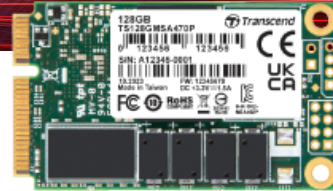


Embedded Solutions



mSATA SSDs

MSA470P

Transcend's SATA III 6Gb/s mSATA SSD MSA470P is a Power Loss Protection (PLP) SSD. During unexpected power outages, the built-in tantalum capacitor provides power to the controller and DRAM cache, ensuring data integrity and storage reliability.

Featuring the Serial ATA interface and a powerful controller, Transcend's SATA III 6Gb/s MSA470P mSATA SSD delivers reliable performance. The MSA470P features the new 112-layer 3D NAND technology for high storage efficiency and a built-in DRAM cache for fast access. The 30 μ " gold finger PCB, Corner Bond technology, and anti-sulfur resistor guarantee its reliability in harsh conditions. Transcend's MSA470P is fully tested in-house, operating stably in a wide temperature range (-40°C~85°C). 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

- Anti-sulfur technology implemented to prevent sulfurization in the environment
- Key components fortified by default with Corner Bond technology
- 30 μ " PCB gold finger
- Power Loss Protection (PLP) to prevent data loss in the event of sudden power outage
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)

Firmware Features

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

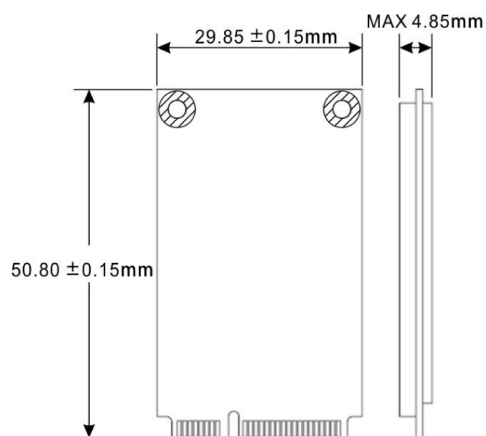
Ordering Information

| | |
|-------|---------------|
| 128GB | TS128GMSA470P |
| 256GB | TS256GMSA470P |
| 512GB | TS512GMSA470P |
| 1TB | TS1TMSA470P |

Specifications

| | | |
|------------------------------|---|---|
| Appearance | Dimensions | 50.8 mm x 29.85 mm x 4.85 mm (2" x 1.18" x 0.19") |
| | Weight | 6 g (0.21 oz) |
| | Form Factor | mSATA (MO-300A) |
| Interface | Bus Interface | SATA III 6Gb/s |
| Storage | Capacity | 128 GB / 256 GB / 512 GB / 1 TB |
| | Flash Type | 112-layer 3D NAND flash |
| Operating Environment | Operating Voltage | 3.3V±5% |
| | Operating Temperature | 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 ~ 2000 Hz (frequency) |
| Power | Power Consumption (Operation) | 3.07 watt(s) |
| Performance | Sequential Read/Write (CrystalDiskMark) | Read: Up to 560 MB/s Write: Up to 420 MB/s |
| | 4K Random Read/Write (IOmeter) | Read: Up to 38,000 IOPS Write: Up to 75,000 IOPS |
| | Mean Time Between Failures (MTBF) | 3,000,000 hour(s) |
| | Terabytes Written (TBW) | Up to 250 TBW |
| | Drive Writes Per Day (DWPD) | 1.66 (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.