

Embedded Solutions



PCIe M.2 SSDs

MTE652T2 & MTE652T2-I

3K P/E cycles

Transcend's MTE652T2 M.2 SSD features the PCI Express (PCIe) Gen 3 x4 interface and is compatible with NVM Express (NVMe) 1.3 specifications, delivering unparalleled transfer speeds. The MTE652T2 features the latest 3D NAND technology for higher storage efficiency, 30 μ m PCB gold finger 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.

Transcend also offers the MTE652T2-I with wide temperature (-40°C ~ 85°C) capabilities to ensure sustained functionality, endurance and reliability in mission-critical applications.

Features

- DRAM Cache embedded
- 30 μ m PCB gold finger
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Extended Temp. (-20°C ~ 75°C) and Wide Temp. (-40°C ~ 85°C) options available
- PCIe Gen 3 x4 interface
- Key components fortified with baked-in Corner Bond process
- Compliant with PCI Express specification 3.1
- Compliant with NVM Express specification 1.3
- Supports NVM 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

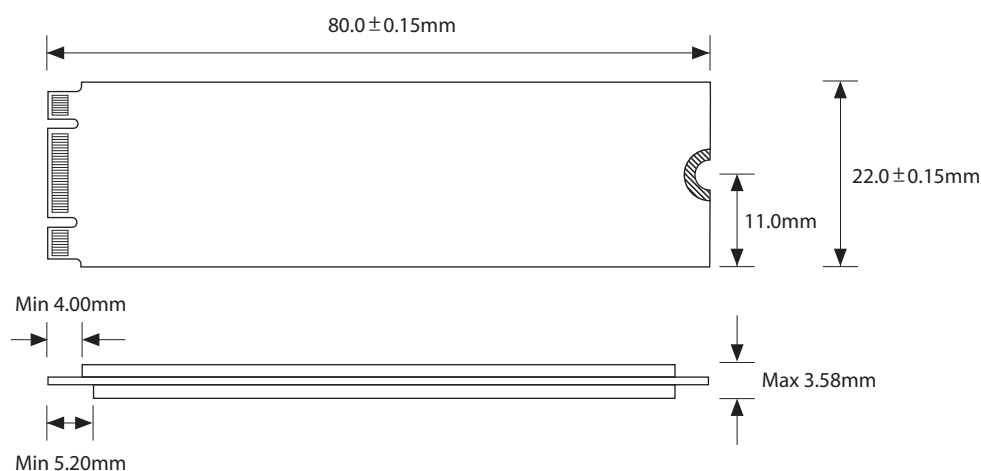
Wide Temp. (-40°C ~ 85°C)

128GB	TS128GMTE652T2-I
256GB	TS256GMTE652T2-I
512GB	TS512GMTE652T2-I

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) Wide Temp.: -40°C (-40°F) ~ 85°C (185°F)
	Storage Temperature	-40°C (-40°F) ~ 85°C (185°F)
	Humidity	5% ~ 95%
	Shock	1500 G, 0.5 ms, 3 axis
	Vibration (Non-operating)	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: 165,000 IOPS ; write: 235,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	1,080 TB
	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"> • Speed may vary due to host hardware, software, usage, and storage capacity. • 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. 	

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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