



SSD510K

Featuring the SATA III 6Gb/s interface, a powerful controller, and Transcend's exclusive SuperMLC technology, Transcend's SSD510K provides superior reliability and endurance nearly equivalent to SLC NAND flash, yet at a cost-effective price, ideal for embedded applications, such as embedded automation computers, engineering machines, and fanless PCs. The SSD510K is built with DRAM cache for reliable speeds, outstanding cache performance and customized functions to cater to the requirements of various embedded applications.

Hardware Features

- Compliant with RoHS 2.0 standards
- DDR3 DRAM Cache embedded

Firmware Features

- Transcend's exclusive SuperMLC technology
- · Built-in ECC (Error Correction Code) functionality
- · Advanced Global Wear-Leveling and Block management for reliability
- Power-saving DevSleep (Device Sleep) mode
- · Enhanced S.M.A.R.T. function for durability

Ordering Information

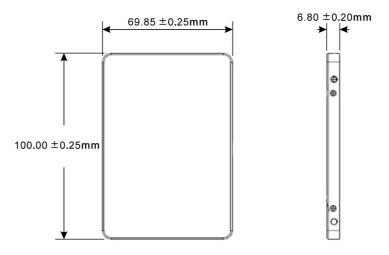
| 16GB | TS16GSSD510K |
|-------|---------------|
| 32GB | TS32GSSD510K |
| 64GB | TS64GSSD510K |
| 128GB | TS128GSSD510K |
| | |



Specifications

| Appearance | Dimensions | 100 mm x 69.85 mm x 6.8 mm (3.94" x 2.75" x 0.27") |
|--------------------------|---|---|
| | Weight | 63 g (2.22 oz) |
| | Form Factor | 2.5" |
| Interface | Bus Interface | SATA III 6Gb/s |
| Storage | Flash Type | SuperMLC |
| | Capacity | 16 GB / 32 GB / 64 GB / 128 GB |
| Operating Environment | Operating Voltage | 5V±5% |
| | Operating Temperature | Standard 0°C (32°F) ~ 70°C (158°F) |
| | Storage Temperature | -40°C (-40°F) ~ 85°C (185°F) |
| | Humidity | 0% ~ 95% |
| | Shock | 1500 G, 0.5 ms, 3 axis |
| | Vibration (Operating) | 5.0 G (peak-to-peak), 5 Hz ~ 800 Hz (frequency) |
| Power | Power Consumption (Operation) | 2.95 watt(s) |
| | Power Consumption (Sleep) | 0.35 watt(s) |
| Performance | Sequential Read/Write (ATTO, max.) | Read: up to 570 MB/s Write: up to 460 MB/s |
| | Sequential Read/Write (CrystalDiskMark, max.) | Read: up to 530 MB/s Write: up to 440 MB/s |
| | 4K Random Read/Write (IOmeter, max.) | Read: up to 75,000 IOPS Write: up to 75,000 IOPS |
| | Mean Time Between Failures (MTBF) | 1,500,000 hour(s) |
| | Terabytes Written (Max.) | 2,840 TBW |
| | Drive Writes Per Day (DWPD) | 15.2 (3 yrs) |
| Warranty | Certificate | CE / 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.