

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 ranging from -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
- SLC caching technology
- Dynamic thermal throttling
- Built-in LDPC ECC (Error Correction Code) functionality
- Advanced Global Wear-Leveling and Block management for reliability

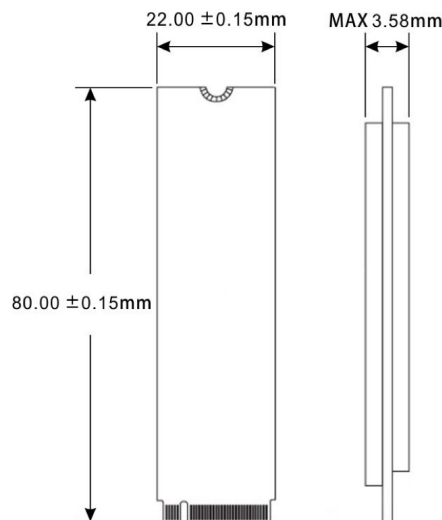
Ordering Information

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

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)
	Form Factor	M.2
	M.2 Type	2280-D2-M (Double-sided)
Interface	Bus Interface	NVMe PCIe Gen4 x4
Storage	Flash Type	112-layer 3D NAND flash
	Capacity	256 GB / 512 GB / 1 TB / 2 TB
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Extended -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)
Power Consumption (IDLE)		1.52 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 500,000 IOPS Write: up to 560,000 IOPS
	Mean Time Between Failures (MTBF)	5,500,000 hour(s)
	Terabytes Written (TBW)	up to 1,700 TBW
	Drive Writes Per Day (DWPD)	1.55 (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.