

STEC intro industry's highest endurance enterprise-class SSD

By Anthony Garreffa, Storage News

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STEC have just unveiled a new SSD at the Server Design Summit today, dubbed ZeusIOPS XE. ZeusIOPS XE is the industry's highest endurance enterprise-class MLC flash-based SSD which is an extension to their flagship ZeusIOPS SSD family and enables at least 30 full capacity writes per day, every day, for five years.



Impressive, isn't it? STEC's CellCare technology is the behind-the-scenes driver that when applied to MLC flash, extends the performance, endurance and reliability of the ZeusIOPS EX drives.

The drive can fully write roughly 33 Petabytes of data over the working life of a 600GB drive, which is how it works out to 30 times per day over five years. Where STEC's CellCare technology comes in is with its unique ability to measure and manage the wear of the drive using adaptive flash management algorithms and advanced signal processing techniques.

MLC flash wears out faster over time if it is not monitored and managed, where CellCare technology dynamically and proactively manages the way the flash wears throughout the life of the drive. CellCare also uses advanced error correction code (ECC) techniques that enable higher protection against media errors and also improves SSD endurance for write-intensive workloads without limiting the performance of the SSD drive itself.

STEC's Vice President of Technical Marketing, Scott Stetzer, says:

"Our new ZeusIOPS XE SSD solution is a direct response to the growing customer demands for ultra-high endurance solutions that address high write activities associated with caching and logging applications. "We've engineered our new ZeusIOPS XE MLC flash-based drives to deliver extended enterprise endurance for the demanding write-intensive applications and provide our OEM customers with a superior choice for a cost-effective enterprise-class SSD that they can rely on."

The ZeusIOPS XE drives are offered in capacities of 300 and 600GB, and feature a 6Gbps Serial-Attached (SAS) interface. Performance-wise, we can expect both the 300 and 600GB drives to support 500MB/sec sustained read performance backed up with 275MB/sec sustained write. Up to 115,000 IOPS for read operations and up to 70,000 IOPS for write operations. 38,000 IOPS for 8K random read/write operations.