

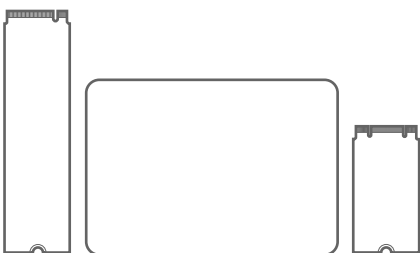
Embedded Solutions

mSATA SSD

Supporting the next-generation SATA interface and built around a powerful controller, Transcend's mSATA and mSATA mini SSDs deliver 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. Fully compliant with mSATA specifications, Transcend's mSATA mini SSDs deliver the full performance benefits of SSD technology while measuring just 26.8 x 29.85 x 3.85 (mm) in size, making it ideal for use in small form factor devices.

Features

- Suitable for wide-temperature applications
- Supports Intel Smart Response Technology (ISRT) and DEVSLP mode (MSA370)
- SuperMLC technology allows MLC NAND to act as SLC NAND
- 3D NAND flash for write protect and hardware purge security functions
- Optional support for write protect and hardware purge security functions
- Supports AHCI mode, TRIM command, and NCQ



Specifications

| | MSA450T | MSA370/MSA370I | MSA510 | MSA570 | MSA630 | MSM360 (Mini) | MSM610 (Mini) |
|-----------------------|---|-------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------------------|-------------------------------|
| Interface | SATA III 6Gb/s | | | SATA II 3Gb/s | | SATA III 6Gb/s | SATA II 3Gb/s |
| Flash Type | 3D TLC | MLC | SuperMLC | SLC | | MLC | |
| Connector | mSATA 52-pin | | | | | | |
| Form Factor | MO-300 | | | | | | |
| Capacity | 32GB~128GB | 16GB~1TB | 8GB~32GB | 4GB~8GB | 32GB | 16GB~128GB | 16GB~32GB |
| Sequential Read* | 550 MB/s | 570 MB/s | 570 MB/s | 300 MB/s | 225MB/s | 520 MB/s | 150 MB/s |
| Sequential Write* | 400 MB/s | 470 MB/s | 290 MB/s | 130 MB/s | 40 MB/s | 220 MB/s | 42 MB/s |
| Operating Temperature | 0°C~70°C** | | | | | | |
| Storage Temperature | -40°C~85°C | | | | | | |
| Humidity | 0%~95% | | | | | | |
| Shock | 1500G, 0.5ms, 3 axis | | | | | | |
| Vibration | 3G, 5Hz to 800Hz (operating) / 5G, 5Hz to 800Hz (non-operating) | | | | | | |
| Operating Voltage | 3.3V±5% | | | | | | |
| Power Consumption | 1.8W (active), 0.4W (idle) | 2.6W (active), 0.4W (idle) | 2.0W (active), 0.3W (idle) | 1.5W (active), 0.4W (idle) | 1.1W (active) 0.6W (idle) | 2.0W (active), 0.3W (idle) | 0.9W (active), 0.5W (idle) |
| Dimensions (max.) | 50.8 x 29.85 x 4.85mm | | | | 26.8 x 29.85 x 3.85mm | | |
| MTBF | 1,500,000 hours | | | | 1,000,000 hours | | |
| Warranty | Three-year Limited Warranty | | | | | | |

*Maximum performance shown. Performance varies by capacity, user hardware, and system configuration.

