

STEC Showcases New Integrated ZeusIOPS SSD ASIC Architecture

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With 6GB SAS and FC, up to 1.6TB

STEC, Inc. announced an integrated ASIC architecture for its ZeusIOPS enterprise-class SSD family making them more cost-efficient.

The ZeusIOPS SSD ASIC architecture was demonstrated at Flash Memory Summit and offers an array of options optimized for enterprise system architects that includes 6GB SAS and FC interfaces, as well as a range of capacities supporting up to 1.6TB of user accessible storage.

The new ASIC-based ZeusIOPS SSD product family, based on three previous generations of ZeusIOPS SSD, combines high-performance with cost efficiencies that support enterprise applications. The overall ZeusIOPS SSD cost has been reduced by moving to a customized ASIC controller that intelligently manages the growing complexities associated with shrinking NAND flash memory geometries.

In addition, the ASIC controller has been designed to utilize NAND process geometries of either 3X or 2X nanometers, providing more functionality in a smaller footprint, as well as reducing overall device cost and power consumption.

ZeusIOPS SSDs enable server and storage systems to reach the IOPS performance required for today's demanding data center and virtualization requirements. They provide long-lasting reliability, increase server utilization and reduce the TCO in the data center by delivering a high-performance drop-in replacement for enterprise HDDs. SAS and FC interfaces support 2.5-inch and 3.5-inch form factors, with future products to support 1.8-inch form factors.

"ZeusIOPS SSDs have led the way in enabling businesses to access critical data in the enterprise, overcoming the performance bottlenecks inherent with traditional rotating HDD storage media, and now we provide an even more cost-effective design with our new ASIC architecture," said Manouch Moshayedi, STEC's Chairman and CEO. *"Data is money in today's economy and our new ASIC-based ZeusIOPS SSD family delivers high-performance, advanced wear-*

leveling, and exceptional data integrity, at a cost that is unmatched in the industry."

Supporting high throughput for enterprise storage and server platforms, the transactional performance of ASIC-based ZeusIOPS SSDs exceeds 120,000/70,000 sustained IOPS with sequential large block transfers of up to 500 Megabytes per second.

To improve the endurance and reliability of its ZeusIOPS SSD MLC flash-based architecture, STEC's CellCare and Secure Array of Flash Elements (S.A.F.E.) technologies have also been further advanced. CellCare utilizes adaptive flash access, signal processing, data management algorithms and error correction codes to improve ZeusIOPS SSD endurance and can handle intensive workloads of up to 10 full capacity writes per day for over five years without limiting ZeusIOPS SSD performance. S.A.F.E. technology eliminates virtually all failures associated with both SLC and MLC flash, providing yet another mechanism to reduce ZeusIOPS SSD failures.

This new generation of cost-effective, ASIC-based ZeusIOPS SSDs is sampling to key customers.