

Specialty

MK8050GACE / MK6050GACE / MK4050GACE

	MK8050GACE	MK6050GACE	MK4050GACE
Basic Specifications			
Interface	ATA-3 / ATA-4 / ATA-5 / ATA-6 / ATA-7		
Interface Speed	100 MB/s		
Formatted Capacity	80 GB	60 GB	40 GB
Logical Data Block Length (HOST)	512 B		
Logical Data Block Length (DISK)	512 B		
Environmental Compliance	RoHS Compatible		
Performances			
Buffer Size	8 MiB		
Rotation Speed	4,200 rpm		
Average Latency Time	7.14 ms		
Reliability			
Unrecoverable Error Rate	1 per 10 ¹³ bits read		
Power Requirements			
Supply Voltage	5 V ±5 %		
Power Consumption (Read / Write)	2.0 W Typ.		
Power Consumption (Low Power Idle)	0.8 W Typ.		
Dimensions			
Height	9.5 mm		
Width	69.85 mm		
Length	100.0 mm		
Weight	98 g Max.		
Environmental Requirements			
Temperature (Operating)	-20 to 70 °C		
Temperature (Non-operating)	-40 to 95 °C		
Humidity (Operating)	5 to 90 % R.H.		
Humidity (Non-operating)	5 to 95 % R.H.		
Altitude (Operating)	-300 to 5,500 m		
Altitude (Non-operating)	-300 to 12,000 m		
Vibration (Operating)	29.4 m/s ² { 3.0 G } (5 to 50 Hz) 19.6 m/s ² { 2.0 G } (50 to 200 Hz) 9.8 m/s ² { 1.0 G } (200 to 500 Hz)		
Vibration (Non-operating)	49 m/s ² { 5.0 G } (10 to 500 Hz)		
Shock (Operating)	2,940 m/s ² { 300 G } (2 ms half sine)		
Shock (Non-operating)	7,840 m/s ² { 800 G } (1 ms half sine)		
Acoustics (Sound Power)			
Idle	22 dB		
Seek	26 dB		

- ▶ Product image may represent design model.
- ▶ 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 = 2³⁰ = 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.
- ▶ A kibibyte (KiB) means 2¹⁰, or 1,024 bytes, a mebibyte (MiB) means 2²⁰, or 1,048,576 bytes, and a gibibyte (GiB) means 2³⁰, or 1,073,741,824 bytes.
- ▶ Toshiba Semiconductor & Storage Products Company defines "RoHS-Compatible" products as products that either (i) contain no more than a maximum concentration value of 0.1% by weight in Homogeneous Materials for lead, mercury, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) and of 0.01% by weight in Homogeneous Materials for cadmium; or (ii) fall within any of the application exemptions set forth in the Annex to the RoHS Directive (Directive 2011/65/EC of the European Parliament and of the Council of 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment). "Homogeneous Material" means a material of uniform composition that cannot be mechanically disjoined (meaning separated, in principle, by mechanical actions such as unscrewing, cutting, crushing, grinding and/or abrasive processes) into different materials. Examples of "Homogeneous Materials" would be individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins and coatings.
- ▶ Read and write speed may vary depending on the host device, read and write conditions, and file size.
- ▶ "2.5-inch" and "3.5-inch" mean the form factor of HDDs or SSDs. They do not indicate drive's physical size.
- ▶ Energy Consumption Efficiency: Energy consumption efficiency is calculated based on power consumption divided by formatted capacity, as defined by Japanese law.