

## Embedded Solutions



### PCIe M.2 SSDs

## MTE672A & MTE672A-I

Transcend's MTE672A M.2 SSD is a self-encrypting drive (SED) that 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 MTE672A M.2 SSD features the 112-layer 3D NAND flash and a PCI Express (PCIe) Gen 3 x4 interface, compatible with NVMe Express (NVMe) 1.3 specifications to achieve 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 MTE672A is also 100% chamber tested in-house for extended operating temperatures of -20°C~75°C. Transcend also offers the MTE672A-I with wide temperature (-40°C~ 85°C) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

### Hardware Features

- Anti-sulfur technology implemented to prevent sulfurization in the environment
- 30μ" PCB gold finger
- Key components fortified by default with Corner Bond technology
- Extended Temp. (-20°C ~ 75°C) and Wide Temp. (-40°C ~ 85°C) options available

### Firmware Features

- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- Dynamic thermal throttling
- Compliant with TCG Opal specifications and IEEE 1667 standards
- Full drive encryption with Advanced Encryption Standard (AES)
- SLC caching technology

### Ordering Information

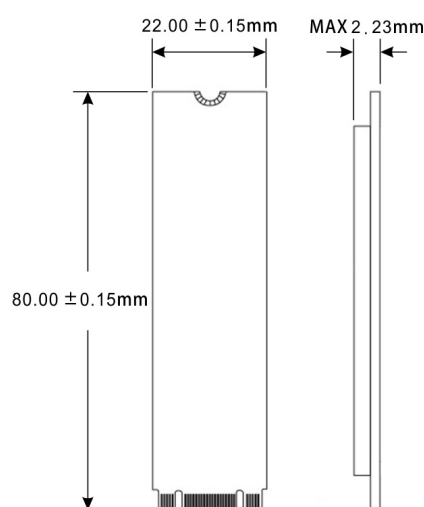
|       |                 |
|-------|-----------------|
| 128GB | TS128GMTE672A   |
|       | TS128GMTE672A-I |
| 256GB | TS256GMTE672A   |
|       | TS256GMTE672A-I |
| 512GB | TS512GMTE672A   |
|       | TS512GMTE672A-I |
| 1TB   | TS1TMTE672A     |
|       | TS1TMTE672A-I   |

\*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)   |
|                       | M.2 Type                                | 2280-S2-M (Single-sided)                              |
|                       | Form Factor                             | M.2 2280  |
| Interface             | Bus Interface                           | NVMe PCIe Gen3 x4                                     |
| Storage               | Capacity                                | 128 GB / 256 GB / 512 GB / 1 TB                       |
|                       | Flash Type                              | 112-layer 3D NAND flash                               |
| Operating Environment | Operating Voltage                       | 3.3V±5%   |
|                       | Operating Temperature                   | Extended Temp.<br>-20°C (-4°F) ~ 75°C (167°F)         |
|                       |   | Wide Temp.<br>-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)           | 3.1 watt(s)   |
|                       | Power Consumption (IDLE)                | 0.4 watt(s)   |
| Performance           | Sequential Read/Write (CrystalDiskMark) | Read: up to 2,100 MB/s<br>Write: up to 1,600 MB/s     |
|                       | 4K Random Read/Write (IOMeter)          | Read: up to 100,000 IOPS<br>Write: up to 260,000 IOPS |
|                       | Mean Time Between Failures (MTBF)       | 3,000,000 hour(s)                                     |
|                       | Terabytes Written (TBW)                 | up to 960 TBW   |
|                       | Drive Writes Per Day (DWPD)             | 0.88 (3 yrs)  |
| Warranty              | Certificate                             | CE / FCC / BSMI / UKCA                                |
|                       | 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.