

Embedded Solutions

SATA III M.2 SSDs

MTS952T & MTS952T-I

Transcend's MTS952T M.2 SSD 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 BiCS3 NAND at 64 layers, this density breakthrough greatly improves storage efficiency. The MTS952T is built with DRAM cache for fast access, and is fully tested in-house to guarantee reliability in mission-critical applications, boasting an endurance rating of 3K Program/Erase cycles.

Transcend also offers the MTS952T-I with wide temperature ($-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

Hardware Features

- DDR3 DRAM Cache embedded
- Space-saving M.2 form factor (80mm) – ideal for mobile computing devices
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)
- Supports Transcend Scope Pro software

Firmware Features

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

Ordering Information

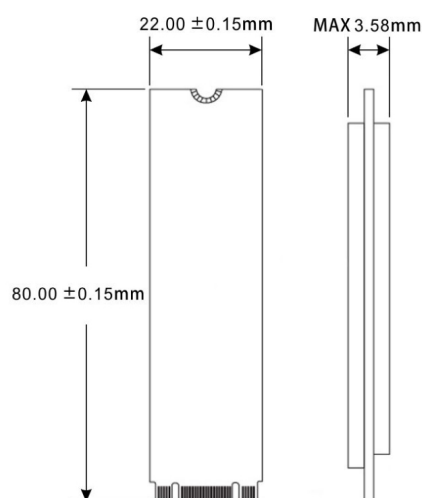
64GB	TS64GMTS952T TS64GMTS952T-I
128GB	TS128GMTS952T TS128GMTS952T-I
256GB	TS256GMTS952T TS256GMTS952T-I
512GB	TS512GMTS952T TS512GMTS952T-I
1TB	TS1TMTS952T TS1TMTS952T-I
2TB	TS2TMTS952T TS2TMTS952T-I



Specifications

Appearance	Dimensions	80.0 mm x 22.0 mm x 3.58 mm (3.15" x 0.87" x 0.14")
	Weight	9 g (0.32 oz)
	Form Factor	M.2
	M.2 Type	2280-D2-B-M (Double-sided)
Interface	Bus Interface	SATA III 6Gb/s
Storage	Flash Type	3D NAND flash
	Capacity	64 GB / 128 GB / 256 GB / 512 GB / 1 TB / 2 TB
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Standard Temp. 0°C (32°F) ~ 70°C (158°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)	2.1 watt(s)
	Power Consumption (Sleep)	0.4 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 95,000 IOPS Write: up to 85,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 3,520 TBW
	Drive Writes Per Day (DWPD)	1.61 (3 yrs)
Warranty	Certificate	CE / 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.

