



PCIe M.2 SSDs

MTE775A & MTE775A-I

Transcend's MTE775A PCIe Gen4 x4 M.2 SSD features BiCS8 218-layer 3D NAND flash and a DRAM-less architecture that helps reduce power consumption and system costs. It also supports the TCG Opal 2.0 standard for hardware-based data security, making it suitable for applications requiring high-speed data access and data security in industrial equipment and embedded systems. The M.2 2280 form factor facilitates integration into a wide range of industrial and embedded platforms.

To meet the operating temperature requirements of different devices and applications, the MTE775A operates from -20°C to 75°C, while the MTE775A-I wide-temperature version supports operation from -40°C to 85°C. Both models feature 30µ"-thick gold-plated fingers and Corner Bond technology to enhance connection reliability and structural integrity. Rigorous in-house testing helps enhance durability and ensure stable operation in industrial environments over extended periods of use.

Hardware Features

- Compliant with RoHS 2.0 standards
- Compliant with NVM Express specification 2.0
- Compliant with PCI Express specification 4.0
- Space-saving M.2 form factor (80mm) – ideal for mobile computing devices
- PCIe Gen 4 x4 interface

Firmware Features

- Supports NVM command
- NCQ command for better performance
- TRIM command for better performance
- Dynamic thermal throttling
- Built-in LDPC ECC (Error Correction Code) functionality

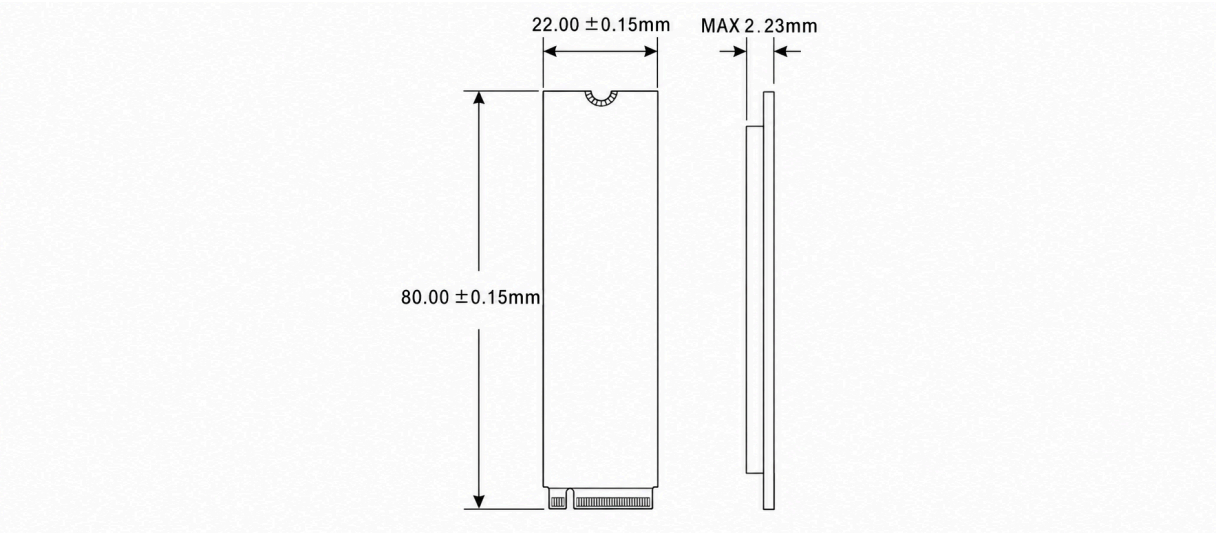
Ordering Information

128GB	TS128GMTE775A TS128GMTE775A-I
256GB	TS256GMTE775A TS256GMTE775A-I
512GB	TS512GMTE775A TS512GMTE775A-I
1TB	TS1TMTE775A TS1TMTE775A-I
2TB	TS2TMTE775A TS2TMTE775A-I

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 Gen4 x4
Storage	Capacity	128 GB / 256 GB / 512 GB / 1 TB / 2 TB
	Flash Type	218-layer 3D NAND flash
Operating Environment	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)
Power	Power Consumption (Operation)	5.0 watt(s)
	Power Consumption (IDLE)	0.64 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: Up to 7,400 MB/s Write: Up to 6,700 MB/s
	4K Random Read/Write (IOmeter)	Read: Up to 1,000,000 IOPS Write: Up to 1,000,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	Up to 3,400 TBW
	Drive Writes Per Day (DWPD)	2.2 (3 yrs)
Warranty	Certificate	CE / UKCA / FCC / BSMI
	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.