



## MC04ACA Series

Hard Disk Drives 2TB / 3TB / 4TB / 5TB\* 3.5-Inch / 7,200 RPM / SATA

Toshiba MC Series hard disk drive (HDD) models provide enterprise-class features and capacities optimized for scale-out servers and storage workloads. Providing a balance between high-capacity and performance, the Toshiba MC Series is ideal for moderate-workload cloud data centers, and for scale-out storage and replicated data environments.

- Affordable High Capacity storage for moderate workload use cases
- High capacity per spindle for improved storage density and reduced cost of ownership
- 7200rpm performance
- Vibration Compensation technology
- 180TB per year workload rating
- SATA 6Gbs interface performance



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	MC04ACA200E	MC04ACA300E	MC04ACA400E	MC04ACA500E
Series Overview				
Drive Capacity	2TB*	3TB*	4TB*	5TB*
Drive Interface	SATA-2.6/3.0 <sup>+</sup>			
Transfer Rate to Host	1.5 Gb/sec, 3.0 Gb/sec, 6.0 Gb/sec†			
Bytes per sector (HOST)	512 B/sector			
Bytes per sector (DISK)	4,096 B/sector			
Performance				
Rotational Speed	7,200 RPM†			
Average Latency	4.17 ms			
Sustained transfer rate (Max.)	140 MiB/s	150 MiB/s	150 MiB/s	170 MiB/s
Buffer Size	128 MiB			
Power Requirements				
Voltage	+5V (+/- 5%), 12V (+/- 5%)			
Read/Write Power	11.3 watts			
Low Power Idle	6.0 watts (Typ.)			
Physical Size				
Dimensions (W)x(D)x(H)	101.6 mm x 147 mm x 26.1 mm			
Weight	720 g Max.			
Environmental				
Temp - Operating	5 to 55°C			
Temp - Non-Operating	-40 to 70°C			
Humidity - Operating	5 to 90% R.H. (No condensation)			
Humidity - Non-Operating	5 to 90% R.H. (No condensation)			
Vibration - Operating	7.35 m/s $^2$ {0.75G} (5300Hz, linear) or less 2.45 m/s $^2$ {0.25G} (300500Hz, linear) or less			
Vibration - Non-Operating	49 m/s² {5G} (5500Hz) or less			
Shock - Operating	$686 \text{ m/s}^2 \{70G\} $ (2ms duration)			
Shock - Non-Operating	2,940 m/s <sup>2</sup> {300G} (2ms duration)			
Altitude - Operating	-305 to 3,048m			
Altitude - Non-Operating	-305 to 12,192m			
Reliability				
MTTF	800,000 hours			
Availability (hrs/day x days/wk)				
Load/Unload	180 TB/year			

Limited Warranty years is for the United States and Canada only. Warranty terms in other counties may be different. For more information visit http://storage.toshiba.com/storageservices-support/technical-support/warranty.

\*One Terabyte (1TB) = 1,000 Gigabytes (GB). One Gigabyte (1GB) 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  $1GB = 2^{30} = 1,073,741,824$  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.

†Read and write speed may vary depending on the host device, read and write conditions, and file size.

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