

## Embedded Solutions



### PCIe M.2 SSDs

# MTE652T2

3K P/E cycles

Transcend's MTE652T2 M.2 SSD features the PCI Express (PCIe) Gen 3 x4 interface and is compatible with NVMe Express (NVMe) 1.3 specifications, delivering unparalleled transfer speeds. The MTE652T2 features the latest 3D NAND technology for higher storage efficiency, 30 $\mu$ m PCB gold finger and Corner Bond technology for enhanced durability, built-in DRAM cache for fast access, an extended operating temperature range from -20°C to 75°C, and an endurance rating of 3K Program/Erase cycles for reliable operation.

## Features

- DRAM Cache embedded
- 30 $\mu$ m PCB gold finger
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- PCIe Gen 3 x4 interface
- Key components fortified by default with Corner Bond technology
- Compliant with PCI Express specification 3.1
- Compliant with NVMe Express specification 1.3
- Supports NVMe command
- SLC caching technology
- Built-in LDPC ECC (Error Correction Code) functionality
- Dynamic thermal throttling
- Compliant with RoHS 2.0 standards
- Supports Transcend SSD Scope Pro software

## Ordering Information

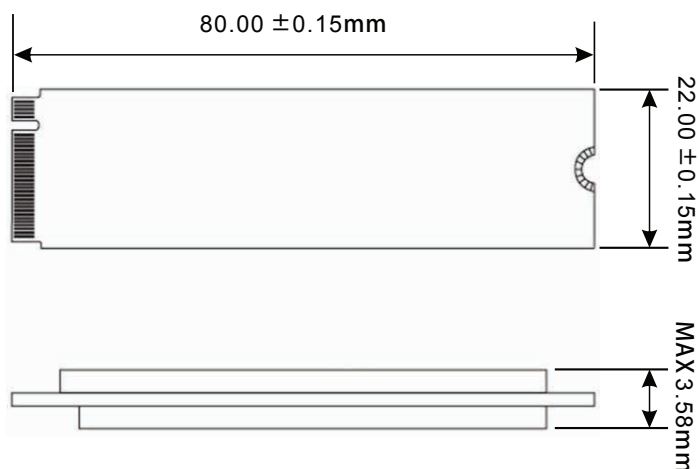
Extended Temp. (-20°C ~ 75°C)

128GB	TS128GMTE652T2
256GB	TS256GMTE652T2
512GB	TS512GMTE652T2

## 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
Interface	Bus Interface	NVMe PCIe Gen3 x4
Storage	Flash Type	3D TLC NAND flash
	Capacity	128 GB/256 GB/512 GB
Operating Environment	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	20G (peak-to-peak), 7 Hz ~ 2000 Hz (frequency)
Power	Power Consumption (Operation)	3.3 watt(s)
	Power Consumption (Sleep)	0.6 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: 2,100 MB/s ; write: 1,000 MB/s
	4K Random Read/Write (IOMeter)	Read: 190,000 IOPS ; write: 290,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	1,080 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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