Embedded Solutions

PCIe M.2 SSDs

MTE720T

Transcend's M.2 2280 SSD MTE720T features the 112-layer 3D NAND flash, a PCI Express (PCIe) Gen 4 x4 interface, and an 8-channel controller, compatible with NVM Express (NVMe) 1.4 specifications to achieve never-before-seen transfer speeds. Its built-in DRAM cache enables fast random read and write speeds, and improves drive endurance. In addition, the 30μ" gold finger PCB, Corner Bond technology, and anti-sulfur resistors guarantee its reliability in harsh conditions. Transcend's MTE720T is also 100% chamber tested in-house for extended operating temperatures of -20℃~75℃.

Hardware Features

- Compliant with NVM Express specification 1.4
- Compliant with PCI Express specification 4.0
- PCIe Gen 4 x4 interface
- DDR4 DRAM Cache embedded
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed

Firmware Features

- Built-in LDPC ECC (Error Correction Code) functionality
- Dynamic thermal throttling
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
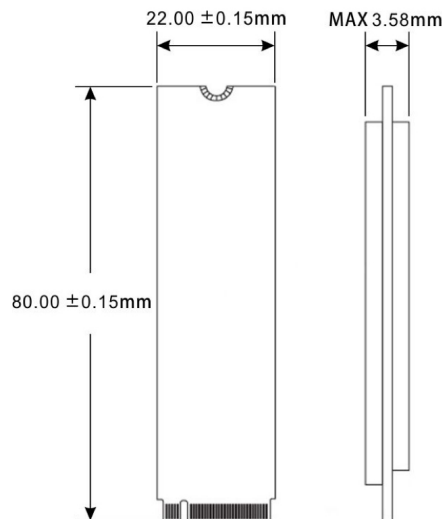- Full drive encryption with Advanced Encryption Standard (AES) (optional)

Ordering Information

Capacity	Part Number
512GB	TS512GMTE720T
1TB	TS1TMTE720T
2TB	TS2TMTE720T
4TB	TS4TMTE720T

Specifications

Appearance	Dimensions	80 mm x 22 mm x 3.58 mm (3.15" x 0.87" x 0.14")
	Weight	10 g (0.35 oz)
	M.2 Type	2280-D2-M (Double-sided)
	Form Factor	M.2 2280
Interface	Bus Interface	NVMe PCIe Gen4 x4
Storage	Capacity	512 GB / 1 TB / 2 TB / 4 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)
	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)	5.8 watt(s)
	Power Consumption (IDLE)	0.8 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 7,500 MB/s Write: up to 6,700 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 540,000 IOPS Write: up to 440,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 5,920 TBW
	Drive Writes Per Day (DWPD)	1.35 (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.