Embedded Solutions

SATA III M.2 SSDs

MTS552T2 & MTS552T2-I

Transcend's MTS552T2 M.2 SSD features the SATA III 6Gb/s interface, delivering superior transfer speeds. The MTS552T2 features the latest 3D NAND technology for high storage efficiency, 30μ" PCB gold finger and Corner Bond technology for enhanced durability, built-in DRAM cache for fast access, an extended operating temperature range from -20°C to 75°C, and an endurance rating of 3K Program/Erase cycles for reliable operation.

Transcend also offers the MTS552T2-I with wide temperature (-40°C ~ 85°C) capabilities to ensure sustained functionality, endurance and reliability in mission-critical applications.

Hardware Features

- Compliant with RoHS 2.0 standards
- DDR3 DRAM Cache embedded
- Space-saving M.2 form factor (42mm) – ideal for mobile computing devices
- 30μ" PCB gold finger
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed

Firmware Features

- Dynamic thermal throttling
- Advanced Global Wear-Leveling and Block management for reliability
- Advanced Garbage Collection
- Built-in LDPC ECC (Error Correction Code) functionality
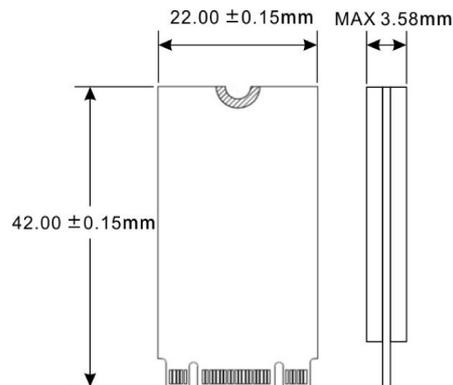- Power-saving DevSleep (Device Sleep) mode

Ordering Information

64GB	TS64GMTS552T2
	TS64GMTS552T2-I
128GB	TS128GMTS552T2
	TS128GMTS552T2-I
256GB	TS256GMTS552T2
	TS256GMTS552T2-I
512GB	TS512GMTS552T2
	TS512GMTS552T2-I

Specifications

Appearance	Dimensions	42.0 mm x 22.0 mm x 3.58 mm (1.65" x 0.87" x 0.14")
	Weight	5 g (0.18 oz)
	Form Factor	M.2
	M.2 Type	2242-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
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Extended -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)	1.7 watt(s)
	Power Consumption (IDLE)	0.3 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 560 MB/s Write: up to 510 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 85,000 IOPS Write: up to 85,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 880 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.