



## Embedded Solutions



### PCIe M.2 SSDs

# MTE662A

Transcend's MTE662A 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 MTE662A 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. The MTE662A is compliant with the TCG Opal 2.0 standards. Data is secured by encryption and hierarchical permission, and the durability is fortified with 30µ" gold finger PCB and Corner Bond technology. The MTE662A is fully tested in-house to guarantee reliability in mission-critical applications, boasting an endurance rating of 3K Program/Erase cycles and an extended operating temperature range (-20°C~75°C).

### Hardware Features

- PCIe Gen 3 x4 interface
- DDR4 DRAM Cache embedded
- Key components fortified by default with Corner Bond technology
- 30µ" PCB gold finger
- Promised operational reliability in an extended temperature range (from -20°C to 75°C)

### Ordering Information

|       |               |
|-------|---------------|
| 128GB | TS128GMTE662A |
| 256GB | TS256GMTE662A |
| 512GB | TS512GMTE662A |
| 1TB   | TS1TMTE662A   |
| 2TB   | TS2TMTE662A   |

### Firmware Features

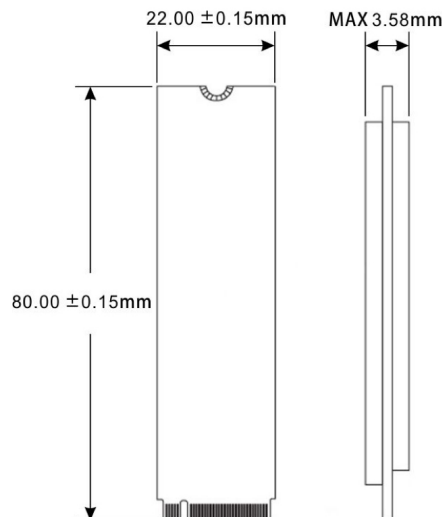
- Supports NVM command
- SLC caching technology
- Dynamic thermal throttling
- Built-in LDPC ECC (Error Correction Code) functionality
- Compliant with TCG Opal specifications and IEEE 1667 standards

\*Supports Microsoft® eDrive standard

## Specifications

|                              |   |   |
|------------------------------|---|---|
| <b>Appearance</b>            | Dimensions                              | 80 mm x 22 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  |
| <b>Interface</b>             | Bus Interface                           | NVMe PCIe Gen3 x4                                     |
| <b>Storage</b>               | Capacity                                | 128 GB / 256 GB / 512 GB / 1 TB / 2 TB                |
|                              | Flash Type                              | 3D NAND flash   |
| <b>Operating Environment</b> | Operating Voltage                       | 3.3V±5%   |
|                              | Operating Temperature                   | Extended Temp.<br>-20°C (-4°F) ~ 75°C (167°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)       |
| <b>Power</b>                 | Power Consumption (Operation)           | 7.0 watt(s)   |
|                              | Power Consumption (IDLE)                | 1.0 watt(s)   |
| <b>Performance</b>           | Sequential Read/Write (CrystalDiskMark) | Read: up to 3,500 MB/s<br>Write: up to 2,700 MB/s     |
|                              | 4K Random Read/Write (IOmeter)          | Read: up to 340,000 IOPS<br>Write: up to 310,000 IOPS |
|                              | Mean Time Between Failures (MTBF)       | 3,000,000 hour(s)                                     |
|                              | Terabytes Written (TBW)                 | up to 4,400 TBW                                       |
|                              | Drive Writes Per Day (DWPD)             | 2 (3 yrs)   |
| <b>Warranty</b>              | 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.