JetStor Brings Flash Storage to a Broad Audience

JetStor® storage arrays offer real-world solutions to small- and medium-sized businesses (SMBs), large enterprises, state and local governments, schools and universities, and military units. Based in Pittsburgh, Pennsylvania, Advanced Computer and Network Corp (AC&NC)—which designs and manufactures the JetStor product line—offers a portfolio of self-contained storage solutions that are built on industry-standard platforms and major software releases from independent software vendors (ISVs).

Solution Focus
- JetStor 1600S
- Optimus Eco™, Optimus Ascend™, and Optimus Extreme™ SSDs

Benefits
- Customized high-performance storage systems
- Rapid ROI
- Faster IOPS
- Increased performance

SanDisk Products
The following is a partial list of JetStor storage solutions that deploy leading SATA SSD drives from SanDisk:

- **JetStor NAS 1600S** unified storage system stores up to 96TB per 3U unit and 384TB with three JBODs

- **JetStor 716iS/iSD** iSCSI IP SAN RAID array stores up to 96TB per 3U unit and 384TB with three JBODs

- **JetStor 764F/FD** V2 single/dual controllers 64-bay Fibre Channel RAID array supplies up to 384TB in a 4U unit

- **JetStor SAS 760iS/iSD** single/dual controllers 60-bay high density storage array stores up to 360TB per 4U unit

AC&NC brings reliable, customized, high-performance storage systems to a wide variety of businesses—offering intelligent storage solutions with embedded RAID controllers that provide redundancy and reliability to protect customer data. The company's solid-state drive (SSD)-based solutions provide high-performance storage capacity—scaling up to 480TB when used with JBODs—and are housed in a single rack.

For more than 25 years, SanDisk has been transforming digital storage with breakthrough products and ideas. SanDisk's flash memory technologies are used by many of the world's largest data centers, and are trusted by enterprises and end users around the world. From handheld devices to hyper-scale data centers, SanDisk is expanding the possibilities of flash storage.

JetStor includes SanDisk's SSDs in JetStor storage arrays due to their ability to store more data in a smaller footprint than for HDD-based solutions. When data center space is at a premium, using high-density SanDisk SSDs supports IT efficiency and delivers higher performance for most workloads.

The Challenge
Organizations today are coping with the data demands from big data, cloud computing, social media, and mobility workloads. As more IT systems are updated to support these industry megatrends, it is more vital than ever to have storage systems that keep pace with the data tsunami that is flooding many

organizations. Importantly, these storage devices must manage—and protect—data throughout the data lifecycle.

The Solution
Data is at the core of the JetStor storage systems—from initial storage, to support for storage-centric workloads, to backup/restore capabilities to ensure that all data is always protected. Placing data in secure, high-performance storage systems—and managing the data throughout the entire data path—are absolutely essential to the specifications of JetStor RAID arrays.

JetStor storage solutions address a wide range of industry- and company-specific workloads, including: Business Processing (OLTP, ERP, CRM); Decision Support; and High-Performance Computing (HPC). Among the biggest workloads addressed by JetStor systems are: Virtual Desktop Infrastructure (VDI) for centrally managed and secure virtual desktops; video production and video surveillance systems; databases; and enterprise applications.

Customized RAID-based Storage Systems: A Key Differentiator
Customized storage solutions that support industry-specific or organization-specific requirements differentiate JetStor products from competitors in the marketplace. Every JetStor solution is custom-designed to meet the customer's specific application requirements, including mean time between failure (MTTF), mean time to

repair (MTTR), quality of service (QoS) and high availability (HA) specifications.

Flexibility in deployment styles is also supported: JetStor storage systems offer a selection of connectivity standards, including SAN (Fibre Channel or iSCSI); SATA; SAS; or NAS connectivity with multiple host ports for parallel-path performance or clustered environments. JetStor systems engineers pre-certify the industry's best-of-class SAS, SATA and SSD drives to ensure outstanding reliability. The customization provided by JetStor supports the IT requirements of organizations that are looking for high-performance business systems at competitive prices.

"Our customers seek the capacity of SanDisk's SSDs in our JetStor arrays because they'll store more data in less space than was possible before," said Gene Leyzarovich, president of AC&NC. "Where data center space is limited, the high-density SanDisk SSDs inside our storage products support IT efficiency and deliver high performance for the most important applications and databases. For SMBs, universities, and public-service agencies, the ability to pack more data into less space is an efficient approach to IT that provides very real business value."

A case in point is the JetStor 1600S storage solution. The 16-drive capacity of the JetStor 1600S, along with additional JBODs, allows it to store a maximum of 384TB, making it suitable for enterprise-level usage. The interface that the 1600S provides allows users to easily create storage shares, to set permissions, and to check the status of RAID, the CPU (central processing unit), and to check the system temperature at a glance. The 1600S, equipped with SanDisk SSDs, saw significant performance gains when outfitted with the Optimus Eco, Optimus Ascend, and Optimus Extreme SSDs—and when configured in RAID10 or RAID50 iSCSI.

Why SanDisk?

JetStor selected SanDisk SSDs for their versatility, capacity, and support for a broad range of industry-standard interfaces. All of these characteristics make it easier for JetStor to quickly configure a storage array with flash and to support multi-system computer rooms filled with servers from many different vendors.

Equally important is the range of software features that JetStor supplies for its flash storage solutions. AC&NC touts the ability of the new JetStor arrays to support data compression and deduplication, snapshots, thin provisioning, and unified authentication. The units are compatible with environments using VMware, Citrix Systems Xen, Microsoft Hyper-V, Unix, Windows, and Apple OS.

The Result

Scalability, reliability, and cost-effectiveness are all central to JetStor-designed storage arrays. Today's organizations have rising expectations regarding the quality of performance, availability, and reliability that are required for today's business processes. Deploying SanDisk SSDs has provided customers with more rapid return on investment (ROI), faster IOPS (I/O operations per second), better reliability, and increased performance and speed.

Based on its long years of experience, AC&NC understands that customers' storage-based solutions must process and maintain the business- and mission-critical data that support business operations. JetStor products are guaranteed for up to five years of constant use, addressing any concerns about reliability and endurance of flash-based storage.

JetStor's selection of SanDisk as an SSD partner exemplifies its commitment to customize powerful storage systems for ever-changing data requirements. This approach to providing storage systems ensures that customers will gain the advantages of the JetStor product line's evolving functionality, as new demands for better and faster systems emerge.

The JetStor 1600S solution allows our customers to support many more concurrent web users than ever before, while guaranteeing that their databases are always ready to process the most demanding workloads.

Gene Leyzarovich
AC&NC CEO

Contact Information

ESS.channelsales@sandisk.com
ESS.OEMsales@sandisk.com
businesspartners@sandisk.com

SanDisk Americas
951 SanDisk Drive
Milpitas, CA 95035-7933, USA
T: 1-866-744-2165

SanDisk Europe, Middle East, Africa
Unit 100, Airside Business Park
Swords, County Dublin, Ireland
T: 1-866-744-2165

SanDisk Asia Pacific
Suite C,D,E, 23/F, No. 918 Middle
Huahai Road, Jiu Shi Renaissance Building
Shanghai, 20031, P.R. China
T: 1-866-744-2165

For more information, please visit:
www.sandisk.com/enterprise

SanDisk®

At SanDisk, we're expanding the possibilities of data storage. For more than 25 years, SanDisk's ideas have helped transform the industry, delivering next generation storage solutions for consumers and businesses around the globe.

951 SanDisk Drive | Milpitas | CA 95035 | USA