TOSHIBA
Leading Innovation >>>

Dangerously fast

SSD Q300 Pro

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-bit-per-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-bit-per-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™ 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

SSD Q300 Pro

Specifications and Performance

Part number:	SSD - Q300 Pro - 512GB: HDTS451EZSTA SSD - Q300 Pro - 256GB: HDTS425EZSTA SSD - Q300 Pro - 128GB: HDTS412EZSTA
Storage memory:	2-bit-per-cell A19nm NAND Flash
Available capacities:	512GB, 256GB, 128GB
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 Iometer):	Up to 550MB/s
Sequential Write Speed (measured with Iometer):	Up to 520MB/s (512GB, 256GB) Up to 510MB/s (128GB)
Random read speed (measured with CrystalDiskMark 4.1.0, 4kiB, QD32):	Up to 92,000 IOPS (512GB, 256GB) Up to 91,000 IOPS (128GB)
Random write speed (measured with CrystalDiskMark 4.1.0, 4kiB, QD32):	Up to 63,000 IOPS (512GB, 256GB) Up to 59,000 IOPS (128GB)
Advance Speed Technology:	Adaptive Size SLC Write Cache Technology
Error Correction Code (ECC):	QSBC™ (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. Idle: 125mW typ.
Weight	49g - 53g typ.
Dimension:	100mm x 69.85mm x 7mm
TBW (Client endurance workload specified by JES-D219A Solid-State Drive (SSD) Endurance Workloads):	512GB: 320TB 256GB: 160TB 128GB: 80TB
Cloning tool software:	NTI Echo 3 (migration software) by download
Utility tool software:	Toshiba Storage Utilities by download

Box Content

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

Top features
- A19nm 2-bit-per cell NAND flash memory
- Adaptive Size SLC Write Cache technology
- QSBC™: Toshiba original error correction technology
- Patrol Read
- Thermal control

Retail packaging