

2.5" SATA & PATA SSDs

SSD490P

Transcend's SSD490P SATA III 2.5-inch SSD features 218-layer 3D NAND flash memory and Power Loss Protection (PLP) technology. In the event of unexpected power loss, built-in tantalum capacitors provide backup power to the controller and DRAM cache, allowing sufficient time to complete write operations and help protect data integrity.

The SSD490P supports a wide operating temperature range of -40°C to 85°C and has undergone Transcend's rigorous in-house testing to help ensure durability and stability, making it suitable for industrial PCs and space-constrained embedded systems that require continuous operation.

Hardware Features

- Compliant with RoHS 2.0 standards
- DDR3 DRAM Cache embedded
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Power Loss Protection (PLP) to prevent data loss in the event of sudden power outage
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)

Firmware Features

- Built-in LDPC ECC (Error Correction Code) functionality
- Dynamic thermal throttling
- 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
- Advanced Garbage Collection

Ordering Information

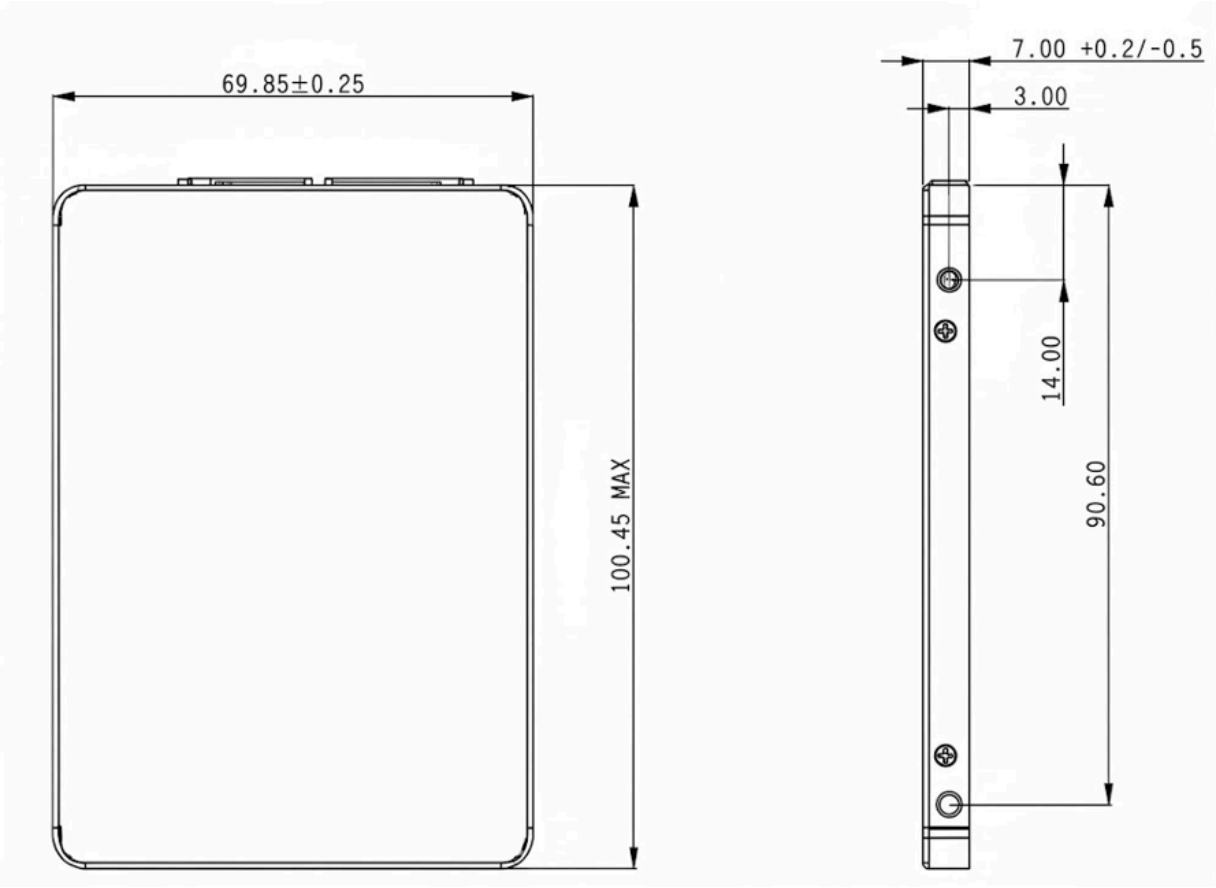
256GB	TS256GSSD490P
512GB	TS512GSSD490P
1TB	TS1TSSD490P

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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
	Flash Type	218-layer 3D NAND flash
Operating Environment	Operating Voltage	5V±5%
	Operating Temperature	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)
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 2,850 TBW
	Drive Writes Per Day (DWPD)	2.6 (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.

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