



Supporting the Serial ATA interface and built around a powerful controller, Transcend's SATA III 6Gb/s MSA450T mSATA SSD, using 64-layer 3D TLC NAND flash memory, delivers blazing-fast performance, long-term reliability, and high cost-effectiveness. 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.

Features

- · 3D TLC NAND flash memory for high cost-effectiveness
- · Advanced Global Wear-leveling and Block management for reliability
- · Built-in ECC (Error Correction Code) functionality
- · DDR3 DRAM cache embedded
- Supports Advanced Garbage Collection, Enhanced S.M.A.R.T. function, and Security Command
- RoHS compliant

Ordering Information

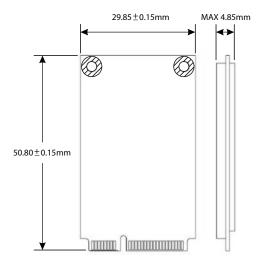
| 32GB | TS32GMSA450T | | |
|-------|---------------|--|--|
| 64GB | TS64GMSA450T | | |
| 128GB | TS128GMSA450T | | |
| 265GB | TS256GMSA450T | | |
| 512GB | TS512GMSA450T | | |
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Specifications

| Appearance Dimensions (Max) 50.8 mm x 29.85 mm x 4.85 mm (2" x 1.18" x 0.19") Appearance Weight (Max) 8 g (0.28 az) Mo-300 mSATA Type MO-300 Interface Bus Interface SATA III GGb/s Storage Flash Type 3DTLC NAND flash Appearance Qperating Voltage 33.24±5% Operating Emperature 0"C (32"F) ~ 70"C (158"F) Operating Emperature 40"C (40"F) ~ 85"C (185"F) Operating Emperature 40"C (40"F) ~ 85"C (185"F) Vibration (Operating) 3 G (peak-to-peak), 5 Hz ~ 800 Hz (frequency) Shock 1500 G, 0.5 ms, 3 axis Vibration (Non-operating) 2 G (peak-to-peak), 5 Hz ~ 800 Hz (frequency) Power Consumption (Operation) 2.1 watt(s) Power Consumption (Sleep) 0.4 watt(s) Sequential Read/Write (CrystalDiskMark, max) Read: 560 MB/s; write: 500 MB/s Sequential Read/Write (CrystalDiskMark, max) Read: 560 MB/s; write: 500 MB/s Warranty 1 readytes Written (Max) 320 TB Warranty 2 create (Max) 20 CE/FCC/BSMI Note 4 Saranty Thr | | | | |
|---|-----------------------|---|---|--|
| MG-300 Pin 52 pin Form Factor mSATA Interface Bus Interface SATA III 6Gb/s Flash Type 3DTLC NAND flash Capacity 32 GB/64 GB/128 GB/256 GB/512 GB Operating Voltage 3.3V±5% Operating Temperature 0°C (32*F) ~ 70°C (158*F) Storage Temperature 40°C (40*F) ~ 85°C (185*F) Storage Temperature 40°C (40*F) ~ 85°C (185*F) Wibration (Operating) 3 G (peak-to-peak), 5 Hz ~ 800 Hz (frequency) Vibration (Non-operating) 5 G (peak-to-peak), 5 Hz ~ 800 Hz (frequency) Vibration (Sleep) 0.4 watt(s) Power Consumption (Sleep) 0.4 watt(s) Sequential Read/Write (CrystalDiskMark, max.) Read: 560 MB/s; write: 500 MB/s Sequential Read/Write (CrystalDiskMark, max.) Read: 600 MB/s; write: 500 MB/s AK Random Read/Write (IOmeter, max.) Read: 80,000 IOPS; write: 85,000 IOPS Mean Time Between Failures (MTBF) 1,000,000 hour(s) Terabytes Written (Max.) 320 TB Drive Writes Per Day (DWPD) 0.58 (3 yrs) Warranty Certificate CE/FCC/BSMI Warranty Warranty Three-year Limited Warranty 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. | Appearance | Dimensions (Max.) | 50.8 mm x 29.85 mm x 4.85 mm (2" x 1.18" x 0.19") | |
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| Form Factor mSATA Interface Bus Interface SATA III 6Gb/s Storage Flash Type 3D TLC NAND flash Capacity 32 GB/64 GB/128 GB/256 GB/512 GB Operating Voltage 3.3V±5% Operating Temperature 0°C (32°F) ~ 70°C (158°F) Storage Temperature -40°C (-40°F) ~ 85°C (185°F) Operating Environment Humidity 5% ~ 95% Shock 1500 G, 0.5 ms, 3 axis Vibration (Operating) 3 G (peak-to-peak), 5 Hz ~ 800 Hz (frequency) Vibration (Non-operating) 5 G (peak-to-peak), 5 Hz ~ 800 Hz (frequency) Power Onsumption (Sleep) 0.4 watt(s) Power Consumption (Sleep) 0.4 watt(s) Sequential Read/Write (ATTO, max.) Read: 560 MB/s; write: 500 MB/s Sequential Read/Write (CrystalDiskMark, max.) Read: 560 MB/s; write: 500 MB/s AK Random Read/Write (Cometer, max.) Read: 80,000 (OPS; write: 85,000 (OPS Mean Time Between Failures (MTBF) 1,000,000 hour(s) Terabytes Written (Max.) 320 TB Drive Writes Per Day (DWPD) 0.58 (3 yrs) Warranty Warranty Warranty Three-year Limited Warranty Speed may vary due to host hardware, software, usage, and storage capacity. 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. 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. | | mSATA Type | MO-300 | |
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| Flash Type 3D TLC NAND flash | | Form Factor | mSATA | |
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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.



Transcend®