

## Embedded Solutions

# 2.5" SATA III SSD SSD450K



With the combination of larger storage capacity and lower production costs, Transcend's 3D TLC SSDs are the game-changer to the market, delivering endurance equivalent to what MLC-based solutions once prided themselves with. Featuring a SATA III 6Gb/s interface and utilizing 3D NAND flash, the SSD450K is the ideal high-speed, lightweight, and shockproof replacement for traditional rotating hard drives, all while being extra cost-effective and brought to you at an attractive price. The Transcend SSD450K is built with DRAM cache for reliable speeds, outstanding cache performance and customized functions to cater to the requirements of various embedded applications.

## Features

- Advanced Global Wear-Leveling and Block management for reliability
- Advanced Garbage Collection
- DDR3 DRAM Cache embedded
- Built-in LDPC ECC (Error Correction Code) functionality
- Enhanced S.M.A.R.T. function
- Supports DEVSLP mode (optional)
- RoHS compliant
- Shock resistance
- Slim, elegant, and lightweight aluminum design
- Non-volatile Flash Memory for outstanding data retention
- Supports Trim and NCQ command

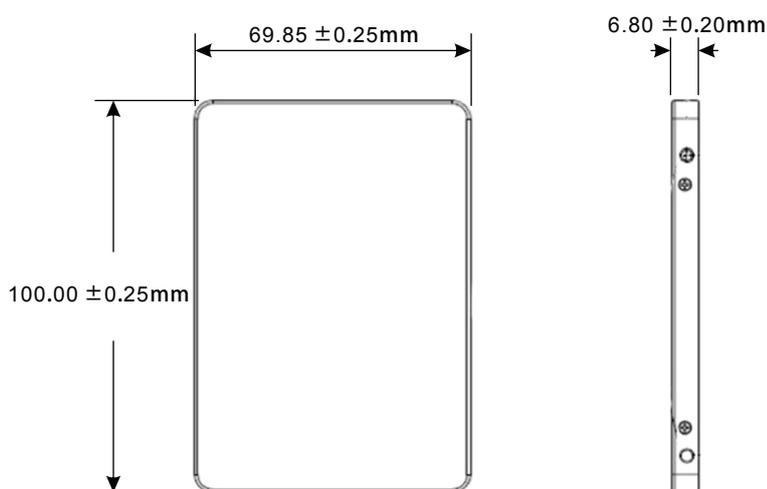
## Ordering Information

64GB	TS64GSSD450K
128GB	TS128GSSD450K
256GB	TS256GSSD450K
512GB	TS512GSSD450K
1TB	TS1TGSSD450K
2TB	TS2TGSSD450K

## Specifications

Appearance	Dimensions (Max.)	100 mm x 69.85 mm x 6.8 mm (3.94" x 2.75" x 0.27")
	Weight (Max.)	63 g (2.22 oz)
	Form Factor	2.5"
Interface	Bus Interface	SATA III 6Gb/s
Storage	Flash Type	3D TLC NAND flash
	Capacity	64 GB/128 GB/256 GB/512 GB/1 TB/2 TB
Operating Environment	Operating Voltage	5V±5%
	Operating Temperature	0°C (32°F) ~ 70°C (158°F)
	Storage Temperature	-40°C (-40°F) ~ 85°C (185°F)
	Humidity	5% ~ 95%
	Shock	1500 G, 0.5 ms, 3 axis
	Vibration (Operating)	20 G (peak-to-peak), 5 Hz ~ 800 Hz (frequency)
Power	Power Consumption (Operation)	3.2 watt(s)
	Power Consumption (Sleep)	0.5 watt(s)
Performance	Sequential Read/Write (ATTO, max.)	Read: 550 MB/s ; write: 520 MB/s
	Sequential Read/Write (CrystalDiskMark, max.)	Read: 550 MB/s ; write: 500 MB/s
	4K Random Read/Write (IOMeter, max.)	Read: 85,000 IOPS ; write: 85,000 IOPS
	Mean Time Between Failures (MTBF)	1,000,000 hour(s)
	Terabytes Written (Max.)	1,280 TB
	Drive Writes Per Day (DWPD)	0.58 (3 yrs)
	Certificate	CE/FCC/BSMI
Warranty	Warranty	Three-year Limited Warranty
Note	<ul style="list-style-type: none"> <li>• Speed may vary due to host hardware, software, usage, and storage capacity.</li> <li>• The workload used to rate DWPD may be different from your actual workload, which may vary due to host hardware, software, usage, and storage capacity.</li> </ul>	

## Mechanical Specification



Product specifications are subject to change without notice. Pictures shown may differ from actual products. When used as a storage capacity unit, one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. Due to the complexity and variety of industrial applications, Transcend cannot guarantee 100% compatibility with all platforms and under all scenarios. For special applications and environments, it is strongly suggested that you contact Transcend beforehand for clarification.



Please feel free to contact us with any special requests you might have.  
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