

Embedded Solutions



SATA III M.2 SSDs

MTS560T & MTS560T-I

Transcend's industrial M.2 DRAM-less SSD MTS560T features the SATA III 6Gb/s interface and state-of-the-art 3D NAND technology, which allows 112 layers of 3D NAND flash chips to be vertically stacked. Compared to 3D NAND at 96 layers, this density breakthrough greatly improves storage efficiency. The MTS560T can operate in an extended temperature range from -20°C to 75°C. Its space-saving M.2 form factor 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.

Transcend also offers the MTS560T-I with wide temperature (-40°C ~ 85°C) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

Hardware Features

- Compliant with RoHS 2.0 standards
- Space-saving M.2 form factor (42mm) – ideal for mobile computing devices
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Key components fortified by default with Corner Bond technology
- 30µ" PCB gold finger

Firmware Features

- 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
- Advanced Garbage Collection
- Advanced Global Wear-Leveling and Block management for reliability
- NCQ command for better performance

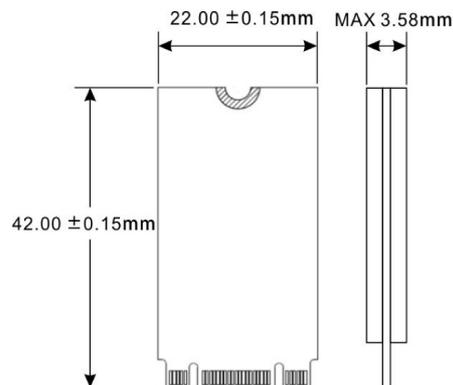
Ordering Information

64GB	TS64GMTS560T
	TS64GMTS560T-I
128GB	TS128GMTS560T
	TS128GMTS560T-I
256GB	TS256GMTS560T
	TS256GMTS560T-I
512GB	TS512GMTS560T
	TS512GMTS560T-I
1TB	TS1TMTS560T
	TS1TMTS560T-I

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-S2-B-M
	Form Factor	M.2 2242
Interface	Bus Interface	SATA III 6Gb/s
Storage	Capacity	64 GB / 128 GB / 256 GB / 512 GB / 1 TB
	Flash Type	112-layer 3D NAND flash
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Extended Temp. -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 ~ 2,000 Hz (frequency)
Power	Power Consumption (Operation)	1.4 watt(s)
	Power Consumption (Sleep)	0.3 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 560 MB/s Write: up to 500 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 45,000 IOPS Write: up to 80,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 2,188 TBW
	Drive Writes Per Day (DWPD)	1.95 (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.