

Embedded Solutions



PCIe M.2 SSDs

MTE652T2

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, 30μ" 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.

Hardware Features

- DDR3 DRAM Cache embedded
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- 30μ" PCB gold finger
- Promised operational reliability in an extended temperature range (from -20°C to 75°C)
- Key components fortified by default with Corner Bond technology

Ordering Information

64GB	TS64GMTE652T2
128GB	TS128GMTE652T2
256GB	TS256GMTE652T2
512GB	TS512GMTE652T2

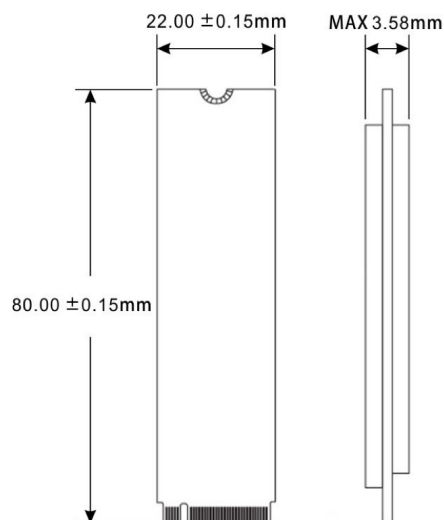
Firmware Features

- Supports NVM command
- Built-in LDPC ECC (Error Correction Code) functionality
- Dynamic thermal throttling
- Advanced Global Wear-Leveling and Block management for reliability
- Advanced Garbage Collection

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)
	M.2 Type	2280-D2-M (Double-sided)
	Form Factor	M.2 2280
Interface	Bus Interface	NVMe PCIe Gen3 x4
Storage	Capacity	64 GB / 128 GB / 256 GB / 512 GB
	Flash Type	3D NAND flash
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Extended Temp. -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 (Non-operating)	20 G (peak-to-peak), 7 Hz ~ 2000 Hz (frequency)
Power	Power Consumption (Operation)	3.0 watt(s)
	Power Consumption (IDLE)	0.6 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 2,100 MB/s Write: up to 1,250 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 190,000 IOPS Write: up to 290,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 1,080 TBW
	Drive Writes Per Day (DWPD)	2 (3 yrs)
Warranty	Certificate	CE / UKCA / FCC / BSMI
	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.