

HDD



Product image may represent a design model.

## ► DT01ACAxxx SERIES DESKTOP HDD

### ► KEY FEATURES

- Up to 3 TB of Data Storage Capacity
- 3.5-inch, Low Profile Form Factor
- 7,200 rpm
- SATA up to 6.0 Gbit/s
- Advanced Format (AF) 512e Sector Length

### ► APPLICATIONS

- Consumer Desktop Computers

### ► MAIN SPECIFICATIONS

Model Number	DT01ACA300	DT01ACA200	DT01ACA100	DT01ACA050		
Interface	Serial ATA 3.0 / ATA-8					
Formatted Capacity	3 TB	2 TB	1 TB	500 GB		
Performance	Interface Speed	6.0 Gbit/s Max.				
	Rotation Speed	7,200 rpm				
	Average Latency Time	4.17 ms				
	Buffer Size	64 MiB	32 MiB			
Logical Data Block Length	DT01ACAxxx	HOST: 512 B, DISK: 4,096 B				
Supply Voltage	Allowable Voltage	5 V ± 5% 12 V ±10 %				
Power Consumption	Read / Write	6.4 W Typ.				
	Idle	5.2 W Typ.	3.7 W Typ.			
Acoustics (Sound Power)	Idle	27 dB	25 dB			
	Seek	28 dB	26 dB			

### ► RELIABILITY

Model Number	DT01ACAxxx
Non-recoverable Error Rate	1 error per $10^{14}$ bits read

### ► MECHANICAL SPECIFICATIONS

Model Number	DT01ACAxxx
Height	26.1 mm Max.
Width	101.6 ± 0.25 mm
Length	147 mm Max.
Weight	680 g Max.
	450 g Max.

## ► ENVIRONMENTAL LIMITS

Item		Specification	
Temperature	Operating	0 °C to 60 °C	
	Non-Operating	- 40 °C to 70 °C	
Humidity	Operating	8 % to 90 % R.H. (No condensation)	
	Non-Operating	5 % to 95 % R.H. (No condensation)	
Shock	Operating	686 m/s <sup>2</sup> {70 G} (2 ms half sine wave)	
	Non-Operating	2,940 m/s <sup>2</sup> {300 G} (2 ms half sine wave )	3,430 m/s <sup>2</sup> { 350 G } (2 ms half sine wave)
Vibration	Operating	6.57 m/s <sup>2</sup> { 0.67 G } ( 5 to 500 Hz )	
	Non-Operating	10.2 m/s <sup>2</sup> { 1.04 G } ( 2 to 200 Hz )	
Altitude	Operating	- 300 m to +3,048 m	
	Non-Operating	- 300 m to +12,000 m	

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.

A kibibyte (KiB) means  $2^{10}$ , or 1,024 bytes, a mebibyte (MiB) means  $2^{20}$ , or 1,048,576 bytes, and a gibibyte (GiB) means  $2^{30}$ , or 1,073,471,824 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 disjointed (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.

Toshiba Semiconductor & Storage Products Company defines halogen-free and antimony-free SSD and HDD products as those meeting all of the following requirements: (a) containing bromine (Br) and chlorine (Cl) at no more than 900 parts per million (ppm) by weight for each element, and containing bromine and chlorine in an aggregate amount not exceeding 1500 ppm by weight; and (b) containing no more than 1000 ppm antimony (Sb) by weight. For the avoidance of doubt, Halogen-Free/Antimony-Free SSD or HDD products may not be entirely free of bromine, chlorine, or antimony, and may contain other element of the halogen family.

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.

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, and availability are all subject to change without notice.

Before creating and producing designs and using, customers must also refer to and comply with the latest versions of all relevant TOSHIBA information and the instructions for the application that Product will be used with or for.