

## Embedded Solutions



mSATA SSDs

# SATA III 6Gb/s MSA370 & MSA370I mSATA SSD

Supporting the Serial ATA interface and built around a powerful controller, Transcend's SATA III 6Gb/s MSA370 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.

Transcend also offers the MSA370I with wide temperature (-40°C ~ 85°C) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

## Features

- DRAM Cache embedded
- Wide-temperature model available: promised operational reliability in a wide temperature range (from -40°C ~ 85°C)
- Advanced Global Wear-Leveling and Block management for reliability
- Advanced Garbage Collection
- Security Command
- Built-in ECC (Error Correction Code) functionality
- Enhanced S.M.A.R.T. function for durability
- Compliant with RoHS 2.0 standards
- Power-saving DevSleep (Device Sleep) mode
- MLC NAND Flash

## Ordering Information

Standard (0°C~ 70°C)

16GB	TS16GMSA370
32GB	TS32GMSA370
64GB	TS64GMSA370
128GB	TS128GMSA370
256GB	TS256GMSA370
512GB	TS512GMSA370
1TB	TS1TMSA370

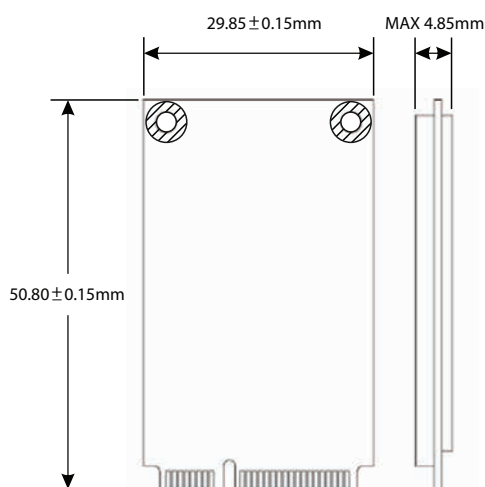
Wide Temp. (-40°C~ 85°C)

16GB	TS16GMSA370I
32GB	TS32GMSA370I
64GB	TS64GMSA370I
128GB	TS128GMSA370I
256GB	TS256GMSA370I
512GB	TS512GMSA370I
1TB	TS1TMSA370I

## Specifications

Appearance	Dimensions	50.8 mm x 29.85 mm x 4.85 mm (2" x 1.18" x 0.19")
	Weight	8 g (0.28 oz)
	mSATA Type	MO-300
	Pin	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/512 GB/1 TB
Operating Environment	Operating Voltage	3.3V±5%
	Operating Temperature	Standard: 0°C (32°F) ~ 70°C (158°F)
		Wide Temp.: -40°C (-40°F) ~ 85°C (185°F)
	Storage Temperature	-40°C (-40°F) ~ 85°C (185°F)
	Humidity	0% ~ 95%
	Shock	1500 G, 0.5 ms, 3 axis
Vibration	20 G (peak-to-peak), 7 Hz ~ 2000 Hz (frequency)	
Power	Power Consumption (Operation)	2.64 watt(s)
	Power Consumption (Sleep)	0.4 watt(s)
	Sequential Read/Write (CrystalDiskMark, max.)	Read: 550 MB/s; write: 450 MB/s
Performance	4K Random Read/Write (IOMeter, max.)	Read: 70,000 IOPS; write: 75,000 IOPS
	Mean Time Between Failures (MTBF)	2,500,000 hour(s)
	Terabytes Written (Max.)	2,360 TBW
	Drive Writes Per Day (DWPD)	2.6 (3 yrs)
Warranty	Certificate	CE/FCC/BSMI
	Warranty	Three-year Limited Warranty
Note	<ul style="list-style-type: none"> <li>• Speed may vary due to host hardware, software, usage, and storage capacity.</li> <li>• The workload used to rate DWPD may be different from your actual workload, which may vary due to host hardware, software, usage, and storage capacity.</li> </ul>	

## Mechanical Dimensions



Product specifications are subject to change without notice. Pictures shown may differ from actual products. When used as a storage capacity unit, one terabyte (TB) = one trillion bytes. 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.



Please feel free to contact us with any special requests you might have.

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