

Silicon Motion Expands its portfolio of PCIe NVMe SSD controller solutions at the 2017 Flash Memory Summit

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New turnkey controller solutions offer the broadest range of performance, cost and form factor for consumer and industrial/embedded applications

MILPITAS, Calif., Aug. 8, 2017 /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 announced the availability of the industry's broadest portfolio of merchant turnkey SSD (solid state disk) controller solutions, including the new ultra-high speed SM2262EN and SM2262 for client, the SM2263 for mainstream and the SM2263XT DRAM-less controller, which supports the BGA form factor.

With the new SM2262 and SM2263 series, Silicon Motion provides PCIe G3 x 4 Lanes NVMe 1.3 controllers while supporting the latest 3D NAND from the main flash manufacturers. The SM2262EN, an ultra-high performance SSD controller solution, delivers peak sequential read and write transfer speeds of up to 3,500 MB/s and 3,000 MB/s, respectively, and random read and write IOPS of up to 370,000 and 300,000. The SM2263 is targeted at mainstream client applications and features sequential read and write speeds of up to 2,400 MB/s and 1,700 MB/s respectively. The SM2263XT, a DRAM-less controller solution, reduces BOM cost and form factor without compromising performance while enabling 11.5mmx13mm BGA SSDs ideally suited for 2-in-1 systems, chromebooks and mobile devices.

"Demand for ultra-high performance and reliability is growing as PCIe NVMe SSDs are becoming the standard across a wide range of market sectors, from data centers and cloud services to small form factor client devices and industrial, automotive applications," said Wallace C. Kou, President and CEO of Silicon Motion. "Silicon Motion is leading the field in the drive to create next-generation controller solutions that not only meet today's needs, but will fulfil the requirements of the world's leading technology manufacturers far into the future."

The expanded line-up of turnkey SSD controller solutions meets the full range of market requirements, from high-end, high-performance enterprise SSDs to compact SSDs embedded in portable devices and robust SSDs for use in industrial and automotive applications. These new SSD controllers from Silicon Motion support the latest 3D NAND products from all the main NAND Flash manufacturers and are supplied with a complete suite of SSD controller firmware, providing customers with the assurance of a rapid time to market with new SSD products. All the controller solutions incorporate unique Silicon Motion technologies including end-to-end data path protection, SRAM ECC (error correction code), NANDXtend[™] technology, and offer high performance with low power consumption.

For Ultra high speed solutions: SM2262EN and SM2262 PCle Gen3 x 4 Lanes NVMe 1.3 SSD controllers

The SM2262 series offers the ultimate performance for demanding client applications. The SM2262 controllers are supplied with a comprehensive suite of controller firmware for easy integration into SSD product designs. With state-of-the-art low-power design, the SM2262EN and SM2262 deliver ultra-low power consumption whether in low power or active states.

Both the SM2262EN and SM2262 offer four lanes of 8Gb/s PCIe data flow and eight NAND channels. The SM2262EN devices offer a lightning-fast maximum sequential read speed of 3.5GB/s and sequential write speed of 3.0GB/s.

For mainstream and small form factor high performance solutions: SM2263 and SM2263XT PCIe Gen3 x 4 Lanes NVMe 1.3 SSD controllers

Silicon Motion also meets the requirements of mainstream and compact client SSDs with the new SM2263 and SM2263XT, which feature four 8Gb/s lanes of PCIe traffic and four NAND channels, and are supplied with a comprehensive suite of firmware.

The SM2263XT supports DRAM-less designs enabling SSD manufacturers to produce compact 11.5mm x 13mm BGA SSDs at a lower BoM cost, as well as supporting the Host Memory Buffer (HMB) architecture. The DRAM-less SM2263XT maintains an impressive 2.4GB/s maximum sequential read speed, and a maximum 1.7GB/s sequential write speed.

All the new SSD controllers are in volume production now. More information about Silicon Motion SSD controllers may be found at www.siliconmotion.com

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	SM2263	SM2263XT	SM2262	SM2262EN
Host Interface	PCIe Gen3 x4	PCIe Gen3 x4	PCIe Gen3 x4	PCIe Gen3 x4
PCIe Protocol	NVMe 1.3	NVMe 1.3	NVMe 1.3	NVMe 1.3
NAND Flash Channel	4	4	8	8
CE/Channel	4	4	4	4
DRAM	Yes	no DRAM	Yes	Yes
Max. Performance				_
Seq. Read	2400 MB/s	2400 MB/s	3200 MB/s	3500 MB/s
Seq. Write	1700 MB/s	1700 MB/s	1900 MB/s	3000 MB/s
Random Read	300K IOPS	280K IOPS(HMB)	370K IOPS	370K IOPS
		140K IOPS(no HMB)		
Random Write	250K IOPS	250K IOPS	300K IOPS	300K IOPS

About Silicon Motion:

We are the global supply leader of NAND flash controllers for solid state storage devices and the merchant supply leader of SSD controllers. We have the broadest portfolio of controller technologies and solutions and have shipped over five billion NAND controllers, more than any other company in the world. Our controllers are widely used in embedded storage products such as SSDs and eMMCs which are found in smartphones, PCs and industrial and commercial applications. We also supply specialized high-performance enterprise 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 <u>www.siliconmotion.com</u>.

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