



# SSD Q300 Pro



# Dangerously fast

Looking for an added boost of performance? With the Toshiba Solid State Drive Q300 Pro there's virtually no speed limit. Whether you want to go full throttle with your games, video and graphics editing or dream of lightning fast booting times, Toshiba's 2-bitper-cell SSD technology puts you in the fast lane. Even at the highest speeds, you'll enjoy incredibly low power consumption. Unlike hard drives, an SSD has no mechanical parts, removing noise and adding endurance. Your data is kept safe and secure with famous Toshiba quality and reliability built in.



Give yourself a boost The SSD Q300 uses 2-bitper-cell flash to maximise storage capacity, without sacrificing speed. Your system will be more responsive than ever.



#### Longevity guaranteed

Speed is great, but speed with endurance is even better. We are so confident of the longevity, we back it up with a 5 year warranty.



Get in the fast lane Designed to optimise your computing and efficiency, the trailblazing Q300 Pro Series SSDs leverage premium Toshiba 2-bit-per-cell NAND flash.



Toshiba's original error correction technology The unique combination of QSBC<sup>™</sup> ECC and patrol read, that checks constantly for data deterioration, makes sure that data integrity is kept at the highest levels.



#### Keep your cool The SSD runs quieter, smoother and more efficiently than traditional storage. It resists shock better and operating noise is lower.

### toshiba.eu/storage

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## Specifications and Performance

Part number:	SSD - Q300 Pro - 1024GB: HDTSA1AEZSTA SSD - Q300 Pro - 512GB: HDTSA51EZSTA
	SSD - Q300 Pro - 256GB: HDTSA25EZSTA
Storage memory:	15nm 2-bit-per-cell NAND flash
Available capacities:	1024GB, 512GB, 256GB
Controller:	Toshiba TC358790
Interface:	SATA III (6.0Gbit/s, backwards compatible with 3.0Gbit/s and 1.5Gbit/s)
Max. transfer rate:	6.0Gbit/s
Sequential Read Speed	
(measured with lometer):	Up to 550MB/s
Sequential Write Speed	Up to 520 MB/s (1024GB, 512GB)
(measured with lometer):	Up to 510 MB/s (256GB)
Random read speed	Up to 92,000 IOPS (1024GB, 512GB)
(measured with CrystalDiskMark 4.1.0, 4kiB, QD32):	Up to 90,000 IOPS (256GB)
Random write speed	Up to 63,000 IOPS (1024GB, 512GB)
(measured with CrystalDiskMark 4.1.0, 4kiB, QD32):	Up to 58,000 IOPS (256GB)
Advance Speed Technology:	Adaptive Size SLC Write Cache Technology
Error Correction Code (ECC):	QSBC <sup>™</sup> (Quadruple Swing-By Code)
Deterministic Zeroing TRIM Support:	yes and requires OS support
Native Command Queuing (NCQ):	yes
S.M.A.R.T support:	yes
Garbage collection:	yes
Read only mode:	yes
Patrol read:	yes
Thermal control:	yes
MTTF:	1.500.000 hours
Operating temperature:	0°C - 65°C
Non-Operating temperature:	-40°C - 85°C
Power consumption:	Active: 3.3W typ.
	ldle: 125mW typ.
Weight	53 - 54g typ.
Dimension:	100mm x 69.85mm x 7mm
TBW (Client endurance workload specified by JES-	1024GB: 640TB
D219A Solid-State Drive (SSD) Endurance Workloads):	512GB: 320TB
	256GB: 160TB
Cloning tool software:	NTI Echo 3 (migration software) by download
Utility tool software:	Toshiba Storage Utilities by download
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### Box Content

- Solid State Drive
- Spacer for 9.5mm applications
- Quick Start Guide
- Warranty Leaflet





### **Top features**

- 15nm 2-bit-per cell NAND flash memory
- Adaptive Size SLC Write Cache technology
- QSBC<sup>™</sup>: Toshiba original error correction technology
- Patrol Read
- Thermal control

## **Retail packaging**



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