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**Embedded Solutions** 

Transcend\*

# 2.5" SATA SSDs SSD420K & SSD420I

Featuring the SATA III 6Gb/s interface, a powerful controller, and top-tier MLC NAND flash chips, Transcend's SSD420K ensures impeccable performance as well as reliability.

Transcend also offers the SSD420I with wide temperature ( $-40^{\circ}C \sim 85^{\circ}C$ ) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

### Hardware Features

- Compliant with RoHS 2.0 standards
- MLC NAND flash
- DDR3 DRAM Cache embedded
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)
- Supports Transcend Scope Pro software

#### **Firmware Features**

- Built-in BCH 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**

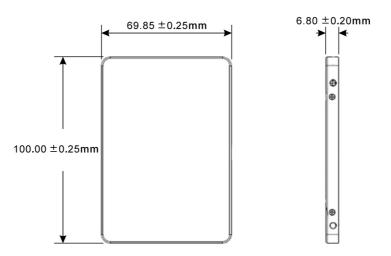
16GB	TS16GSSD420K
32GB	TS32GSSD420I TS32GSSD420K
64GB	TS64GSSD420I TS64GSSD420K
128GB	TS128GSSD420I TS128GSSD420K
256GB	TS256GSSD420I TS256GSSD420K
512GB	TS512GSSD420I TS512GSSD420K
1TB	TS1TSSD420I TS1TSSD420K



## 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	Capacity	16 GB / 32 GB / 64 GB / 128 GB / 256 GB / 512 GB / 1 TB
	Flash Type	MLC NAND flash
Operating Environment	Operating Voltage	5V±5%
	Operating Temperature	Standard Temp. 0°C (32°F) ~ 70°C (158°F) Wide Temp. -40°C (-40°F) ~ 85°C (185°F)
	Storage Temperature	-40°C (-40°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)	2.65 watt(s)
	Power Consumption (IDLE)	0.4 watt(s)
Performance	Read Speed (Max.)	up to 530 MB/s
	Write Speed (Max.)	up to 470 MB/s
	Sequential Read/Write (CrystalDiskMark)	Read: up to 530 MB/s Write: up to 470 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 75,000 IOPS Write: up to 75,000 IOPS
	Mean Time Between Failures (MTBF)	2,000,000 hour(s)
	Terabytes Written (TBW)	up to 2,940 TBW
	Drive Writes Per Day (DWPD)	2.6 (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.