Lite-On to Show Early Storage Device Supporting 'Project Denali' at FMS Show

New Solid-State Drive Could Accelerate SSD Adoption in the Data Center

Santa Clara, Calif., August 6, 2018 – This week at Flash Memory Summit (FMS) 2018, LITE-ON Storage, an established leader in the rapidly expanding solid-state drive (SSD) industry, will showcase its first storage drive supporting Project Denali[i], Microsoft Corp.'s storage specification for cloud-based workloads. The new Open Channel AD2 series SSD was built as part of a collaboration with Microsoft and CNEX Labs.

"LITE-ON is constantly testing new ways to improve the speed and efficiency of flash drives for customers of all sizes, and we see Project Denali as possibly accelerating these efforts," said Darlo Perez, Managing Director, Americas region at LITE-ON Storage. "In early testing of an M.2 SSD built around the Denali spec, CNEX achieved a radical latency reduction of 95 percent, providing a potentially disruptive improvement in quality of service (QoS) for cloud computing."

Project Denali is a standardization and evolution of Open Channel that defines the roles of SSD as opposed to the host in a standard interface. The SSD firmware interfaces by separating functionality for software-defined data layout and media management. For instance, media management, error correction, mapping of bad blocks and other functionality specific to the flash generation stay on the device. The host, meantime, receives random writes, transmits streams of sequential writes, maintains the address map and performs garbage collection.

It is thought this change could greatly reduce costs for SSD deployment, improve performance and make these drives more useful and cost-effective for both enterprise organizations and cloud service providers.

As Tom Coughlin, president of Coughlin Associates explains it, Project Denali seeks to change the monolithic model behind most flash storage where address mapping, garbage collection, wear leveling, bad block management, media management and recovery from power failures are all handled within the SSD. Instead, companies can create an optimized software interface to handle those functions, based on applications they run. This can help reduce the cost of SSD deployment and enable accelerated development of hardware and software deployments in the datacenter.

LITE-ON has not announced a forthcoming product built on Project Denali but is investigating the possibilities and may have more to disclose after the specification is finalized in a few months.

In addition to sharing its latest Denali results during FMS, LITE-ON is also demonstrating its upcoming AD2 NVMe M.2 PCIe SSD with 3D NAND technology, featuring CNEX's proprietary, advanced CNX-2670 controller that delivers an unrivaled 550,000 IOPS (input/output operations per second), a 25 percent performance increase from earlier M.2 form-factor SSDs. CNEX's PCIe SSD controllers offer the flexibility to support both NVMe and Open-Channel SSD technology, the latter of which will now be standardized within Project Denali by Microsoft and industry leaders.

LITE-ON will also tap FMS to reveal its first next-generation form factor, EDSFF (Enterprise & Datacenter SSD Form Factor), the AD3 16TB SSD. Designed for data centers and hyperscale environments the AD3 SSD provides improved manageability, serviceability, reduced power efficiency and lowers total cost of ownership.

To learn more about LITE-ON's next generation SSDs, please visit Flash Memory Summit 2018 booth #621 at the Santa Clara Convention Center August 7-9.

About LITE-ON Storage
A Strategic Business Group of LITE-ON Technology Corporation, LITE-ON Storage is a global leader in the design, development and manufacturing of Solid-State Drives (SSDs) for PC Client, Industrial Solutions, Automotive, Enterprise and Cloud Computing.

Available in a variety of interfaces and form factors to deliver the right product for the right application, LITE-ON SSD solutions are highly customizable using industry-leading key components. Designed for innovation, built for quality, and chosen for performance, all LITE-ON SSDs are 100 percent manufactured in-house utilizing state-of-the-art facilities in Taiwan. Additional information about LITE-ON can be found at: liteonssd.com

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