

SATA 320/250/160/120/80GB

2.5-Inch Hard Disk Drives

Market-Leading Capacity

High-Performance

Durability



MK3254GSY
MK2554GSY
MK1654GSY
MK1254GSY
MK8054GSY

The MKxx54GSY series is Toshiba's newest, top-on-the-line, 7,200 RPM hard disk drive offering which spans capacities ranging from 320 to 80GB. The drive combines superior quality and performance in a mobile platform geared for data-intensive and productivity-sensitive environments such as gaming, multimedia, entertainment as well as office applications.

With the MKxx54GSY, Toshiba continues its corporate initiative in providing environmentally conscious solutions through the integration of a printed circuit board assembly that is completely free of halogens. Usage of MKxx54GSY drives can also reduce operating power consumption by as much as 70 percent over even the most power-conservative 3.5-inch hard disk drives, without compromising valuable storage space.

- Up to 320GB¹ of Storage Capacity
- 7200 RPM Spin Speed
- Superior Performance
- Serial ATA 3.0 Gbps and Extended SATA Features
- 16MB Cache Buffer For User Data
- Optional Free Fall Sensor

Hard Drive

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Leading Innovation >>>

Specifications

		MK3254GSY (HDD2E41)	MK2554GSY (HDD2E42)	MK1654GSY (HDD2E43)	MK1254GSY (HDD2E44)	MK8054GSY (HDD2E45)
Series Overview	Interface	SATA Gb/s Serial ATA 2.6				
	Capacity	320GB ¹	250GB ¹	160GB ¹	120GB ¹	80GB ¹
	Number of Platters	2	2	1	1	1
	Number of Data Heads	4	4	2	2	1
	RoHS Compatible ²	Y	Y	Y	Y	Y
Performance	Max Transfer Rate to Host	3Gb/s				
	Media Transfer Rate (max)	434 - 1020 Mbits/sec				
	Rotational Speed	7200 RPM				
	Average Latency	4.16				
	Buffer ³	16MB				
	Track-to-track Seek Time	2ms				
	Average Seek Time	10.5ms (Read)/12ms (Write)				
	Load/Unload Cycles	600,000				
	Logical Block (LBA)	625,142,448	488,397,168	312,581,808	234,441,648	156,301,488
	Power Requirements	Voltage	5V ±5%			
Energy Consumption Efficiency ⁴		0.0028W/GB	0.0036W/GB	0.0056W/GB	0.0075W/GB	0.0113W/GB
Spin-up		5.5watts				
Seeking		2.2watts				
Reading		1.9watts				
Writing		1.9watts				
Active Idle		1.2watts				
Low Power Idle		0.9watts				
Standby		0.18watts				
Sleep		0.13watts				
Dimensions/Weight	Height	0.37" (9.5mm)				
	Width	2.75" (69.85mm)				
	Depth	3.94" (100mm)				
	Weight	4.02oz (114g)		3.88oz (110g)		
Environmental	Operating Temperature	41 - 131°F (5 to 55°)				
	Non-Operating Temperature	-40 - 148°F (-40 to 60°)				
	Operating Humidity	8 - 90% R.H.				
	Non-Operating Humidity	8 - 90% R.H.				
	Operating Vibration	1.0G (5-500 Hz)				
	Non-Operating Vibration	5.0G (15-500 Hz)				
	Operating Shock	300G/2.0ms				
	Non-Operating Shock	900G/1.0ms				
Acoustics	Idle Mode (Average)	2.5Bels	2.5Bels	2.0Bels	2.0Bels	2.0Bels
	Seek Mode (Average)	2.8Bels	2.8Bels	2.5Bels	2.5Bels	2.5Bels

- One Gigabyte (1 GB) means 10⁹ = 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 GB = 2³⁰ = 1,073,741,824 bytes, and therefore shows less storage capacity. Available storage capacity will also be less if the computer includes one or more pre-installed operating systems, pre-installed software applications, or media content. Actual formatted capacity may vary.
- RoHS Compatible: This product is compatible with European Union Directive 2002/95/EC. Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), which restricts use of lead, cadmium, mercury, hexavalent chromium, PBB, and PBDE.
- Buffer space available to the user.
- Energy consumption efficiency is calculated based on power consumption divided by formatted capacity, as defined by Japanese law.

Subject to Change: While Toshiba has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice.

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