

Skyera Set to Dramatically Change Enterprise Flash Adoption Landscape

Company unveils 44 terabytes in a 1u form factor for under \$3 per gigabyte native capacity; less than \$1 a gigabyte with compression and deduplication

San Jose, Calif. – August 14, 2012 --[Skyera Inc.](#), founded by an executive and engineering team with unsurpassed backgrounds in the solid-state, storage and networking arenas, today unveiled the company's Skyhawk series of enterprise solid-state storage systems based entirely on low cost 19/20 nanometer Multi Level Cell (MLC) NAND Flash. The compact half-depth 1u form factor sports a staggering 44 terabytes of high performance, low latency native capacity for the most demanding Big Data, analytics and virtualization applications. And, at a system price of under \$3 per gigabyte – before compression and deduplication – the company envisions a sea change in the solid-state playing field.

Extending the life amplification of consumer-grade MLC Flash was an exciting challenge for the experienced engineering team that had already delivered world class flash controllers. Only a ground-up, system-wide approach to the design, development, and integration of all components in the technology stack – including the flash controller, RAID controller, storage blades, communication bus and network interface – could yield the 100 times life amplification required to exceed enterprise reliability and endurance.

“The ‘norms’ of solid-state storage have seen much change and improvement over the last few years” said Mark Peters, Senior Analyst at ESG, “But Skyera’s flagship product introduction challenges even the best of those new ‘norms’ and looks set to be a true game changer. Its compact, high capacity form, together with impressive longevity and – most notably and unapologetically – a dramatically-attractive price, promise to change the storage landscape; users who thought they could not afford solid-state are simply going to have to revise their thinking.”

Industry Firsts

Penetration in the mainstream enterprise storage market can be fueled by the latest generation of low cost 19/20nm consumer-grade MLC Flash. However, today's flash controllers are simply not able to compensate for the limited write cycles of this new technology. Skyera is the first company to remove the barrier to life amplification without compromising the reliability, durability and performance demands for enterprise storage.

Skyera's Flash controller leverages proprietary algorithms to dynamically tune the partitions during the lifetime of the Flash, allowing the controller to adapt to different Flash behavior as the media ages. The Skyera controller reduces damage that the flash oxide layer typically experiences on writes. With lower write amplification, adaptive ECC, and tight integration with Skyera's RAID technology, the life of consumer-grade MLC is extended to a market-leading five years of enterprise usage. Additionally, the flexibility of the Skyera architecture enables the controller and ECC to adapt to future generations of higher-capacity Flash memory that will require different write parameters and more powerful error correction.

Tackling the Network Bottleneck

Higher performing solid-state systems can easily saturate the 10-Gigabit iSCSI channel between the network switch and the storage array. By combining switch with storage via a high-speed proprietary bus, Skyera has eliminated this bottleneck while simplifying data access. With 40 1-Gigabit and 3 10-Gigabit Ethernet ports, servers can connect via traditional Ethernet switches or directly to the flash storage without the cost and latency of an external switch or the consolidated storage network connection in the data path.

Skyera will be demonstrating their Skyhawk enterprise solid-state storage system at the upcoming Flash Memory Summit, August 21st to 23rd in Santa Clara, CA.

For more information or to arrange an evaluation, contact Skyera at (408) 954-8100, or via email at sales@skyera.com.

About Skyera

Skyera Inc. is an emerging provider of enterprise solid-state storage systems designed to enable a large class of applications with extraordinarily high performance, exceptionally lower power consumption at the lowest cost relative to existing enterprise storage systems. Founded by the executives who previously developed the world's most-advanced flash memory controller, Skyera is backed by key technology and financial partnerships designed to position it at the forefront of the hyper growth in the solid state storage sector. The company was featured in the Gartner report "Cool Vendors in Storage Technologies, 2012."