

A Closer Look at SSD Data Integrity Requirements - Session 201

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Summary

With the vast improvement in both sequential and random read performance from SSDs compared to HDDs, it is critical that SSDs component vendors step up and improve their ECC and data reliability by orders-of-magnitude. Data integrity is especially important when considering SSDs based on commodity MLC NAND flash technologies. This presentation will examine what level of data integrity checking and correction is really required for SSDs today (taking into consideration varying enterprise and consumer workloads), and what the future requires given the increasing pace of performance improvements SSDs are expected to deliver.

Biography

Andy Tomlin is responsible for all software and firmware development for the company. Andy has over 20 years of storage firmware and software experience and has several flash storage systems patents that have been granted or are in process. Prior to SandForce, Andy was Sr. Director of Firmware, Software and Memory Systems at SanDisk where he was responsible for all Sandisk's Flash management design and implementation. Prior to that, he held senior manager positions at Quantum, Maxtor and IBM. Andy earned his Bachelor of Engineering in Special Engineering Programme from Brunel University, England.

About SandForce

SandForce, Inc., is transforming data storage by pioneering the use of commodity flash memory in enterprise and mobile computing applications with its innovative SSD (Solid State Drive) Processors. By delivering unprecedented reliability, performance and energy efficiency, SSDs based on patent-pending SandForce DuraClass™ technology unleash the full potential for mass-market adoption of SSDs based on NAND flash media. Founded in 2006, SandForce is funded by leading venture capital investors and first tier storage companies.