

2.5" SATA & PATA SSDs

SSD480K & SSD480K-I

Transcend's SSD480K industrial-grade SATA III 2.5-inch DRAM-less SSD features BiCS8 218-layer 3D NAND flash memory. Its DRAM-less architecture helps reduce power consumption and system costs, while the standard 2.5-inch form factor makes it easy to integrate into existing embedded systems and industrial equipment.

To meet the operating temperature requirements of different devices and applications, the SSD480K supports an extended operating temperature range of -20°C to 75°C. The SSD480K-I is also available with a wide temperature range of -40°C to 85°C. The entire series has undergone Transcend's in-house testing to enhance durability and stability during long-term operation in industrial environments.

Hardware Features

- Compliant with RoHS 2.0 standards
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Anti-sulfur technology implemented to prevent sulfurization in the environment
- Power Shield (PS) to ensure data transfer integrity and minimize data corruption in the drive during an abnormal power outage
- Supports Transcend Scope Pro software

Firmware Features

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

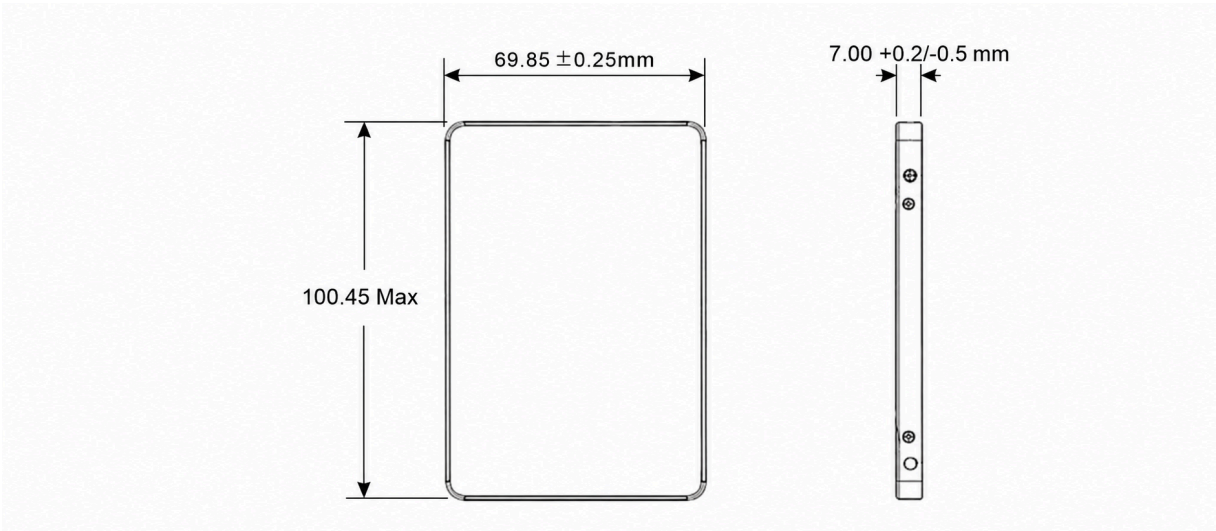
Ordering Information

128GB	TS128GSSD480K TS128GSSD480K-I
256GB	TS256GSSD480K TS256GSSD480K-I
512GB	TS512GSSD480K TS512GSSD480K-I
1TB	TS1TSSD480K TS1TSSD480K-I
2TB	TS2TSSD480K TS2TSSD480K-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	128 GB / 256 GB / 512 GB / 1 TB / 2 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 ~ 2,000 Hz (frequency)
Power	Power Consumption (Operation)	0.81 watt(s)
	Power Consumption (IDLE)	0.33 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 70,000 IOPS Write: Up to 85,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	Up to 5,400 TBW
	Drive Writes Per Day (DWPD)	2.46 (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.