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**TOSHIBA INTRODUCES TWO 1.8-INCH HARD DISK DRIVE FAMILIES  
FOR BOTH HIGH PERFORMANCE AND LONG BATTERY LIFE  
IN MOBILE COMPUTING APPLICATIONS**

*New 1.8-inch SATA HDDs Demonstrate Leadership  
in Capacity, Power Consumption and Areal Density*

**IRVINE, Calif., November 4, 2009** – Toshiba Storage Device Division (SDD), a division of Toshiba America Information Systems, Inc. and the industry pioneer in small form factor hard disk drives (HDDs), today announced new additions to its 1.8-inch Serial ATA HDD product line, covering the full range of mobile computing applications. The introductions include a high-performance 5,400 RPM family, offering an industry-leading 320GB<sup>1</sup> capacity, as well as a power-efficient, slim 4,200 RPM model with 120GB of storage for applications that require low-power consumption and an ultra-compact form factor.

Toshiba has designed these 1.8-inch HDD products to meet a variety of mobile computing needs based on specific market requirements. With high capacity and top-end performance, the **MKxx33GSG** series is available in 320GB, 250GB and 160GB capacities and uses 42 percent less power during seek operations than best-in-class 5,400 RPM 2.5-inch HDDs. The single-platter 120GB, **MK1235GSL** is the most power-conservative HDD on the market and offers a high-capacity, low 5-millimeter profile for battery-conscious ultra-mobile computers.

Significantly surpassing 2.5-inch HDDs in durability, Toshiba's 1.8-inch HDDs can tolerate up to 1,500Gs of non-operational shock and 500Gs of operational shock, which are 50 percent and 25 percent more durable than the most rugged 2.5-inch HDDs. As a result of this

extreme ruggedness, 1.8-inch HDDs have been incorporated into some of the most demanding applications for shock and vibration.

“Toshiba 1.8-inch HDDs provide a compelling solution for any application that demands extreme mobility along with the ability to reliably and quietly store large amounts of user content,” said Maciek Brzeski, vice president of marketing at Toshiba Storage Device Division. “As the market demands smaller devices, manufacturers can take advantage of the 1.8-inch form factor’s small footprint, low power consumption, light weight, proven durability and volume manufacturability. With these benefits, Toshiba 1.8-inch HDDs have served as the foundation for a variety of innovative consumer electronics and PC products that have continued to evolve and transform the market over the years.”

### ***High-Performance Solutions for Mobile Computing***

Designed for performance, the high-end SATA MKxx33GSG line provides speedy access to data with its 16MB cache buffer, 5,400 RPM rotational speed and disk transfer rates of up to 830 Mb/second. At 320GB, the highest-capacity model in the family can store up to either 90,000 digital photos, 84,000 digital music files or 260 downloaded digital videos<sup>2</sup> – all in a storage device about the size of a credit card.

Built on a technology platform utilizing 160GB per disk, this high-performance HDD family is ideally suited for thin-and-light mobile PCs, ruggedized mobile PCs, mini-notebooks and external add-on storage solutions.

### ***Cost-Effective, High-Capacity Storage***

The single-platter 120GB MK1235GSL offers a cost-effective solution for manufacturers looking to make the most of small form factor mobile applications. Its slim 5-millimeter and ultra-low power, 4,200 RPM design make the MK1235GSL SATA HDD an optimum choice for compact, power-efficient products, such as smartbooks, netbooks or battery-conscious mini-notebooks, as well as converged devices leveraging touch-screen technology.

***Solid Track Record for Interoperability and Reliability***

To ensure the highest level of interoperability with other host system components, both the MKxx33GSG and MK1235GSL HDDs have successfully completed strenuous verification testing by industry-designated SATA Interoperability Labs. As a result, these HDDs carry the certified SATA mark of compliance award issued by the Serial ATA International Organization, the industry committee governing the standards for SATA technologies and specifications.

Toshiba has a solid track record in delivering high-volume 1.8-inch HDD shipments. The company recently surpassed the 70 million unit shipment milestone and has consistently maintained the number one position in 1.8-inch HDDs, since entering the market in 2000. According to industry analyst firm IDC, Toshiba shipped more than 80 percent of 1.8-inch HDDs worldwide in the third quarter of 2009.

***Availability***

The MK1235GSL series is currently shipping in volume production, while the MKxx33GSG is scheduled to enter mass production in early December. For more information on Toshiba’s line of industry-leading small form factor hard drives, visit [www.toshibastorage.com](http://www.toshibastorage.com).

