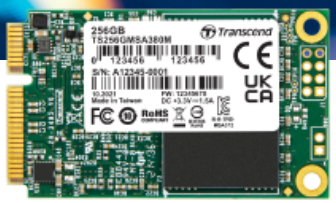
Embedded Solutions



mSATA SSDs

MSA380M

Supporting the Serial ATA interface and built around a powerful controller, Transcend's SATA III 6Gb/s MSA380M mSATA SSD delivers blazing-fast performance and long-term reliability. The compact mSATA form factor is just one-eighth the size of a standard 2.5" SSD, making it perfect for use in space-constricted portable devices such as Ultrabooks, tablet PCs, and slim servers.

Hardware Features

- Compliant with RoHS 2.0 standards
- MLC NAND flash
- DDR3 DRAM Cache embedded

Firmware Features

- NCQ command for better performance
- TRIM command for better performance
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- Static Data Refresh
- Built-in BCH ECC (Error Correction Code) functionality

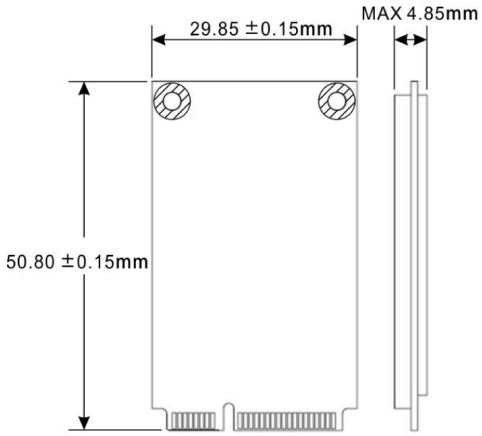
Ordering Information

16GB	TS16GMSA380M
32GB	TS32GMSA380M
64GB	TS64GMSA380M
128GB	TS128GMSA380M
256GB	TS256GMSA380M

Specifications

Appearance	Dimensions	50.8 mm x 29.85 mm x 4.85 mm (2" x 2.18" x 0.19")
	Weight	8 g (0.28 oz)
	mSATA Type	MO-300A
	Pin Count	52 pin
	Form Factor	mSATA
Interface	Bus Interface	SATA III 6Gb/s
Storage	Flash Type	MLC NAND flash
	Capacity	16 GB / 32 GB / 64 GB / 128 GB / 256 GB
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Standard 0°C (32°F) ~ 70°C (158°F)
	Storage Temperature	-40°C (-40°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 ~ 2000 Hz (frequency)
Power	Power Consumption (Operation)	1.82 watt(s)
	Power Consumption (Sleep)	0.28 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 550 MB/s Write: up to 420 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 70,000 IOPS Write: up to 75,000 IOPS
	Mean Time Between Failures (MTBF)	2,500,000 hour(s)
	Terabytes Written (TBW)	up to 740 TBW
	Drive Writes Per Day (DWPD)	2.6 (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.