

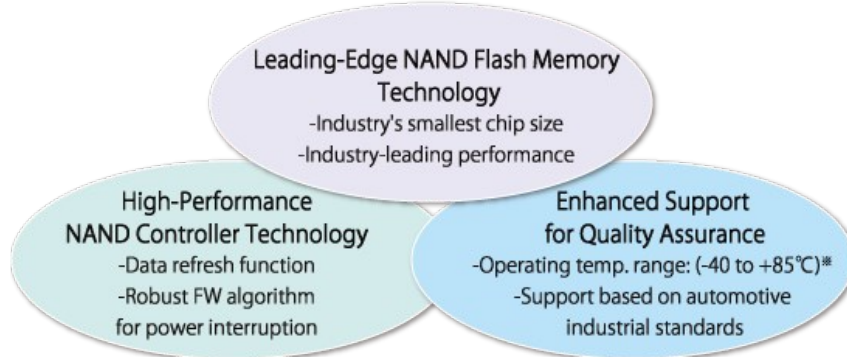
- ▶ Sales Contacts
- ▶ Product Inquiries
- ▶ Stock Check

(*)Display audio, car navigation system, in-vehicle infotainment system and others are collectively called automotive infotainment systems.



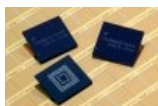
Capacity	e-MMC™	SD / microSD memory card	HDD
320GB	—	—	✔
200GB	—	—	
100GB~	※1	—	
64GB		※2	—
32GB	✔	✔	—
16GB			—
~8GB			—

※2: SD / microSD 64GB : Under study



※: Operating temp. for SD/microSD memory card: (-30 to +85°C)

Toshiba e-MMC™ for Automotive Infotainment Systems



- ▶ De facto standard of embedded storage
- ▶ Optimize for automotive infotainment

"e-MMC" is the trademark of JEDEC/MMCA.

Capacity	Part Number	e-MMC Version	Max. Speed (MB/s)	Power Supply Voltage		Operating Temperature (°C)	Package
				Vcc (V)	VccQ (V)		
128GB	Under study						
64GB							
32GB	THGBMAG8B4JBAAM	4.5	200	2.7 to 3.6	1.7 to 1.95, 2.7 to 3.6	-40 to +85	FBGA169
16GB	THGBMAG7B2JBAAM						
8GB	THGBMAG6A2JBAAR						FBGA153
4GB	THGBMAG5A1JBAAR						

↑ Arriba

Toshiba SD / microSD memory card for Automotive Infotainment Systems



- ▶ Removable storage
- ▶ Including data refresh function, robust FW algorithm for power interruption and reliability test commands

Capacity	Part Number	SD Physical Layer Version	Max. Speed (MB/s)	Power Supply Voltage Vcc (V)	Operating Temperature (°C)	Card Type
64GB	Under study					SD
						microSD
32GB	THNSR032GBA5KC	3.01	45	2.7 to 3.6	-30 to +85	SD
	THNSR032GBB5KG					microSD
16GB	THNSR016GBA5KB					SD
	THNSR016GBB5KF					microSD
8GB	THNSR008GBA5KA					SD
	THNSR008GBB5KE					microSD

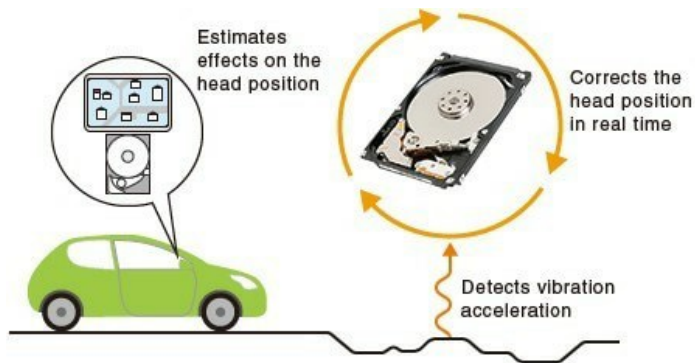
↑ Arriba

Toshiba HDDs for Automotive Infotainment Systems



- ▶ Toshiba HDD(MQ01AADxxx) are designed for the demanding automotive environments and applications. The rugged design of the MQ01AADxxx enables optimized operation at higher altitudes, greater temperature ranges and vibrational conditions compared to normal HDDs for PCs (MQ01ABD series). The MQ01AADxxx is available in capacities up to 320 GB.
- ▶ Automotive HDDs: Improving Vibration Resistance Technologies
 The HDD detects vibration acceleration applied to it when the vehicle drives over a bumpy road. Such HDDs feature a control technology to estimate effects on the head positions based on the detected acceleration level and are thus able to correct head positions in real

time.



Capacity	Model Number	Rotation Speed (rpm)	Interface	Operating Temperature (°C)	Dimensions
320GB	MQ01AAD032C	4,200	Serial ATA 2.6 / ATA8 3.0 Gbit/s, 1.5 Gbit/s	-30 ~ +85	69.85mm(Width) × 100.0mm(Length) × 9.5mm(Height), 109g Max.(Weight)
200GB	MQ01AAD020C				
100GB	MQ01AAD010C				

➤ For details, visit [the Automotive HDD product page](#).

➤ 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 1,000,000,000,000 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.

↑ Arriba

The products shown herein are intended for automotive infotainment applications.

Contact your Toshiba sales representative for consultation about unintended applications and the test conditions for the quality of respective products.

Related pages

➤ [Storage Solutions for Automotive Information & Entertainment Systems](#)

➤ [Productos de almacenamiento \(HDD\)](#)

- [HDD para empresas \(eHDD\)](#) Updated
- [HDD para clientes \(cHDD\)](#) Updated
- [Especializados](#) Updated
- [Asistencia sobre garantía](#)

Contactos

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