

Embedded Solutions



PCIe M.2 SSDs

MTE560P

Transcend's M.2 SSD MTE560P is a Power Loss Protection (PLP) SSD. During unexpected power outages, the built-in tantalum capacitor provides power to the controller and DRAM cache, ensuring data integrity and storage reliability. The MTE560P also complies with the TCG (Trusted Computing Group) Opal 2.0 standards. Data is protected using the hardware-based AES 256-bit encryption and LBA (Logical Block Address) sector-specific permissions.

Transcend's M.2 SSD MTE560P features a PCI Express (PCIe) Gen4 x4 interface, 112 layers of 3D NAND flash, and SLC Mode technology, delivering high sustained speeds and SLC-grade durability. In addition, the 30μ" gold finger PCB, Corner Bond technology, and anti-sulfur resistors guarantee its reliability in harsh conditions. Transcend's MTE560P is also 100% chamber tested in-house for wide operating temperatures of -40°C~85°C.

Hardware Features

- PCIe Gen 4 x4 interface
- Endurance: 100K P/E cycles (Program/Erase cycles) guaranteed
- Anti-sulfur technology implemented to prevent sulfurization in the environment
- 30μ" PCB gold finger
- Key components fortified by default with Corner Bond technology

Ordering Information

40GB	TS40GMTE560P
80GB	TS80GMTE560P
160GB	TS160GMTE560P
320GB	TS320GMTE560P
640GB	TS640GMTE560P

Firmware Features

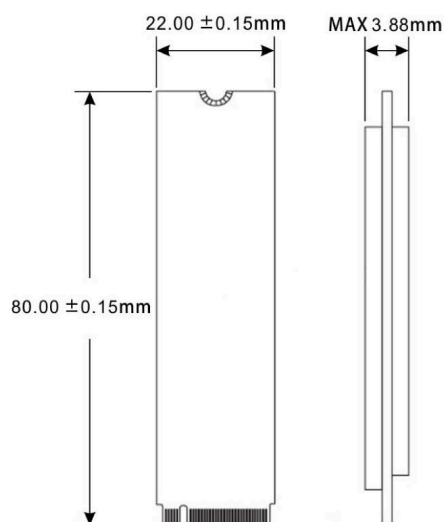
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- Built-in LDPC ECC (Error Correction Code) functionality
- Compliant with TCG Opal specifications and IEEE 1667 standards
- Full drive encryption with Advanced Encryption Standard (AES)

*Supports Microsoft® eDrive standard

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)
	M.2 Type	2280-D5-M
	Form Factor	M.2 2280
Interface	Bus Interface	NVMe PCIe Gen4 x4
Storage	Capacity	40 GB / 80 GB / 160 GB / 320 GB / 640 GB
	Flash Type	112-layer 3D NAND flash (SLC mode)
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Wide Temp. -40°C (-40°F) ~ 85°C (185°F)
	Storage Temperature	-55°C (-67°F) ~ 85°C (185°F)
	Humidity	5% ~ 95%
	Shock	15 G, 11 ms, 3 axis
	Vibration (Operating)	20 G (peak-to-peak), 7 Hz ~ 2000 Hz (frequency)
Power	Power Consumption (Operation)	3.5 watt(s)
	Power Consumption (IDLE)	1.35 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: Up to 3,800 MB/s Write: Up to 3,000 MB/s
	4K Random Read/Write (IOmeter)	Read: Up to 190,000 IOPS Write: Up to 420,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	Up to 5,580 TBW
	Drive Writes Per Day (DWPD)	31.8 (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.