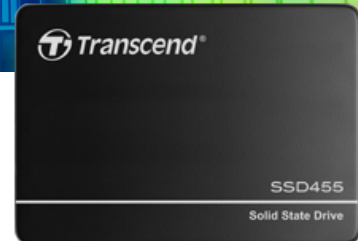


## Embedded Solutions



### 2.5" SATA SSDs

## SSD455K-I

Transcend's SSD455K-I 2.5" SSD features the SATA III interface and state-of-the-art 3D NAND technology, which allows 96 layers of 3D NAND flash chips to be vertically stacked. Compared to 3D NAND at 64 layers, this density breakthrough greatly improves storage efficiency. The SSD455K-I is built with DRAM cache for fast access, and is fully tested in-house to guarantee reliability in mission-critical applications, boasting an endurance rating of 3K Program/Erase cycles. The SSD455K-I is compliant with the TCG Opal 2.0 standards. Data is secured by encryption and hierarchical permission. It can operate in a wide temperature range(-40°C ~ 85°C). This ensures a sustained functionality, enhanced endurance, and optimal reliability in mission-critical applications.

### Hardware Features

- Compliant with RoHS 2.0 standards
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)
- DDR3 DRAM Cache embedded

### Firmware Features

- Dynamic thermal throttling
- Advanced Garbage Collection
- Advanced Global Wear-Leveling and Block management for reliability
- Power-saving DevSleep (Device Sleep) mode
- Compliant with TCG Opal specifications and IEEE 1667 standards

\*Supports Microsoft® eDrive standard

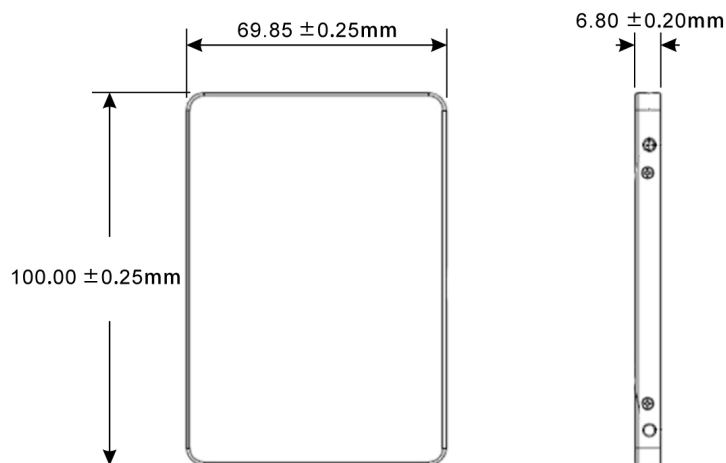
### Ordering Information

256GB	TS256GSSD455K-I
512GB	TS512GSSD455K-I
1TB	TS1TSSD455K-I

## Specifications

<b>Appearance</b>	Dimensions	100 mm x 69.85 mm x 6.8 mm (3.94" x 2.75" x 0.27")
	Weight	54 g (1.90 oz)
	Form Factor	2.5"
<b>Interface</b>	Bus Interface	SATA III 6Gb/s
<b>Storage</b>	Flash Type	3D NAND flash
	Capacity	256 GB / 512 GB / 1 TB
<b>Operating Environment</b>	Operating Voltage	5V±5%
	Operating Temperature	Wide Temp. -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), 7 Hz ~ 2000 Hz (frequency)
<b>Power</b>	Power Consumption (Operation)	3.3 watt(s)
	Power Consumption (Sleep)	0.5 watt(s)
<b>Performance</b>	Sequential Read/Write (CrystalDiskMark)	Read: up to 560 MB/s Write: up to 520 MB/s
	4K Random Read/Write (IOMeter)	Read: up to 90,000 IOPS Write: up to 85,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 1,760 TBW
	Drive Writes Per Day (DWPD)	1.61 (3 yrs)
<b>Warranty</b>	Certificate	CE / FCC / BSMI
	Warranty	Three-year Limited Warranty

## Mechanical Dimensions



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.