

## Embedded Solutions



### PCIe M.2 SSDs

# MTE460T & MTE460T-I

Transcend's MTE460T PCIe M.2 SSD features a PCIe Gen 3x2 interface and 112-layer 3D NAND flash, delivering breakthrough density that greatly improves storage efficiency. In addition, the 30 $\mu$ " gold finger PCB, Corner Bond technology, and anti-sulfur resistors guarantee its reliability in harsh conditions. Transcend's MTE460T is also 100% chamber tested in-house for extended operating temperatures of -20 $^{\circ}$ C~75 $^{\circ}$ C. Wide-temp capability (-40 $^{\circ}$ C~85 $^{\circ}$ C) can also be provided upon request, optimizing stability in extreme environments.

### Hardware Features

- Compliant with PCI Express specification 3.1
- PCIe Gen 3 x2 interface
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Anti-sulfur technology implemented to prevent sulfurization in the environment
- 30 $\mu$ " PCB gold finger

### Firmware Features

- Built-in LDPC ECC (Error Correction Code) functionality
- Dynamic thermal throttling
- Advanced Global Wear-Leveling and Block management for reliability
- Advanced Garbage Collection
- Early Move

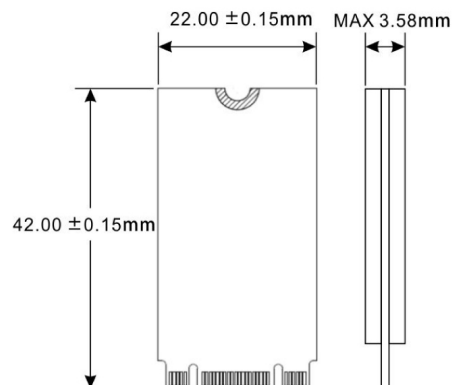
### Ordering Information

128GB	TS128GMTE460T TS128GMTE460T-I
256GB	TS256GMTE460T TS256GMTE460T-I
512GB	TS512GMTE460T TS512GMTE460T-I
1TB	TS1TMTE460T TS1TMTE460T-I

## Specifications

<b>Appearance</b>	Dimensions	42 mm x 22 mm x 2.23 mm (1.65" x 0.87" x 0.09")
	Weight	5 g (0.18 oz)
	M.2 Type	2242-D2-B-M (Double-sided)
	Form Factor	M.2 2242
<b>Interface</b>	Bus Interface	NVMe PCIe Gen3 x2
<b>Storage</b>	Capacity	128 GB / 256 GB / 512 GB / 1 TB
	Flash Type	112-layer 3D NAND flash
<b>Operating Environment</b>	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 ~ 2,000 Hz (frequency)
<b>Power</b>	Power Consumption (Operation)	2.5 watt(s)
	Power Consumption (IDLE)	0.33 watt(s)
<b>Performance</b>	Sequential Read/Write (CrystalDiskMark)	Read: up to 1,700 MB/s Write: up to 1,000 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 406 TBW
	Drive Writes Per Day (DWPD)	0.86 (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.