***Product Specifications***

<b>Model Number</b>	<b>MKxx33GSG</b>
<b>Maximum Capacity (Formatted)<sup>1</sup></b>	320GB / 250GB // 160GB
<b>Number of platters</b>	2 // 1
<b>Areal density (max)</b>	516 Gb/in <sup>2</sup>
<b>Media transfer rate (max)</b>	830 Mbps
<b>Average seek time</b>	15 ms
<b>Rotational speed</b>	5,400 RPM
<b>Buffer memory</b>	16 MB
<b>Interface</b>	Serial ATA 3.0Gb/s, Revision 2.6
<b>Interface transfer rate</b>	3 Gb/s
<b>External dimensions (WxDxH; mm)</b>	54.0 mm x 78.5 mm x 8.0 mm
<b>Weight (g)</b>	62g // 60g (max)

<b>Energy consumption efficiency</b>	0.0013 / 0.0016 // 0.0025 W/GB
<b>Shock resistance:</b> <b>Operating</b> <b>Non-operating</b>	4,900 m/s <sup>2</sup> (500G) 2ms 14,700 m/s <sup>2</sup> ( 1,500G) 1ms
<b>Acoustics:</b> <b>Idle</b> <b>Seek</b>	18 // 16 dB 19 // 17 dB

<b>Model Number</b>	<b>MK1235GSL</b>
<b>Maximum Capacity (Formatted)<sup>1</sup></b>	120GB
<b>Number of platters</b>	1
<b>Areal density (max)</b>	361.3 Gb/in <sup>2</sup>
<b>Media transfer rate (max)</b>	533 Mbps
<b>Average seek time</b>	15 ms
<b>Rotational speed</b>	4,200 RPM
<b>Buffer memory</b>	8 MB
<b>Interface</b>	Serial ATA 3.0Gb/s, Revision 2.6
<b>Interface transfer rate</b>	3 Gb/s
<b>External dimensions (WxDxH; mm)</b>	54.0 mm x 78.5 mm x 5.0 mm
<b>Weight (g)</b>	51g (max)
<b>Energy consumption efficiency</b>	0.0033 W/GB
<b>Shock resistance:</b> <b>Operating</b> <b>Non-operating</b>	4,900 m/s <sup>2</sup> (500G) 2ms 14,700 m/s <sup>2</sup> ( 1,500G) 1ms
<b>Acoustics:</b> <b>Idle</b> <b>Seek</b>	16 dB 19 dB

***About Toshiba Storage Device Division***

Toshiba is a one-of-a-kind global storage company, offering hard disk drives (HDDs), optical disk drives (ODDs), solid state drives (SSDs) and NAND flash memories – technologies that drive a wide range of consumer electronics, computer and automotive applications, as well as enterprise solutions for the global marketplace. Through its Storage Device Division, Toshiba leads in the development, design and manufacturing of mobile, retail and enterprise hard disk drives. Toshiba SDD markets high-quality peripherals to original equipment manufacturers, original design manufacturers, value-added resellers, value-added dealers, systems integrators, distributors and retailers worldwide. Inherent in the Toshiba storage family are the high-quality engineering and manufacturing capabilities that have established Toshiba products as innovation leaders worldwide. For more information, visit [www.toshibastorage.com](http://www.toshibastorage.com).

***About Toshiba America Information Systems Inc. (TAIS)***

Headquartered in Irvine, Calif., TAIS is comprised of four business units: Digital Products Division, Imaging Systems Division, Storage Device Division and Telecommunication Systems Division. Together, these divisions provide mobile products and solutions, including industry-leading portable computers; projectors; imaging products for the security, medical and manufacturing markets; storage products for automotive, computer and consumer electronics applications; and telephony equipment and associated applications.

TAIS provides sales, marketing and services for its wide range of information products in the United States and Latin America. TAIS is an independent operating company owned by Toshiba America, Inc., a subsidiary of Toshiba Corporation. Toshiba Corporation is a world leader and innovator in high technology, a diversified manufacturer and marketer of advanced electronic and electrical products. These products span from information & communications systems; digital consumer products; electronic devices and components; as well as power systems including nuclear energy; industrial and social infrastructure systems; and home appliances. Toshiba was founded in 1875, and today operates a global network of more than 730 companies, with 199,000 employees worldwide and annual sales surpassing US \$67 billion (FY 2008). For more information on Toshiba's leading innovations, visit the company's Web site at [www.toshiba.com](http://www.toshiba.com).

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1. One Gigabyte (1 GB) means  $10^9 = 1,000,000,000$  bytes using powers of 10. A computer operating system, however, reports storage capacity using powers of 2 for the definition of  $1 \text{ GB} = 2^{30} = 1,073,741,824$  bytes, and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system. Examples of the number of photos, songs, movies, and any other files that can be stored on a hard drive are provided for illustrative purposes only. Your results will vary based on file size and format, settings, features, operating system, software and other factors.
2. Examples of the number of photos, songs, movies, and any other files that can be stored on a hard drive are provided for illustrative purposes only. Results will vary based on file size and format, settings, features, operating system, software and other factors.