



Embedded Solutions



PCIe M.2 SSDs

MTE662P & MTE662P-I

Transcend's MTE662P M.2 SSD features the PCI Express (PCIe) Gen 3 x4 interface and is compatible with NVM Express (NVMe) 1.3 specifications to achieve never-before-seen transfer speeds. The MTE662P 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 30µ" gold finger PCB and Corner Bond technology, the MTE662P is fully tested in-house, boasting an endurance rating of 3K Program/Erase cycles and an extended operating temperature ranging from -20°C~75°C. The built-in Power Loss Protection (PLP) further ensures data integrity in mission-critical applications.

Transcend also offers the MTE662P-I with wide temperature (-40°C ~ 85°C) capabilities to ensure sustained functionality, enhanced endurance, and optimal reliability in mission-critical applications.

Hardware Features

- 30µ" PCB gold finger
- DDR4 DRAM Cache embedded
- Power Loss Protection (PLP) to prevent data loss in the event of sudden power outage
- Key components fortified by default with Corner Bond technology
- Extended Temp. (-20°C ~ 75°C) and Wide Temp. (-40°C ~ 85°C) options available

Ordering Information

128GB	TS128GMTE662P
256GB	TS256GMTE662P TS256GMTE662P-I
512GB	TS512GMTE662P TS512GMTE662P-I
1TB	TS1TMTE662P TS1TMTE662P-I

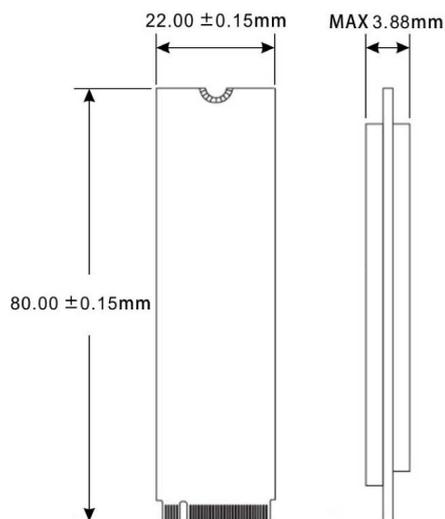
Firmware Features

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

Specifications

Appearance	Dimensions	80 mm x 22 mm x 3.88 mm (3.15" x 0.87" x 0.15")
	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	128 GB / 256 GB / 512 GB / 1 TB
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Extended Temp. -20°C (-4°F) ~ 75°C (167°F)
		Wide Temp. -40°C (-40°F) ~ 85°C (185°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)
Power	Power Consumption (Operation)	3.4 watt(s)
	Power Consumption (IDLE)	1.0 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 3,400 MB/s Write: up to 2,300 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 340,000 IOPS Write: up to 355,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 2,200 TBW
	Drive Writes Per Day (DWPD)	2 (3 yrs)
Warranty	Certificate	CE / 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.