

PCIe M.2 SSDs

# MTE5601

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 30μ" 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

- PCle 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)

### 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

## **Ordering Information**

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

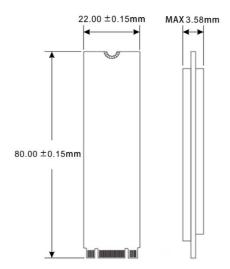
<sup>\*</sup>Supports Microsoft® eDrive standard



## 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 / 240 GB / 320 GB / 640 GB             |
|                          | Flash Type                              | 112-layer 3D NAND flash (SLC mode)                    |
| Operating<br>Environment | Operating Voltage                       | 3.3V±5%   |
|                          | Operating Temperature                   | 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)           | 5 watt(s)   |
|                          | Power Consumption (IDLE)                | 1.25 watt(s)  |
| Performance              | Sequential Read/Write (CrystalDiskMark) | Read: up to 3,800 MB/s<br>Write: up to 3,100 MB/s     |
|                          | 4K Random Read/Write (IOmeter)          | Read: up to 190,000 IOPS<br>Write: up to 320,000 IOPS |
|                          | Mean Time Between Failures (MTBF)       | 3,000,000 hour(s)                                     |
|                          | Terabytes Written (TBW)                 | up to 9,500 TBW                                       |
|                          | Drive Writes Per Day (DWPD)             | 54.2 (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.