

SATA III M.2 SSDs

MTS960T & MTS960T-I

Transcend's industrial M.2 DRAM-less SSD MTS960T 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 MTS960T 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 MTS960T-I with wide temperature (-40° C $\sim 85^{\circ}$ 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 (80mm) ideal for mobile computing devices
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Supports Transcend Scope Pro software
- · Key components fortified by default with Corner Bond technology

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

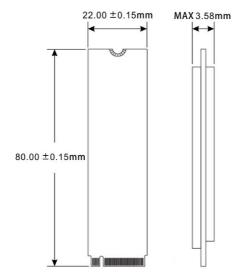
64GB TS64GMTS960T TS64GMTS960T-I 128GB TS128GMTS960T TS128GMTS960T-I 256GB TS256GMTS960T TS256GMTS960T-I 512GB TS512GMTS960T TS512GMTS960T-I 1TB TS1TMTS960T TS1TMTS960T-I 2TB TS2TMTS960T-I		
T\$128GMT\$960T-I 256GB T\$256GMT\$960T T\$256GMT\$960T-I 512GB T\$512GMT\$960T T\$512GMT\$960T-I 1TB T\$1TMT\$960T T\$1TMT\$960T-I 2TB T\$2TMT\$960T	64GB	
TS256GMTS960T-I 512GB TS512GMTS960T TS512GMTS960T-I 1TB TS1TMTS960T TS1TMTS960T-I 2TB TS2TMTS960T	128GB	
TS512GMTS960T-I 1TB TS1TMTS960T TS1TMTS960T-I 2TB TS2TMTS960T	256GB	
TS1TMTS960T-I 2TB TS2TMTS960T	512GB	
	1TB	
	2TB	



Specifications

Appearance	Dimensions	80 mm x 22 mm x 2.23 mm (3.15" x 0.87" x 0.09")
	Weight	8 g (0.28 oz)
	M.2 Type	2280-S2-B-M (Single-sided)
	Form Factor	M.2 2280
Interface	Bus Interface	SATA III 6Gb/s
Storage	Capacity	64 GB / 128 GB / 256 GB / 512 GB / 1 TB / 2 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 (IDLE)	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 55,000 IOPS Write: Up to 80,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	Up to 4,376 TBW
	Drive Writes Per Day (DWPD)	1.95 (3 yrs)
Warranty	Certificate	CE / UKCA / 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.