



Press Release  
**FOR IMMEDIATE RELEASE**

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**SMART Modular Technologies Announces Enterprise Class PCI Express Storage Solution**

*Delivering 140K random IOPS performance and 200x power reduction, the new 400GB XceedIOPS PCIe raises the bar in next-generation solid-state storage.*

NEWARK, CA, June 1, 2009 - SMART Modular Technologies (WWH), Inc. ("SMART" or the "Company") (NASDAQ: SMOD), a leading independent manufacturer of memory modules, solid-state drives, embedded computing subsystems, and TFT-LCD display products, has collaborated with Marvell® (NASDAQ: MRVL), a leader in storage, communications, and consumer silicon solutions, to develop SMART's XceedIOPS PCIe solid-state storage solution, the first in a line of products that targets the growing storage market for enterprise applications.

Addressing the top two concerns in enterprise storage today, power and performance, the solid-state design of SMART's XceedIOPS PCIe reduces overall data-center power loading while eliminating the bottlenecks created by differences between the processor bandwidth and performances in rotating storage devices. Featuring a full-height, half-length PCI card form factor, the XceedIOPS PCIe connects directly to any computer platform equipped with an eight-lane or higher PCI Express (PCIe) 2.0 slot.

**Performance, Reliability, and Flexibility**

The XceedIOPS PCIe product achieves fast, reliable performance through industry-standard Flash and DRAM combined with Marvell's PCIe controller devices. SMART's innovative packaging, manufacturing, design, and test capabilities provide a highly reliable, cost-effective, and efficient solution. The new product exploits the 32Gb/s bandwidth of the PCIe interface (8x faster than 4Gb Fiber Channel and 5x faster than SATA 3.0) to deliver industry-leading 140,000 random small block IOPS performance. Offering up to 400GB of single-level cell (SLC) Flash-based solid-state storage, the new solution features exceptional reliability due to state-of-the-art Flash management algorithms and advanced wear-leveling techniques. OEMs that require more flexibility can take advantage of the fine granularity configurability of the XceedIOPS PCIe, which can be populated with two, four, or eight storage nodes with 24GB or 50GB addressable capacity per storage node. This flexibility allows OEMs to configure the optimal storage solution, trading off performance and cost in order to best satisfy the needs of a particular application.

In today's market, enterprise and server-class data center applications that require more than 100,000 IOPS, such as multi-million record databases, social network services, and search engines, are becoming very common. In order to satisfy the operational requirements of these applications, hundreds of short-stroked, enterprise-class hard disk drives (HDDs) are often assembled in an expensive and power-hungry rack-based storage node. Now, the same workload can be fulfilled by a single SMART 400GB XceedIOPS PCIe with the additional benefits of reduced power consumption and higher reliability. For instance, to achieve 140,000 IOPS, a traditional design would require 466 HDDs. Operating at 15,000 RPM and 14.7W, this approach would then require 6850W, as compared to a single XceedIOPS PCIe, which requires 25W. As a result, OEMs selecting the XceedIOPS PCIe can realize a 200x power reduction.

**Growing Market**

The worldwide revenue forecast for enterprise solid-state drive (SSD) storage is expected to increase at a CAGR of 78% from 2009 to 2012, according to IDC. In addition, IDC projects that 2010 revenue for SSD sales will increase by 132% from 2009, up to \$382 million.<sup>1</sup> "SMART and Marvell have collaborated on research and development, product technology, packaging, and logistical expertise to manufacture and deliver products that address the enterprise storage market," said Alan Gulachenski, SMART's Vice President of Advanced Memory Solutions. "Marvell is the industry leader in data storage silicon solutions, and we lead the market in delivering innovative memory and solid-state storage products."

<sup>1</sup> Source: IDC, Worldwide Solid State Drive 2009–2012 Forecast Update, Doc # 216054, Jan 2009

"This collaboration provides both companies with an excellent opportunity to better serve the changing needs of OEMs as they address the enterprise storage and computing marketplace," said Alan Armstrong Vice President of Marketing of the Storage Business Unit for Marvell Semiconductor. "Marvell's vast experience and leadership in storage silicon products is enabling a solution that exceeds the requirements of today's customers."

Through this new partnership, SMART will continue to leverage Marvell's industry-leading storage controller chips for integration into solid-state storage products, while Marvell will benefit from SMART's operational expertise, global footprint, customer relationships, customer support framework, and technical experience developing storage products. The companies expect to announce additional storage and memory products later this year. For more information on SMART's embedded storage solutions, visit [www.smartm.com](http://www.smartm.com).

Sampling in Q3, the XceedIOPS PCIe will be available in production volumes beginning in Q4. SMART will showcase its new XceedIOPS PCIe solid-state storage solution in the Marvell booth (M1319a) at the Computex Show to be held at the Nangang Exhibition Hall in Taipei, Taiwan, from June 2 – 6, 2009.

#### **About SMART**

SMART Modular Technologies is a leading provider of memory products, offering more than 500 standard and custom products to top-tier OEMs in the computer, industrial, networking, and telecommunications sectors. Taking innovations from the design stage through manufacturing and delivery, SMART has developed a comprehensive memory product line that includes DRAM, SRAM, and Flash in various form factors. Through its subsidiary, Adtron Corporation, SMART offers high performance, high capacity solid-state drives for enterprise, defense/aerospace, industrial automation, medical, and transportation markets. SMART's Display and Embedded Products Group designs, manufactures and sells thin film transistor (TFT) liquid crystal display (LCD) solutions to customers developing casino gaming systems as well as embedded applications such as kiosk, ATM, point-of-service, and industrial control systems. SMART's presence in the US, Europe, Asia, and Latin America enables it to provide its customers with proven expertise in international logistics, asset management, and supply-chain management worldwide. More information on SMART can be obtained at [www.smartm.com](http://www.smartm.com).

#### **Forward-Looking Statements**

Statements contained in this press release, that are not statements of historical fact, including any statements that use the words "will," "believes," "anticipates," "project," "estimates," "expects," "intends" or similar words that describe the Company's or its management's future plans, objectives, or goals, are "forward-looking statements" and are made pursuant to the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include those related to the Company's business strategies and product plans, the timing of product and sample availability, the market for the Company's products, product performance, and customers' cost savings.

Such forward-looking statements involve known and unknown risks, uncertainties and other factors that could cause the actual results of the Company to be materially different from the historical results and/or from any future results or outcomes expressed or implied by such forward-looking statements. Factors that would cause or contribute to such differences include, but are not limited to, design, production or manufacturing difficulties, competitive factors, new products and technological changes, fluctuations in product prices and raw material costs, dependence upon third-party vendors, customer demand, changes in industry standards or release plans, and other risks detailed in the Company's periodic report filings with the Securities and Exchange Commission, including the Company's Form 10-K for the fiscal year ended August 29, 2008, Form 10-Q for the fiscal quarter ended November 28, 2008, and Form 10-Q for the fiscal quarter ended February 27, 2009. Such risk factors as outlined in our periodic report filings may not constitute all factors that could cause actual results to differ materially from those discussed in any forward-looking statement.

The Company operates in a continually changing business environment and new factors emerge from time to time. The Company cannot predict such factors, nor can it assess the impact, if any, from such factors on the Company or its results. Accordingly, forward-looking statements should not be relied upon as a prediction of actual results. The Company is not obligated to revise or update any forward-looking statements in order to reflect events or circumstances that may arise after the date of this press release.

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