



SSD510K

Featuring the SATA III 6Gb/s interface, a powerful controller, and Transcend's exclusive SLC Mode 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
- High-quality MLC NAND flash and SLC mode for exceptional endurance and reliability

Firmware Features

- · Built-in ECC (Error Correction Code) functionality
- · Advanced Global Wear-Leveling and Block management for reliability
- Power-saving DevSleep (Device Sleep) mode
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices

Ordering Information

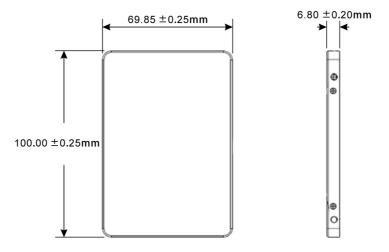
16GB	TS16GSSD510K	
32GB	TS32GSSD510K	
64GB	TS64GSSD510K	
128GB	TS128GSSD510K	



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	MLC NAND flash (SLC mode)
	Capacity	16 GB / 32 GB / 64 GB / 128 GB
Operating Environment	Operating Voltage	5V±5%
	Operating Temperature	Standard Temp. 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)	20 G (peak-to-peak), 5 Hz ~ 800 Hz (frequency)
Power	Power Consumption (Operation)	2.95 watt(s)
	Power Consumption (IDLE)	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)	Read: up to 530 MB/s Write: up to 440 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 75,000 IOPS Write: up to 75,000 IOPS
	Mean Time Between Failures (MTBF)	1,500,000 hour(s)
	Terabytes Written (TBW)	up to 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.