to announce the production release of our second-generation Flashtec NVMe controllers, tuned for enterprise storage, server and data center workloads," said Derek Dicker, vice president and business unit manager, performance storage, at Microsemi. "These controllers deliver world class performance, advanced low-density parity-check (LDPC) error correction suitable for managing next-generation 3D NAND, and a programmable architecture upon which SSD builders can develop custom firmware, providing developers the ultimate means of product differentiation." Microsemi's second-generation Flashtec NVMe2032 and NVMe2016 controllers support the standard NVMe host interface and are optimized for high-performance 4KB random read/write operations, performing all flash management operations on-chip and consuming negligible host processing and memory resources. In addition, the controllers can achieve up to 1 million random read input/output operations per second (IOPS).

"We congratulate Microsemi on the production release of its second-generation NVMe 2032/2016 enterprise NVMe controller with a high-performance, flexible low-density parity-check engine," said Eric Endebrook, vice president of Storage Marketing Micron. "These types of enabling technologies align to Micron's 3D NAND needs which are focused on mission-critical and high performance workloads."

Hyperscale and enterprise data centers continue adopting NVMe due to the high speed and low latency connection between SSDs and host processors, providing significant performance advantages over SAS and SATA. According to market research firm IDC's report titled, "Worldwide Solid State Drive Forecast, 2015–2019," the number of high-

performance PCIe-based SSD units has an estimated compound annual growth rate of 44 percent from 2014-2019. As part of Microsemi's broad Flashtec controller family, the NVMe2032 and NVMe2016 controllers cater to this growing demand for robust NVMe-based solutions, with the devices optimized for power efficiency while providing customers the highest levels of performance, data integrity and reliability.

Additional key features include:

- Up to 20TB flash capacity using 256Gb flash
- single-level cell (SLC), multi-level cell (MLC), enterprise MLC and triple-level cell (TLC) flash with toggle and Open NAND Flash Interface (ONFI)
- PCIe Gen3 x8 or dual independent PCIe Gen3 x4 (active/active or active/standby) host interface
- 32 independent flash channels, each supporting up to 8 chip enables
- DDR4-2400
- Option read-only memory (ROM) allows NVMe Flash controller to be used as a boot device
- Encryption (XTS-AES-256)
- Power fault and abrupt shutdown without data loss or corruption
- Flash channel RAID
- End-to-end host to flash data protection

Product Availability

Microsemi's Flashtec NVMe2032 and NVMe2016 controllers are available in volume production quantities now. For more information, visit <http://www.microsemi.com/products/storage/flashtec-nvme-controllers/pm8609-nvme2032#features> and <http://www.microsemi.com/products/storage/flashtec-nvme-controllers/pm8607-nvme2016>, respectively, or contact sales.support@microsemi.com.

Product Demonstrations in Booth #213 at Flash Memory Summit Aug. 9-11

Microsemi will be showcasing its new devices at the upcoming Flash Memory Summit Aug. 9-11, 2016, with product demonstrations offered in Microsemi's booth, #213. The event, which will be held at the Santa Clara Convention Center in Santa Clara, California, educates attendees about the latest developments in flash memory.

About Microsemi's Product Portfolio for Data Center

Microsemi is a premier supplier of innovative semiconductor, board, system, software and services for enterprise and hyperscale data centers, enabling high performance, secure, low power and reliable infrastructure for scalable deployments. Microsemi technologies drive innovation in applications including storage systems, server storage, NVM solutions, Ethernet switching, rack scale architecture, data center interconnect, network timing and power subsystems. Building on a track record of technology leadership, Microsemi's data center infrastructure portfolio is transforming networks that connect, store and move big data, while lowering the total cost of ownership of deploying next generation services.

The portfolio includes high performance NVMe storage controllers, NVRAM drives, SAS/SATA host bus adapters and RAID controllers enabling high capacity storage architectures, high density PCIe switching and firmware for rack scale architectures, PCIe re-drivers, and Ethernet PHYs for intra-rack connectivity. Microsemi's product

portfolio also includes clock and power management, IEEE1588 integrated circuits (ICs) and NTP servers for synchronization across the data center, as well as field programmable gate arrays (FPGAs) and system-on-chip (SoC) FPGAs to perform secure system management of servers and storage. For more information, visit <http://www.microsemi.com/applications/data-center>.

About Microsemi

Microsemi Corporation (NASDAQ: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for aerospace & defense, communications, data center and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; enterprise storage and communication solutions, security technologies and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, California, and has approximately 4,800 employees globally. Learn more at www.microsemi.com.

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"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: Any statements set forth in this news release that are not entirely historical and factual in nature, including without limitation statements related to the production release of its Flashtec NVM Express (NVMe)2032 and NVMe2016 controllers, enabling the world's leading enterprises and data centers to realize the highest performance solid state drives (SSDs) utilizing next-generation NAND technologies, and its potential effects on future business, are forward-looking statements. These forward-looking statements are based on our current expectations and are inherently subject to risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. The potential risks and uncertainties include, but are not limited to, such factors as rapidly changing technology and product obsolescence, potential cost increases, variations in customer order preferences, weakness or competitive pricing environment of the marketplace, uncertain demand for and acceptance of the company's products, adverse circumstances in any of our end markets, results of in-process or planned development or marketing and promotional campaigns, difficulties foreseeing future demand, potential non-realization of expected orders or non-realization of backlog, product returns, product liability, and other potential unexpected business and economic conditions or adverse changes in current or expected industry conditions, difficulties and costs of protecting patents and other proprietary rights, inventory obsolescence and difficulties regarding customer qualification of products. In addition to these factors and any other factors mentioned elsewhere in this news release, the reader should refer as well to the factors, uncertainties or risks identified in the company's most recent Form 10-K and all subsequent Form 10-Q reports filed by Microsemi with the SEC. Additional risk factors may be identified from time to time in

Microsemi's future filings. The forward-looking statements included in this release speak only as of the date hereof, and Microsemi does not undertake any obligation to update these forward-looking statements to reflect subsequent events or circumstances.

Regards,

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