

Embedded Solutions



PCIe M.2 SSDs

MTE710T & MTE710T-I

Transcend's M.2 SSD MTE710T features the PCI Express (PCIe) Gen 4 x4 interface and is compatible with NVM Express (NVMe) 1.4 specifications to achieve never-before-seen transfer speeds. The MTE710T features 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 MTE710T 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 range (-20°C~75°C).

Transcend also offers the MTE710T-I with wide temperature (-40°C ~ 85°C) capabilities to ensure sustained functionality and optimal reliability.

Hardware Features

- PCIe Gen 4 x4 interface
- Compliant with RoHS 2.0 standards
- Compliant with NVM Express specification 1.4
- Space-saving M.2 form factor (80mm) – ideal for mobile computing devices
- DDR4 DRAM Cache embedded

Firmware Features

- Supports NVM command
- Dynamic thermal throttling
- Built-in LDPC ECC (Error Correction Code) functionality
- Advanced Global Wear-Leveling and Block management for reliability
- Advanced Garbage Collection

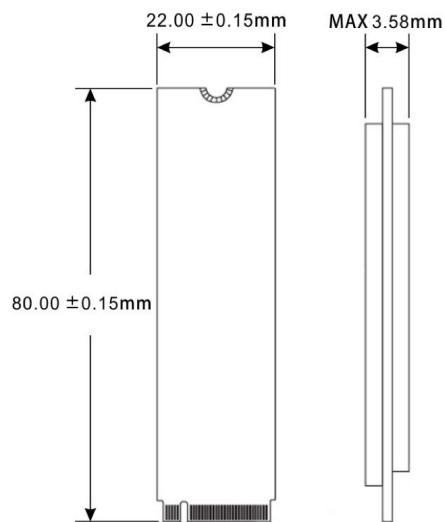
Ordering Information

256GB	TS256GMTE710T TS256GMTE710T-I
512GB	TS512GMTE710T TS512GMTE710T-I
1TB	TS1TMTE710T TS1TMTE710T-I
2TB	TS2TMTE710T TS2TMTE710T-I

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	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 ~ 2000 Hz (frequency)
Power	Power Consumption (Operation)	4.6 watt(s)
	Power Consumption (IDLE)	1.6 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 3,800 MB/s Write: up to 3,200 MB/s
	4K Random Read/Write (IOMeter)	Read: up to 350,000 IOPS Write: up to 430,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 4,480 TBW
	Drive Writes Per Day (DWPD)	1.99 (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.