

Embedded Solutions



SATA III M.2 SSDs

MTS210I

The MTS210I features the SATA III 6Gb/s interface and 112-layer 3D NAND flash, delivering density breakthrough that greatly improves storage efficiency. Its built-in DRAM cache allows faster random speeds while the 30μ" gold finger PCB, Corner Bond technology, and anti-sulfur resistor guarantee its reliability in harsh conditions. Transcend also adopts the SLC Mode technology to enable the drive to reach competitive speeds and endurance that are equal to the SLC flash. The MTS210I is fully tested in-house, operating stably in a wide operating temperature range(-40°C~85°C).

Hardware Features

- DDR3 DRAM Cache embedded
- High-quality 3D NAND flash and SLC mode for exceptional endurance and reliability
- Anti-sulfur technology implemented to prevent sulfurization in the environment
- 30μ" PCB gold finger
- Key components fortified by default with Corner Bond technology

Ordering Information

40GB	TS40GMTS210I
80GB	TS80GMTS210I
160GB	TS160GMTS210I
320GB	TS320GMTS210I

Firmware Features

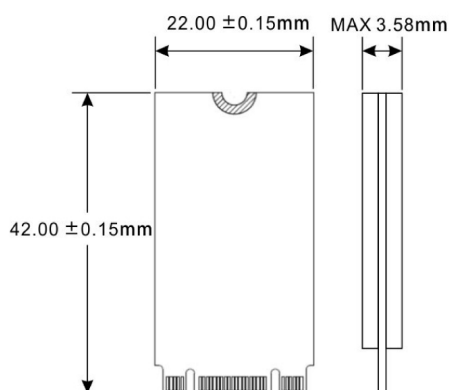
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- Advanced Garbage Collection
- Advanced Global Wear-Leveling and Block management for reliability
- Built-in LDPC ECC (Error Correction Code) functionality
- Full drive encryption with Advanced Encryption Standard (AES) (optional)



Specifications

Appearance	Dimensions	42 mm x 22 mm x 3.58 mm (1.65" x 0.87" x 0.14")
	Weight	5 g (0.18 oz)
	M.2 Type	2242-D2-B-M
	Form Factor	M.2 2242
Interface	Bus Interface	SATA III 6Gb/s
Storage	Capacity	40 GB / 80 GB / 160 GB / 320 GB
	Flash Type	112-layer 3D NAND flash (SLC mode)
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	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), 2 Hz ~ 2,000 Hz (frequency)
Power	Power Consumption (Operation)	2.7 watt(s)
	Power Consumption (Sleep)	1.1 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 560 MB/s Write: up to 400 MB/s
	4K Random Read/Write (IOMeter)	Read: up to 38,000 IOPS Write: up to 75,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 2,289 TBW
	Drive Writes Per Day (DWPD)	52.3 (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.

