

## Embedded Solutions

# 2.5" SATA III SSD SSD450K-I

3K P/E cycles

Wide Temperature



Rated to endure 3K P/E cycles and featuring a SATA III 6Gb/s interface as well as 3D NAND flash, Transcend's SSD450K-I 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 SSD450K-I is built with DRAM cache for reliable speeds, outstanding cache performance and customized functions to cater to the requirements of various embedded applications. The SSD450K-I can also perform in a wide range of operating temperatures, and is fully tested in-house to guarantee sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

## Features

- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)
- 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 2.0 compliant
- Shock resistance
- Slim, elegant, and lightweight aluminum design
- Non-volatile Flash Memory for outstanding data retention
- Supports Trim and NCQ command

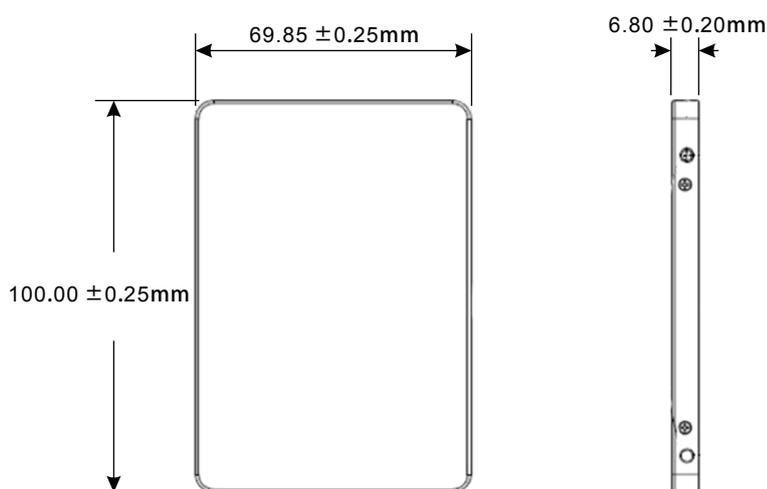
## Ordering Information

128GB	TS128GSSD450K-I
256GB	TS256GSSD450K-I
512GB	TS512GSSD450K-I

## 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	128 GB/256 GB/512 GB
Operating Environment	Operating Voltage	5V±5%
	Operating Temperature	-40°C (-40°F) ~ 85°C (185°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)	1.9 watt(s)
	Power Consumption (Sleep)	0.3 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: 520 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.)	880 TB
	Drive Writes Per Day (DWPD)	1.61 (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. 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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