

Silicon Motion Enables the Highest Capacity and Highest Performance Enterprise SATA SSDs with release of SM2271 SSD Controller Solution

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Supporting up to 16TB of 3D QLC NAND, the SM2271 drives the most competitive Enterprise SATA SSD TCO.

SAN JOSE, Calif., March 14, 2019 /PRNewswire/ -- Silicon Motion Technology Corporation (NasdaqGS: SIMO) ("Silicon Motion"), a global leader in NAND Flash controllers and solid-state storage devices, today released the SM2271, a new SSD controller ASIC with a turnkey firmware stack which enables customers to accelerate the development of high-performance enterprise SATA SSDs with a maximum capacity of 16TB.

The SM2271 is a high-performance, 8-channel enterprise SATA SSD controller solution which supports the latest 3D TLC and QLC Flash technologies. It exploits the full potential of the SATA interface, achieving a maximum Sequential Read speed of 540 MB/s and Sequential Write speed of 520 MB/s.

The SM2271 combines enterprise-level endurance, support for high SSD capacity, and high performance for Read-intensive workloads while enabling users to maintain their existing SATA storage infrastructure for a low total cost of ownership. Providing more consistent latency than client SSDs for more reliable data Write and Read operation, the SM2271 is the ideal platform for new SATA SSD designs intended to replace lower-performance HDDs in enterprise storage, data center and industrial storage systems.

Sophisticated physical Flash media management and data integrity functions in the SM2271 ensure that the SSD performs reliably and has a long operating lifetime. Data integrity is safeguarded by end-to-end data path protection and advanced data handling firmware/software. Silicon Motion's 6th generation proprietary NANDXtend® technology, which integrates error recovery functionality with a machine learning algorithm, prolongs data retention to improve QoS during life time.

Data security is safeguarded by the provision of AES 256-bit encryption, secure boot, and full compliance with the Trusted Computing Group (TCG) Opal specification.

"The SM2271 is Silicon Motion's latest enterprise SSD controller, enabling customers to get to market quickly with new 16TB, high performance SATA SSDs that feature 3D TLC or QLC Flash from any of the major NAND Flash manufacturers," said Nelson S. Duann, Senior Vice President of Marketing and R&D at Silicon Motion. "It incorporates our latest enterprise innovations including our 6th generation NANDXtend® technology for data retention extension, end-to-end data protection and comprehensive security while providing the industry's best QoS consistency."

Silicon Motion provides a complete SSD reference design kit that includes turnkey FW minimizing development time and investment. Features include:

- Support latest 3D TLC/QLC; up to 16TB Capacity
- Consistent IOPs and predictable QoS latency
- End-to-end data protection SRAM/DRAM ECC
- Data retention extension with NANDXtend
- Self-encrypting drive (SED) with AES-256 and TCG Opal
- Secure Boot Support

The SM2271 controller, turnkey firmware and reference design is currently being sampled to key partners and is on display in the Silicon Motion private meeting room at the 2019 OCP Global Summit in San Jose, California on March 14.

About Silicon Motion:

We are the global leader in supplying NAND flash controllers for solid state storage devices and the merchant leader in supplying SSD controllers. We have the broadest portfolio of controller technologies and our controllers are widely used in embedded storage products such as SSDs and eMMCs+UFS, which are found in smartphones, PCs, commercial and industrial applications. We have shipped over six billion NAND controllers in the last ten years, more than any other company in the world. We also supply specialized high-performance hyperscale data center and industrial SSD solutions. Our customers include most of the NAND flash vendors, storage device module makers, and leading OEMs. For further information on Silicon Motion, visit us at www.siliconmotion.com.

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