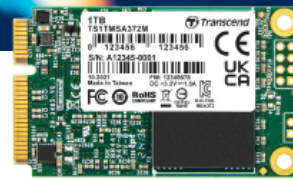# Transcend®

www.transcend-info.com

Embedded Solutions

mSATA SSDs

MSA372M & MSA372I

Supporting the Serial ATA interface and built around a powerful controller, Transcend's SATA III 6Gb/s MSA372M 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 MSA372I with wide temperature (-40℃ ~ 85℃) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

Hardware Features

- DDR3 DRAM Cache embedded
- Compliant with RoHS 2.0 standards
- MLC NAND flash
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)
- Key components fortified by default with Corner Bond technology

Firmware Features

- Advanced Global Wear-Leveling and Block management for reliability
- Built-in BCH ECC (Error Correction Code) functionality
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- Power-saving DevSleep (Device Sleep) mode
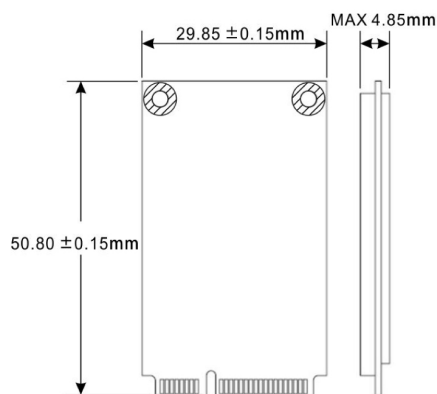- Advanced Garbage Collection

Ordering Information

Capacity	Part Number
16GB	TS16GMSA372I TS16GMSA372M
32GB	TS32GMSA372I TS32GMSA372M
64GB	TS64GMSA372I TS64GMSA372M
128GB	TS128GMSA372I TS128GMSA372M
256GB	TS256GMSA372I TS256GMSA372M
512GB	TS512GMSA372I TS512GMSA372M
1TB	TS1TMSA372I TS1TMSA372M

Transcend®

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	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 Temp. 0°C (32°F) ~ 70°C (158°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)	2.64 watt(s)
	Power Consumption (Sleep)	0.4 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 550 MB/s Write: up to 450 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 70,000 IOPS Write: up to 70,000 IOPS
	Mean Time Between Failures (MTBF)	2,500,000 hour(s)
	Terabytes Written (TBW)	up to 2360 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.

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

US

sales@assured-systems.com

Sales: +1 347 719 4508
Support: +1 347 719 4508

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050
Support: +44 (0)1785 879 050

Unit A5 Douglas Park
Stone Business Park
Stone
ST15 0YJ
United Kingdom

VAT Number: 120 9546 28
Business Registration Number: 07699660