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Embedded Solutions



SATA III M.2 SSDs MTS570T & MTS570T-I

Transcend's M.2 SSD MTS570T features the SATA III 6Gb/s interface and the 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, and its built-in DRAM cache allows faster access. Applied with 30μ " gold finger PCB and Corner Bond technology, the MTS570T is fully tested in-house to guarantee reliability in mission-critical applications, boasting an endurance rating of 3K Program/Erase cycles and an extended operating temperature ranging from $-20^{\circ}C \sim 75^{\circ}C$.

Transcend also offers the MTS570T-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 (42mm) ideal for mobile computing devices
- DDR3 DRAM Cache embedded
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- · Key components fortified by default with Corner Bond technology

Firmware Features

- NCQ command for better performance
- TRIM command for better performance
- 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

Ordering Information

128GB	TS128GMTS570T TS128GMTS570T-I
256GB	TS256GMTS570T TS256GMTS570T-I
512GB	TS512GMTS570T TS512GMTS570T-I
1TB	TS1TMTS570T TS1TMTS570T-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
	М.2 Туре	2242-D2-B-M (Double-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
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)	4.5 watt(s)
	Power Consumption (Sleep)	1.1 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 90,000 IOPS Write: up to 85,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 2420 TBW
	Drive Writes Per Day (DWPD)	2.16 (3 yrs)
Warranty	Certificate	CE / FCC / BSMI / UKCA
	Warranty	Three-year Limited Warranty

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.