

## Embedded Solutions



### PCIe M.2 SSDs

# MTE710T

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.

### 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

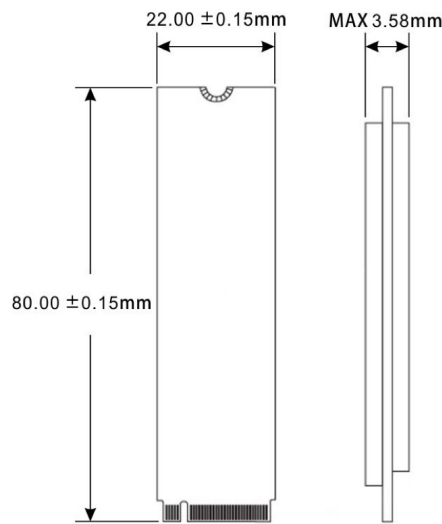
512GB	TS512GMTE710T
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1TB	TS1TMTE710T
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## Specifications

<b>Appearance</b>	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-B-M (Double-sided)
<b>Interface</b>	Bus Interface	NVMe PCIe Gen4 x4
<b>Storage</b>	Flash Type	3D NAND flash
	Capacity	512 GB / 1 TB
<b>Operating Environment</b>	Operating Voltage	3.3V±5%
	Operating Temperature	Extended -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)
<b>Power</b>	Power Consumption (Operation)	4.6 watt(s)
	Power Consumption (IDLE)	1.5 watt(s)
<b>Performance</b>	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 470,000 IOPS
	Mean Time Between Failures (MTBF)	5,500,000 hour(s)
	Terabytes Written (TBW)	up to 1,700 TBW
	Drive Writes Per Day (DWPD)	1.5 (3 yrs)
<b>Warranty</b>	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.