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Embedded Solutions



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 ($-40^{\circ}C \sim 85^{\circ}C$) 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

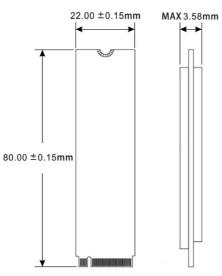
128GB	TS128GMTS960T TS128GMTS960T-I
256GB	TS256GMTS960T TS256GMTS960T-I
512GB	TS512GMTS960T TS512GMTS960T-I
1TB	TS1TMTS960T TS1TMTS960T-I
2TB	TS2TMTS960T TS2TMTS960T-I



Specifications

Appearance	Dimensions	80 mm x 22 mm x 3.58 mm (3.15" x 0.87" x 0.14")
	Weight	8 g (0.28 oz)
	Form Factor	M.2
	М.2 Туре	2280-S2-B-M (Single-sided)
Interface	Bus Interface	SATA III 6Gb/s
Storage	Flash Type	112-layer 3D NAND flash
	Capacity	128 GB / 256 GB / 512 GB / 1 TB / 2 TB
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	-40°C (-40°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)	0.2 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 / 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.