

Media Inquiries: Rachel Austin Waggener Edstrom Worldwide (512) 527-7018 raustin@waggeneredstrom.com

## TOSHIBA ANNOUNCES LARGEST CAPACITY AUTOMOTIVE-GRADE HARD DRIVE IN THE WORLD

The MQ01AAD032C 320GB HDD broadens Toshiba's industry-leading automotive drive portfolio

**IRVINE, Calif.** — **June 26, 2013** — The Storage Products Business Unit of Toshiba America Electronic Components, Inc., announces the world's largest capacity automotive-grade hard disk drive (HDD), the Toshiba MQ01AAD032C 320GB<sup>1</sup> SATA automotive HDD. As part of the Toshiba MQ01AADxxxC series, the MQ01AAD032C drive addresses the auto industry demand for higher capacity HDDs, which allows for improved in-vehicle user experience, as well as facilitates a growing range of on-board technological applications and functions.

As the industry's highest capacity single platter automotive-grade HDD, the MQ01AAD032C addresses the needs of telematic infotainment applications where proven reliability, performance and capacity are required. Each drive is optimized to handle temperature variations of  $-22^{\circ}$  to  $+185^{\circ}$ F while in operation and handle  $-40^{\circ}$  to  $+203^{\circ}$ F during non-operating. With aerodynamic technology in the magnetic head slider, the drive series can withstand altitudes up to 18,536 feet (higher than any city in the world) while in operation, and withstands up to 3G (29.4m/s<sup>2</sup>) vibration tolerance<sup>2</sup> during operation.

Toshiba, the leader in the automotive-grade HDD industry, works in partnership with premier automotive manufacturers to provide best-in-class storage devices that can withstand severe road conditions, the growing quantities of data

<sup>&</sup>lt;sup>1</sup> Definition of capacity: Toshiba defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of  $1GB = 2^{30} = 1,073,741,824$  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, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

<sup>&</sup>lt;sup>2</sup> Operating swept sine vibration tolerance of 8-50 Hz. See specification for details.

embedded in a vehicle's system, and users' demands for constant connectivity to stream high-definition movies and update their navigation systems simultaneously.

"Consumers demand excellence in their technology, and in-vehicle computing systems are not different," said Joel Hagberg, vice president marketing, Toshiba Storage Products Business Unit. "We continue to partner with the automotive industry to develop the most innovative and effective storage solutions possible to meet the needs of the automotive customer."

With 320GB<sup>3</sup> of storage, the drive's 4,200 RPM speed offers high internal transfer rates of up to 976 Mbit/s using an average seek time of 12ms. The drive also offers silent seek operation and uses the minimum amount of power without compromising performance.

For more information on Toshiba's industry-leading automotive HDDs, visit <u>www.toshibastorage.com</u>. To connect with Toshiba Storage, visit the corporate blog at <u>http://storage.toshiba.com/corporateblog</u> and follow <u>@ToshibaStorage</u> on Twitter.

###

Model Number	MQ01AAD032C
Maximum Capacity (Formatted) <sup>1</sup>	320GB <sup>2</sup>
Number of Platters	1
Number of Heads	2
Average Seek Time	12 ms
Interface	ATA8/Serial ATA 2.6
Interface Transfer Rate	3 Gbit/s
<b>Rotational Speed</b>	4,200 rpm
External Dimensions (WxDxH; mm)	69.85 mm x 100.0 mm x 9.5 mm
Weight (g)	105 g

## **Specifications**

<sup>&</sup>lt;sup>3</sup> Definition of capacity: Toshiba defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of  $1GB = 2^{30} = 1,073,741,824$  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, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

Temperature:	
Operating	$-30 - +85^{\circ}C$
Non-operating	-40 - +95°C
Shock resistance:	
Operating	2,940m/s <sup>2</sup> {300G} (2.0ms, 1/2sine)
Non-operating	7,840/s <sup>2</sup> {800G} (1.0ms, 1/2sine)
Atmosphere Pressure:	
Operating	-300 to 5,650m
Non-operating	-300 to 12,000m
Vibration:	
Operating	29.4m/s² {3G} (8-50Hz)
Non-operating	49m/s² {5G} (10-500Hz)

## **About Toshiba Storage Products**

Toshiba Corporation and its affiliates offer one-of-a-kind global storage solutions, offering hard disk drives (HDDs), 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. Toshiba is a leader in the development, design and manufacture of mobile, consumer and enterprise hard disk drives and solid state drives. In North America, the Storage Products Business Unit of Toshiba America Electronic Components, Inc., markets high-quality storage peripherals to original equipment manufacturers, original design manufacturers, value-added resellers, value-added dealers, systems integrators and distributors 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 <u>www.toshibastorage.com</u>.

## About Toshiba Corp. and Toshiba America Electronic Components, Inc. (TAEC)

Through proven commitment, lasting relationships and advanced, reliable electronic components, Toshiba enables its customers to create market-leading designs. Toshiba is the heartbeat within product breakthroughs from OEMs, ODMs, CMs, VARs, distributors and fabless chip companies worldwide. A committed electronic components leader, Toshiba designs and manufactures high-quality flash memory-based storage solutions, solid state drives (SSDs), hard disk drives (HDDs), discrete devices, advanced materials, medical tubes, custom SoCs/ASICs, imaging products, microcontrollers and wireless components that make possible today's leading smartphones, tablets, MP3 players, cameras, medical devices, automotive electronics, enterprise solutions and more.

Toshiba America Electronic Components, Inc. is an independent operating company owned by Toshiba America, Inc., a subsidiary of Toshiba Corporation, Japan's largest semiconductor manufacturer and the world's fifth largest semiconductor manufacturer (Gartner, 2012 Worldwide Semiconductor Revenue, April, 2013). Toshiba Corporation was founded in 1875 and today has over 554 subsidiaries and affiliates, with 210,000 employees worldwide. Visit Toshiba's web site at www.toshiba.co.jp/index.htm.

© 2013 Toshiba America Electronic Components, Inc. All rights reserved. All product, service and company names are trademarks, registered trademarks or service marks of their respective owners. Information in this press release, including product pricing, availability and specifications, content of services and contact information, is current and believed to be accurate on the date of the announcement, but is subject to change without prior notice. Technical and application information contained here is subject to the most recent applicable Toshiba product specifications.