

**Embedded Solutions** 

mSATA SSDs

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 oneeighth 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
- Power Shield (PS) to ensure data transfer integrity and minimize data corruption in the drive during an abnormal power outage
- · Key components fortified by default with Corner Bond technology

#### **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**

123456 / 123456 A12345-0001

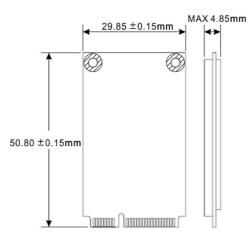
16GB	TS16GMSA380M	
32GB	TS32GMSA380M	
64GB	TS64GMSA380M	
128GB	TS128GMSA380M	
256GB	TS256GMSA380M	



# 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)
	Pin Count	52 pin
	Form Factor	mSATA (MO-300A)
Interface	Bus Interface	SATA III 6Gb/s
Storage	Capacity	16 GB / 32 GB / 64 GB / 128 GB / 256 GB
	Flash Type	MLC NAND flash
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Standard Temp. 0°C (32°F) ~ 70°C (158°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 ~ 2000 Hz (frequency)
Power	Power Consumption (Operation)	1.82 watt(s)
	Power Consumption (IDLE)	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 / 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.