

## Embedded Solutions



### PCIe M.2 SSDs

# MTE662T2 & MTE662P

3K P/E cycles

Transcend's MTE662T2 M.2 SSD features the PCI Express (PCIe) Gen 3 x4 interface and is compatible with NVMe Express (NVMe) 1.3 specifications to achieve never-before-seen transfer speeds. The MTE662T2 features state-of-the-art 3D NAND technology, which allows 96 layers of 3D NAND flash chips to be vertically stacked. Compared to 3D NAND at 64 layers, this density breakthrough greatly improves storage efficiency, and its built-in DRAM cache allows faster access. Applied with 30 $\mu$ m gold finger PCB and Corner Bond technology, the MTE662T2 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.

## Firmware Features

- Supports NVM command
- SLC caching technology
- Dynamic thermal throttling
- Built-in LDPC ECC (Error Correction Code) functionality
- Enhanced S.M.A.R.T. function for durability

## Hardware Features

- PCIe Gen 3 x4 interface
- DDR4 DRAM Cache embedded
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Key components fortified by default with Corner Bond technology
- 30 $\mu$ m PCB gold finger
- MTE662P is designed with Intelligent Power Shield (IPS) to ensure data integrity.
- Promised operational reliability in an extended temperature range (from -20°C to 75°C)
- Supports Transcend Scope Pro software

## Ordering Information

### Extended (-20°C~ 75°C)

512GB	TS512GMTE662T2
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1TB	TS1TMTE662T2
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2TB	TS2TMTE662T2
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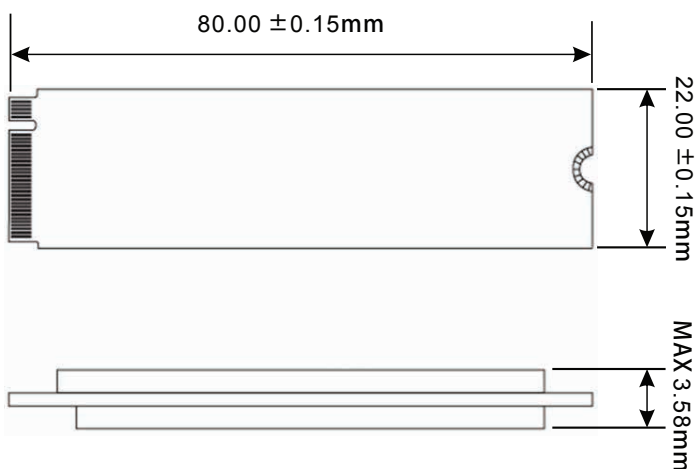
### IPS (-20°C~ 75°C)

256GB	TS256GMTE662P
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## Specifications

Appearance	Dimensions	80 mm x 22 mm x 3.58 mm (3.15" x 0.87" x 0.14")
	Weight	9 g (0.32 oz)
	Form Factor	M.2
	M.2 Type	2280-D2-M (Double-sided)
Interface	Bus Interface	NVMe PCIe Gen3 x4
Storage	Flash Type	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)
	Storage Temperature	-40°C (-40°F) ~ 85°C (185°F)
	Humidity	5% ~ 95%
	Shock	1500 G, 0.5 ms, 3 axis
	Vibration	20 G (peak-to-peak), 7 Hz ~ 2000 Hz (frequency)
Power	Power Consumption (Operation)	7.0 watt(s)
	Power Consumption (IDLE)	1.0 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark, max.)	Read: 3,500 MB/s ; write: 2,700 MB/s
	4K Random Read/Write (IOMeter, max.)	Read: 340,000 IOPS ; write: 355,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (Max.)	4,400 TBW
	Drive Writes Per Day (DWPD)	2 (3 yrs)
Warranty	Certificate	CE/FCC/BSMI
	Warranty	Three-year Limited Warranty
Note	<ul style="list-style-type: none"> <li>• Speed may vary due to host hardware, software, usage, and storage capacity.</li> <li>• The workload used to rate DWPD may be different from your actual workload, which may vary due to host hardware, software, usage, and storage capacity.</li> </ul>	

## 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.



Please feel free to contact us with any special requests you might have.  
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