**Wide temperature (-40°C~85°C) available by request.

Ordering Information

| | | | | | | | | |
|--------------------|---------------|-------|--------|-------------------------------|------|-------------------------------|--------------|-------|
| MSA450T | TS32GMSA450T | 32GB | MSA510 | TS8GMSA510 | 8GB | MSM360 (mSATA mini SSD) | TS16GMSM360 | 16GB |
| | TS64GMSA450T | 64GB | | TS16GMSA510 | 16GB | | TS32GMSM360 | 32GB |
| | TS128GMSA450T | 128GB | | TS32GMSA510 | 32GB | | TS64GMSM360 | 64GB |
| MSA370/ MSA370I | TS16GMSA370 | 16GB | MSA570 | TS4GMSA570 | 4GB | | TS128GMSM360 | 128GB |
| | TS16GMSA370I | 16GB | | TS8GMSA570 | 8GB | MSM610 (mSATA mini SSD) | TS16GMSM610 | 16GB |
| | TS32GMSA370 | 32GB | MSA630 | TS32GMSA630 | 32GB | | TS32GMSM610 | 32GB |
| | TS32GMSA370I | 32GB | | MSM360 (mSATA mini SSD) | | | | |
| | TS64GMSA370 | 64GB | | | | | | |
| | TS64GMSA370I | 64GB | | | | | | |
| | TS128GMSA370 | 128GB | | | | | | |
| | TS128GMSA370I | 128GB | | | | | | |
| | TS256GMSA370 | 256GB | | | | | | |
| | TS256GMSA370I | 256GB | | | | | | |
| | TS512GMSA370 | 512GB | | | | | | |
| | TS512GMSA370I | 512GB | | | | | | |
| | TS1TMSA370 | 1TB | | | | | | |

Tailored Options Available



Intelligent Power Shield



AES Encryption



Underfill

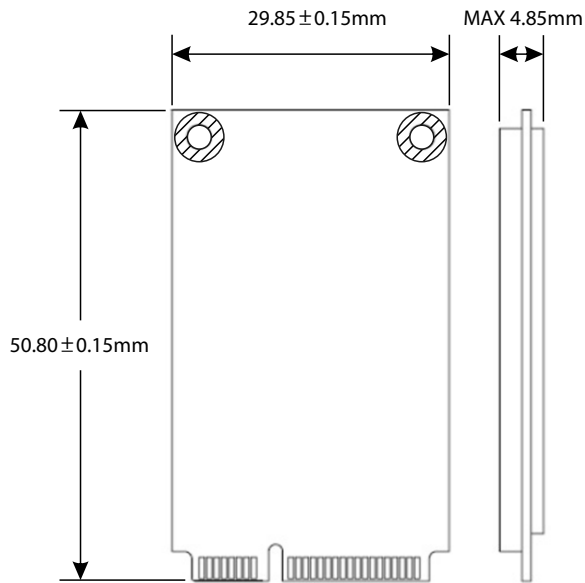


Conformal Coating

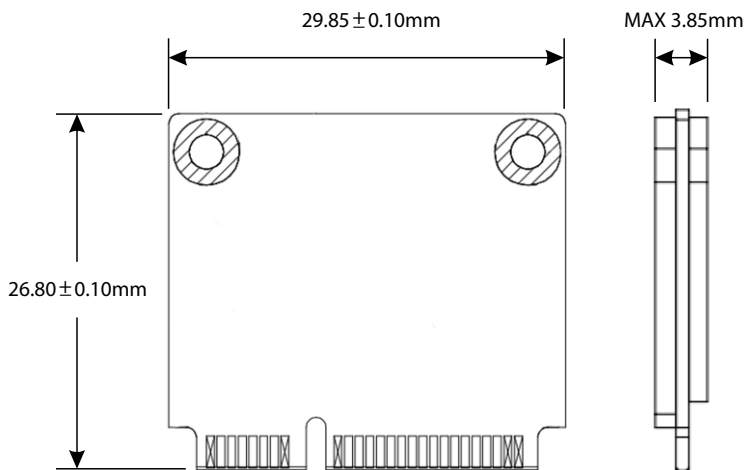


Mechanical Dimensions

MSA450T/MSA70/MSA370I/MSA510/MSA570/MSA630



MSM360/MSM610



Tailored Options Available



Intelligent Power Shield



AES Encryption



Underfill



Conformal Coating

