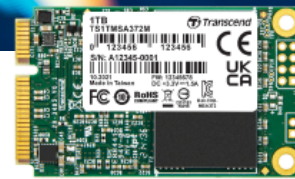




[www.transcend-info.com](http://www.transcend-info.com)

## 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°C ~ 85°C) 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

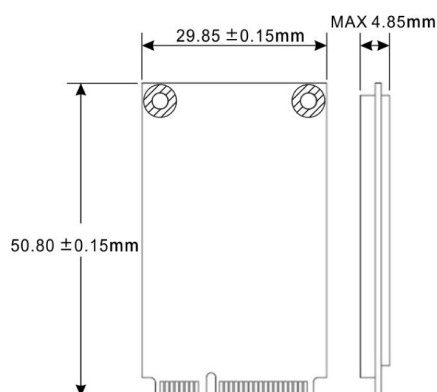
## Ordering Information

|       |                                |
|-------|--------------------------------|
| 16GB  | TS16GMSA372I<br>TS16GMSA372M   |
| 32GB  | TS32GMSA372I<br>TS32GMSA372M   |
| 64GB  | TS64GMSA372I<br>TS64GMSA372M   |
| 128GB | TS128GMSA372I<br>TS128GMSA372M |
| 256GB | TS256GMSA372I<br>TS256GMSA372M |
| 512GB | TS512GMSA372I<br>TS512GMSA372M |
| 1TB   | TS1TMSA372I<br>TS1TMSA372M     |

## Specifications

|                              |                                         |                                                                                           |
|------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Appearance</b>            | 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)                                                                           |
| <b>Interface</b>             | Bus Interface                           | SATA III 6Gb/s                                                                            |
| <b>Storage</b>               | Flash Type                              | MLC NAND flash                                                                            |
|                              | Capacity                                | 16 GB / 32 GB / 64 GB / 128 GB / 256 GB / 512 GB / 1 TB                                   |
| <b>Operating Environment</b> | Operating Voltage                       | 3.3V±5%                                                                                   |
|                              | Operating Temperature                   | Standard Temp.<br>0°C (32°F) ~ 70°C (158°F)<br>Wide Temp.<br>-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)                                          |
| <b>Power</b>                 | Power Consumption (Operation)           | 2.64 watt(s)                                                                              |
|                              | Power Consumption (Sleep)               | 0.4 watt(s)                                                                               |
| <b>Performance</b>           | Sequential Read/Write (CrystalDiskMark) | Read: up to 550 MB/s<br>Write: up to 450 MB/s                                             |
|                              | 4K Random Read/Write (IOMeter)          | Read: up to 70,000 IOPS<br>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)                                                                               |
| <b>Warranty</b>              | 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.

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