

Embedded Solutions



PCIe M.2 SSDs

MTE560I

Transcend's M.2 SSD MTE560I features a PCI Express (PCIe) Gen 4 x4 interface, 112 layers of 3D NAND flash, and SLC Mode technology, delivering high sustained speeds and SLC-grade durability. Its built-in DRAM cache enables fast random read and write speeds, and improves drive endurance. In addition, the 30 μ m gold finger PCB, Corner Bond technology, and anti-sulfur resistors guarantee its reliability in harsh conditions. Transcend's MTE560I is also 100% chamber tested in-house for wide operating temperatures of -40°C~85°C.

Additionally, the MTE560I is a self-encrypting drive (SED) that complies with the TCG (Trusted Computing Group) 2.0 standards. Data is protected using the hardware-based AES 256-bit encryption and LBA (Logical Block Address) sector-specific permissions.

Hardware Features

- PCIe Gen 4 x4 interface
- DDR4 DRAM Cache embedded
- High-quality 3D NAND flash and SLC mode for exceptional endurance and reliability
- Key components fortified by default with Corner Bond technology
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)

Ordering Information

80GB	TS80GMTE560I
160GB	TS160GMTE560I
320GB	TS320GMTE560I
640GB	TS640GMTE560I

Firmware Features

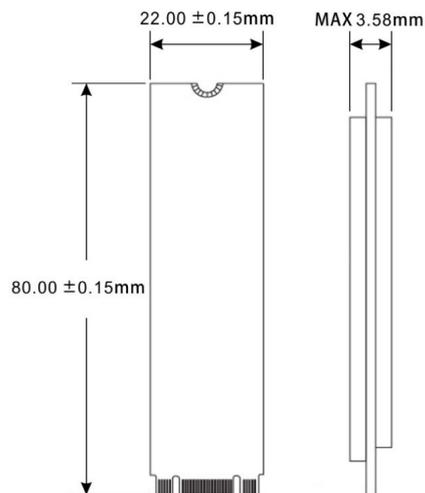
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- Built-in LDPC ECC (Error Correction Code) functionality
- Dynamic thermal throttling
- Full drive encryption with Advanced Encryption Standard (AES)
- Compliant with TCG Opal specifications and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

*Supports Microsoft® eDrive standard

Specifications

Appearance	Dimensions	80.0 mm x 22.0 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 Gen4 x4
Storage	Capacity	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	1500 G, 0.5 ms, 3 axis
	Vibration (Operating)	20 G (peak-to-peak), 7 Hz ~ 2,000 Hz (frequency)
Power	Power Consumption (Operation)	5.6 watt(s)
	Power Consumption (IDLE)	1.28 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: Up to 3,800 MB/s Write: Up to 3,200 MB/s
	4K Random Read/Write (IOmeter)	Read: Up to 350,000 IOPS Write: Up to 330,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	Up to 38,000 TBW
	Drive Writes Per Day (DWPD)	54.2 (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.