

Embedded Solutions



PCIe M.2 SSDs

MTE760T & MTE760T-I

Transcend's M.2 SSD MTE760T is a self-encrypting drive (SED) that complies with the TCG 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 MTE760T features the 112-layer 3D NAND flash, a high-speed PCI Express (PCIe) Gen 4 x4 interface, and a powerful controller, achieving never-before-seen transfer speeds. In addition, the 30µ" gold finger PCB, Corner Bond technology, and anti-sulfur resistors guarantee its reliability in harsh conditions. Transcend's MTE760T is also 100% chamber tested in-house for extended operating temperatures of -20°C~75°C.

Transcend also offers the MTE760T-I with wide temperature (-40°C~ 85°C) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

Hardware Features

- PCIe Gen 4 x4 interface
- Anti-sulfur technology implemented to prevent sulfurization in the environment
- 30µ" PCB gold finger
- Key components fortified by default with Corner Bond technology
- Power Shield (PS) to ensure data transfer integrity and minimize data corruption in the drive during an abnormal power outage

Firmware Features

- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- Advanced Global Wear-Leveling and Block management for reliability
- Built-in LDPC ECC (Error Correction Code) functionality
- Dynamic thermal throttling
- Compliant with TCG Opal specifications and IEEE 1667 standards

Ordering Information

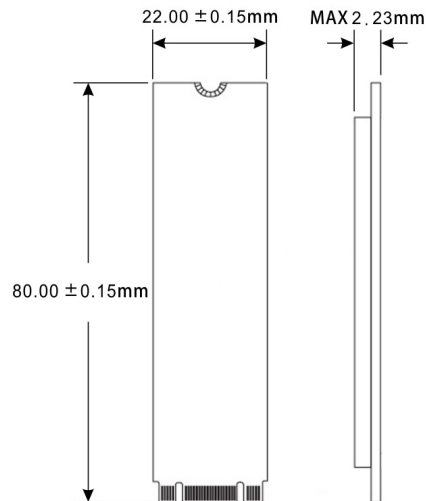
| | |
|-------|----------------------------------|
| 256GB | TS256GMTE760T TS256GMTE760T-I |
| 512GB | TS512GMTE760T TS512GMTE760T-I |
| 1TB | TS1TMTE760T TS1TMTE760T-I |
| 2TB | TS2TMTE760T TS2TMTE760T-I |

*Supports Microsoft® eDrive standard

Specifications

| | | |
|------------------------------|-----------------------------------------|-------------------------------------------------------|
| Appearance | Dimensions | 80 mm x 22 mm x 2.23 mm (3.15" x 0.87" x 0.08") |
| | Weight | 9 g (0.32 oz) |
| | Form Factor | M.2 2280 |
| Interface | Bus Interface | NVMe PCIe Gen4 x4 |
| Storage | Capacity | 256 GB / 512 GB / 1 TB / 2 TB |
| | Flash Type | 112-layer 3D NAND flash |
| 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) | 8.4 watt(s) |
| | Power Consumption (IDLE) | 0.84 watt(s) |
| Performance | Sequential Read/Write (CrystalDiskMark) | Read: Up to 5,000 MB/s Write: Up to 4,100 MB/s |
| | 4K Random Read/Write (IOmeter) | Read: Up to 500,000 IOPS Write: Up to 415,000 IOPS |
| | Mean Time Between Failures (MTBF) | 3,000,000 hour(s) |
| | Terabytes Written (TBW) | Up to 2640 TBW |
| | Drive Writes Per Day (DWPD) | 1.2 (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.