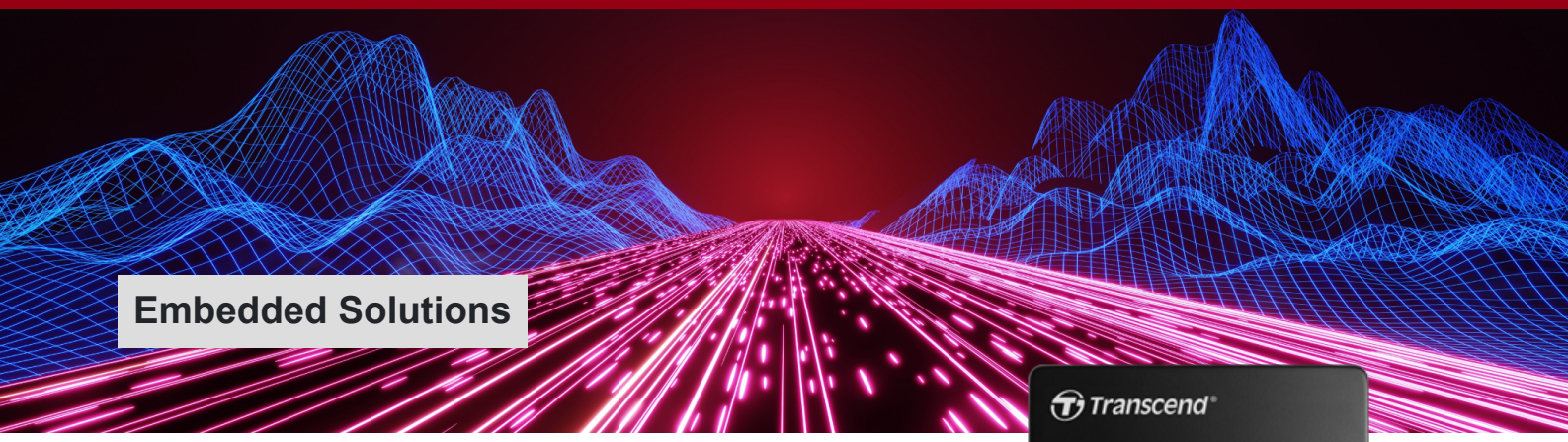
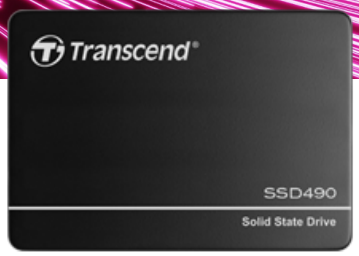




2.5" SATA & PATA SSDs

SSD490K & SSD490K-I

Transcend's SSD490K features the SATA III 6Gb/s interface and 218-layer 3D NAND technology. Its built-in DRAM cache allows faster data access. The SSD490K is fully tested in-house to guarantee reliability in mission-critical applications, boasting an endurance rating of 3K Program/Erase cycles and an extended operating temperature ranging from -20℃~75℃.

Transcend also offers the SSD490K-I with wide temperature (-40℃ ~ 85℃) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

Hardware Features

- DRAM Cache embedded
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Extended Temp. (-20°C ~ 75°C) and Wide Temp. (-40°C ~ 85°C) options available

Firmware Features

- Built-in LDPC ECC (Error Correction Code) functionality
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- Advanced Global Wear-Leveling and Block management for reliability
- Dynamic thermal throttling
- Full drive encryption with Advanced Encryption Standard (AES) (optional)

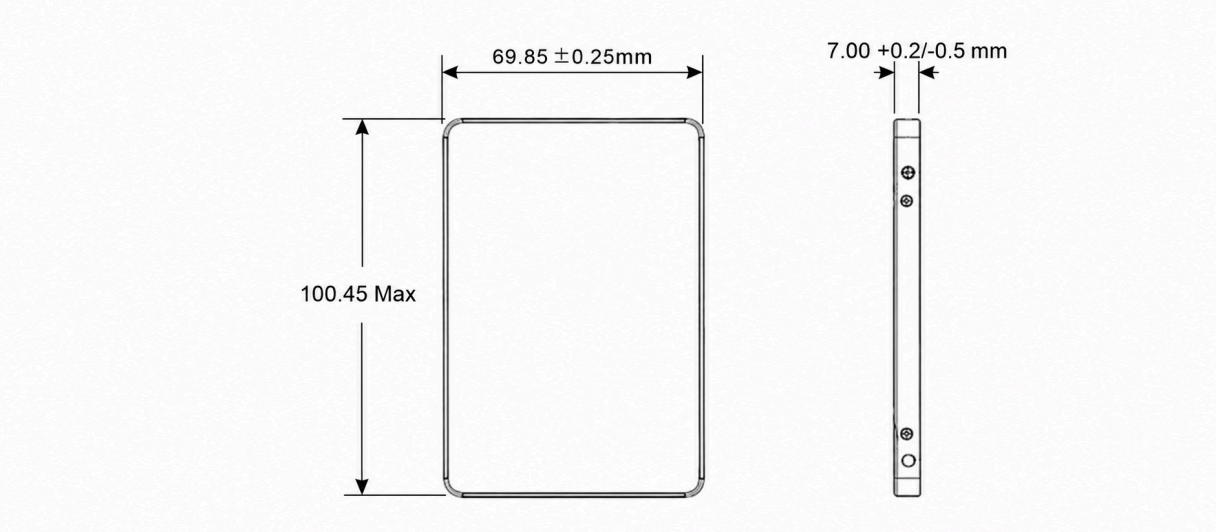
Ordering Information

256GB	TS256GSSD490K-I TS256GSSD490K
512GB	TS512GSSD490K TS512GSSD490K-I
1TB	TS1TSSD490K TS1TSSD490K-I
2TB	TS2TSSD490K TS2TSSD490K-I
4TB	TS4TSSD490K TS4TSSD490K-I

Specifications

Appearance	Dimensions	100.45 mm x 69.85 mm x 7 mm (3.95" x 2.75" x 0.28")
	Weight	54 g (1.9 oz)
	Form Factor	2.5"
Interface	Bus Interface	SATA III 6Gb/s
Storage	Capacity	256 GB / 512 GB / 1 TB / 2 TB / 4 TB
	Flash Type	218-layer 3D NAND flash
Operating Environment	Operating Voltage	5V±5%
	Operating Temperature	Extended Temp. -20°C (-4°F) ~ 75°C (167°F) Wide Temp. -40°C (-40°F) ~ 85°C (185°F)
	Storage Temperature	-55°C (-67°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)
Power	Power Consumption (Operation)	2.7 watt(s)
	Power Consumption (IDLE)	0.88 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: Up to 560 MB/s Write: Up to 520 MB/s
	4K Random Read/Write (IOmeter)	Read: Up to 82,000 IOPS Write: Up to 83,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	Up to 8,450 TBW
	Drive Writes Per Day (DWPD)	2.72 (3 yrs)
Warranty	Certificate	CE / UKCA / 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.