

Embedded Solutions



PCIe M.2 SSDs

MTE370T

Transcend's M.2 2230 SSD MTE370T features state-of-the-art 3D NAND technology, which allows 112 layers of 3D NAND flash chips to be vertically stacked. This density breakthrough greatly improves storage efficiency. The MTE370T features the PCI Express (PCIe) Gen 3 x4 interface and is compatible with NVMe Express (NVMe) 1.3 specifications to achieve never-before-seen transfer speeds. Applied with the 30 μ m gold finger PCB and Corner Bond technology, the MTE370T 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 ranging from -20°C~75°C.

Hardware Features

- Compliant with RoHS 2.0 standards
- Compliant with NVMe Express specification 1.3
- Compliant with PCI Express specification 3.1
- Space-saving M.2 form factor (30mm) – ideal for mobile computing devices
- Single-sided to fit perfectly in small form factor devices

Ordering Information

| | |
|-------|---------------|
| 256GB | TS256GMTE370T |
| 512GB | TS512GMTE370T |

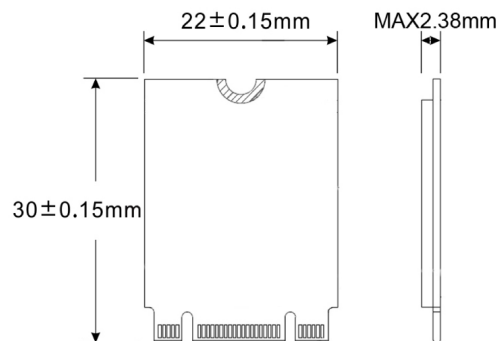
Firmware Features

- Supports NVM command
- SLC caching technology
- Dynamic thermal throttling
- Built-in LDPC ECC (Error Correction Code) functionality
- Advanced Garbage Collection

Specifications

| | | |
|------------------------------|---|--|
| Appearance | Dimensions | 30 mm x 22 mm x 2.38 mm (1.18" x 0.87" x 0.08") |
| | Weight | 4 g (0.14 oz) |
| | Form Factor | M.2 |
| | M.2 Type | 2230-S2-M |
| Interface | Bus Interface | NVMe PCIe Gen3 x4 |
| Storage | Flash Type | 112-layer 3D NAND flash |
| | Capacity | 256 GB / 512 GB |
| Operating Environment | Operating Voltage | 3.3V±5% |
| | Operating Temperature | Extended Temp. -20°C (-4°F) ~ 75°C (185°F) |
| | Storage Temperature | -55°C (-67°F) ~ 75°C (167°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) | 3.3 watt(s) |
| | Power Consumption (IDLE) | 0.4 watt(s) |
| Performance | Sequential Read/Write (CrystalDiskMark) | Read: up to 2,000 MB/s Write: up to 1,100 MB/s |
| | 4K Random Read/Write (IOMeter) | Read: up to 90,000 IOPS Write: up to 220,000 IOPS |
| | Mean Time Between Failures (MTBF) | 3,000,000 hour(s) |
| | Terabytes Written (TBW) | up to 480 TBW |
| | Drive Writes Per Day (DWPD) | 2.0 (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.