

Embedded Solutions



SATA III M.2 SSDs

MTS532T

Transcend's industrial M.2 SSD MTS532T features the SATA III 6Gb/s interface and state-of-the-art 3D NAND technology, which allows 96 layers of 3D NAND flash chips to be vertically stacked. Compared to 3D NAND at 64 layers, this density breakthrough greatly improves storage efficiency. The MTS532T comes with space-saving M.2 form factor, which is ideal for space-limited devices. It is fully tested in-house to guarantee reliability in mission-critical applications, boasting an endurance rating of 3K Program/Erase cycles.

Hardware Features

- Compliant with RoHS 2.0 standards
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Space-saving M.2 form factor (42mm) – ideal for mobile computing devices
- Supports Transcend Scope Pro software
- Power Shield (PS) to ensure data transfer integrity and minimize data corruption in the drive during an abnormal power outage

Ordering Information

64GB	TS64GMTS532T
------	--------------

Firmware Features

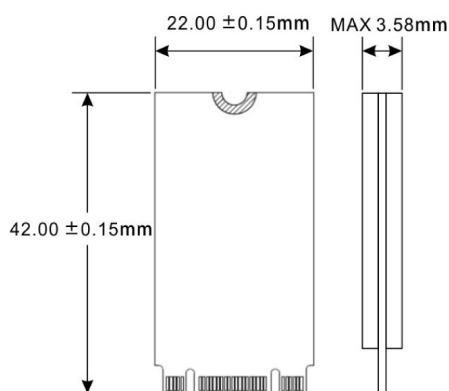
- Built-in LDPC ECC (Error Correction Code) functionality
- Advanced Global Wear-Leveling and Block management for reliability
- Advanced Garbage Collection
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- TRIM command for better performance



Specifications

Appearance	Dimensions	42 mm x 22 mm x 3.58 mm (1.65" x 0.87" x 0.14")
	Weight	5 g (0.18 oz)
	M.2 Type	2242-D2-B-M (Double-sided)
	Form Factor	M.2 2242
Interface	Bus Interface	SATA III 6Gb/s
Storage	Capacity	64 GB
	Flash Type	3D NAND flash
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Standard Temp. 0°C (32°F) ~ 70°C (158°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)	1.1 watt(s)
	Power Consumption (Sleep)	0.3 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 500 MB/s Write: up to 200 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 40,000 IOPS Write: up to 45,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 80 TBW
	Drive Writes Per Day (DWPD)	1.16 (3 yrs)
Warranty	Certificate	CE / FCC / BSMI / UKCA
	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.

