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#### **Embedded Solutions**



# 2.5" SATA & PATA SSDs SSD472K & SSD472K-I

Transcend's SSD472K features the SATA III 6Gb/s interface and 112-layer 3D NAND technology. Its built-in DRAM cache allows faster data access, while anti-sulfur resistors guarantee its reliability in harsh conditions. The SSD472K 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°C~75°C.

Transcend also offers the SSD472K-I with wide temperature ( $-40^{\circ}C \sim 85^{\circ}C$ ) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

### Hardware Features

- Compliant with RoHS 2.0 standards
- DDR3 DRAM Cache embedded
- 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

### **Firmware Features**

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

#### **Ordering Information**

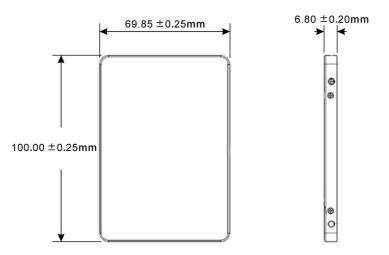
128GB	TS128GSSD472K
	TS128GSSD472K-I
256GB	TS256GSSD472K
	TS256GSSD472K-I
512GB	TS512GSSD472K
	TS512GSSD472K-I
1TB	TS1TSSD472K
	TS1TSSD472K-I
2TB	TS2TSSD472K
	TS2TSSD472K-I
4TB	TS4TSSD472K
	TS4TSSD472K-I



# Specifications

Appearance	Dimensions	100.45 mm x 69.85 mm x 7mm (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 / 4 TB
	Flash Type	112-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)	5 watt(s)
	Power Consumption (IDLE)	1.3 watt(s)
Performance	Read Speed (Max.)	Up to 560 MB/s
	Write Speed (Max.)	Up to 520 MB/s
	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 9680 TBW
	Drive Writes Per Day (DWPD)	2.16 (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.