Silicon Motion Unveils Next-Generation Ultra-Fast, Single-Chip Controller for High-Density Portable SSDs, Ideally Suited for Next-Generation AI Smart Devices and Gaming Consoles

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New SM2322 controller supports the latest QLC NAND, providing capacities up to 8TB with 2000ips data transfer speed.

TAIPEI and MILPITAS, Calif., May 28, 2024 (PRNewswire) – Silicon Motion Technology Corporation (NasdaqGS: SIMO) ("Silicon Motion"), a global leader in designing and marketing NAND flash controllers for solid-state storage devices, today launched the SM2322, the industry's fastest single-chip high-performance, low-power, and cost-effective solution for external portable SSDs, supporting up to 8TB of storage and achieves unparalleled data transfer rates of 2000ips for storing and accessing large amounts of content seamlessly from AI smartphones, high-performance multimedia devices, and game consoles.

With the increase of AI-capable devices, high density and high-performance storage solutions are becoming more critical to consumers. Portable SSDs powered by the new SM2322 controller are the only solution that offers low-cost, high-density and high-performance, making it the ideal solution for these applications. Equipped with a USB 3.2 Gen 2x2 interface with 2000ips bandwidth and fully integrated hardware and software solution delivering peak sequential read and write transfer speeds of 2,100MB/s and 2,000MB/s, respectively, with up to 8TB capacity, SM2322 powered high-performance portable SSDs enable an ultra-compact and lightweight form factor. The SM2322 supports the Profiles Serial and MPI specification for iPhone users while also being compatible with Windows®, Android OS ™, and macOS®, making it an ideal high-density, high-performance portable storage solution for AI smartphones, HD-content creation, and gaming enthusiasts who require high-density, high-performance portable storage.

By eliminating the USB bridge chip required in traditional designs, the single-chip solution reduces both the Bill of Materials (BOM) costs and power consumption. The new SM2322 upgrades external portable SSDs with higher performance and larger capacity using Silicon Motion's proprietary NANDXtend® dual LDPC error-correction technologies to improve the endurance and data retention of 3D TLC/QLC NAND. It provides comprehensive data integrity through SMART ECC and end-to-end data path protection. In addition, the SM2322 delivers the highest level of data security by providing AES 256-bit encryption, fingerprint security, and full compliance with the Trusted Computing Group (TCG) Opal specification to meet the high-security standards.

"The proliferation of AI smartphones and handheld gaming devices has exponentially increased the demand for managing large digital video and photographic content," said Nelson Duarte, Senior VP of Client & Automotive Storage Business at Silicon Motion. "AI inference will generate extensive data, making high-capacity storage even more important. The new SM2322 now sets the bar even higher, introducing enhancements to support the higher speed USB3.2 specifications and providing greater capacity, catering to the needs of the AI era for large-scale digital media content storage and access."

Numerous portable SSDs are already powered by Silicon Motion's SM2322 are commercially available today from ADATA, Crucial, HP, Kingston, Lexar, Transcend, Xiaomi, Seagate LaCie, etc. The SM2322, the newest generation of our highly successful portable SSD controller family, raises the bar with exceptional performance and reliability, utilizing advanced features and proven technology, making it a top choice for new portable storage solutions.

The SM2322 is sampling to multiple customers now and will enter mass production in mid-2024. More information about SM2322 controller can be found at www.siliconmotion.com.

About Silicon Motion

We are the global leader in supplying NAND flash controllers for solid-state storage devices. We supply more SSD controllers than any other company in the world—for servers, PCs and other client devices—and are the merchant market leader in controllers for eMMC/UFS mobile embedded storage used in smartphones, IoT and other applications. We also supply customized high-performance hyperscale data center and specialized industrial and automotive SSD solutions. Our customers include most of the NAND flash vendors, storage device module makers and leading OEMs. For further information about Silicon Motion, visit us at www.siliconmotion.com.

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