Embedded Solutions
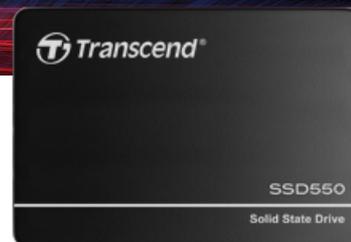
2.5" SATA SSDs

SSD550I

Transcend's 2.5" SATA III SSD550I features the 112-layer 3D NAND flash and the SLC Mode technology, achieving remarkable endurance and sustained speeds equivalent to SLC flash. Its built-in DRAM cache allows faster random speeds while the anti-sulfur resistor guarantees its reliability in harsh conditions. The SSD550I is thoroughly tested in-house, operating stably in wide operating temperatures ranging from -40℃~85℃.

Hardware Features

- DDR3 DRAM Cache embedded
- High-quality 3D NAND flash and SLC mode for exceptional endurance and reliability
- Anti-sulfur technology implemented to prevent sulfurization in the environment
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)
- Endurance: 100K P/E cycles (Program/Erase cycles) guaranteed

Firmware Features

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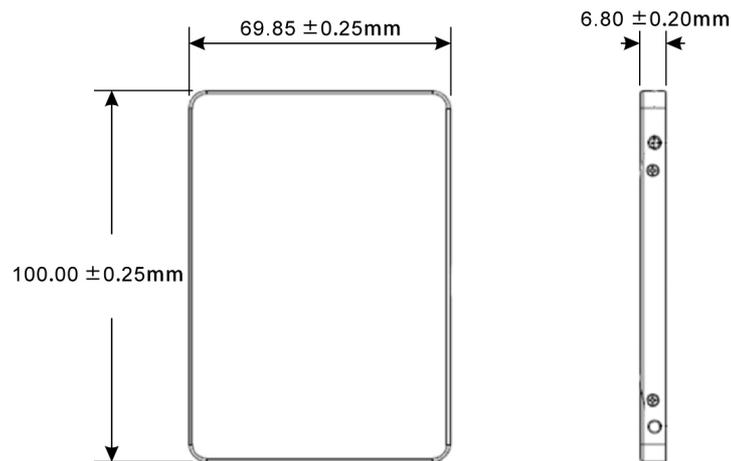- Dynamic thermal throttling

Ordering Information

40GB	TS40GSSD550I
80GB	TS80GSSD550I
160GB	TS160GSSD550I
320GB	TS320GSSD550I
640GB	TS640GSSD550I
1280GB	TS1280GSSD550I

Specifications

Appearance	Dimensions	100 mm x 69.85 mm x 6.8 mm (3.94" x 2.75" x 0.27")
	Weight	54 g (1.9 oz)
	Form Factor	2.5"
Interface	Bus Interface	SATA III 6Gb/s
Storage	Capacity	40 GB / 80 GB / 160 GB / 320 GB / 640 GB / 1280 GB
	Flash Type	112-layer 3D NAND flash (SLC mode)
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)
Power	Power Consumption (Operation)	4.0 watt(s)
	Power Consumption (IDLE)	1.2 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 90,000 IOPS Write: up to 85,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 8,355 TBW
	Drive Writes Per Day (DWPD)	47.7 (3 yrs)
Warranty	Certificate	CE / FCC / BSMI / UKCA
	Warranty	Three-year Limited Warranty

Mechanical Dimensions

69.85 ±0.25mm

6.80 ±0.20mm

100.00 ±0.25mm

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.