

## 2.5" SATA IISSD



- Industrial SLC NAND Flash (-40°C to 85°C)
- 64MB DRAM cache
- Fully compatible with devices and OS that support the SATA II 3Gb/s standard
- Non-volatile Flash Memory for outstanding data retention
- Built-in ECC (Error Correction Code) functionality and wear-leveling algorithm ensures highly reliable of data transfer
- Support Trim command
- Shock resistance
- Support Hardware Purge function

### SSD500I Benefits

Transcend's 2.5" SATA SSDs provide excellent shock resistance, long term data storage, speedier data transfer, lower power consumption, cool, noiseless operation and a wide operating temperature range from -40°C to 85°C. Thanks to their highquality and performance, Transcend's SSDs offer stutter-free response and stability for netbooks, notebooks, high-end gaming PCs and industrial computers.

### Enhanced Performance

Combining the latest SATA II 3Gb/s specification with SLC NAND Flash, the SSD500I is able to offer incredible transfer speeds of up to 260MB/s read and 240MB/s write. This ultrafast speed translates into significantly faster system boot up, application launch speed, data transfers, and overall system responsiveness.

### Built-In Reliability

To further increase the lifespan of the SSD, built-in wear-leveling and Error Correction Code (ECC) ensure reliable data transfer, while full support of the S.M.A.R.T. command helps detect possible hard drive failures before they occur.

## Placement



## Dimensions

Side	Millimeters	Inches
A	100.30 ± 0.40	3.949 ± 0.016
B	69.85 ± 0.20	2.750 ± 0.008
C	9.50 ± 0.15	0.374 ± 0.004

## Specifications

Environmental Specifications		
Operating Temperature		- 40 °C to 85 °C
Storage Temperature		- 40 °C to 85 °C
Humidity	Operating	0% to 95% (Non-condensing)
	Non-Operating	0% to 95% (Non-condensing)

Physical Specification	
Form Factor	2.5-inch HDD
Storage Capacities	32GB
Input Voltage	5V ± 5%
Weight	66g ± 2g
Connector	SATA 7+15 pins combo connector

## Performance

Model P/N	Sequential	Sequential	Random Read	Random Write	IOPS	IOPS
	Read*	Write*	(4KB QD32)*	(4KB QD32)*	Random Read (4KB QD32)**	Random Write (4KB QD32)**
TS32GSSD500I	257.7	239.5	48.37	26.88	9,168	4,556

Note: Maximum transfer speed recorded

\* 25 °C, test on ASUS P8Z68-V PRO, 6GB, Windows® 7 Professional with AHCI mode, benchmark utility CrystalDiskMark (version 3.0), copied file 1000MB, unit MB/s

\*\* Random read/write performance based on Iometer2008 with 4K file size and queue depth of 32, unit IOPs

\*\*\* 25 °C, test on P8Z68-V PRO, 6GB, Windows® 7 with AHCI mode, benchmark utility ATTO (version 2.41), unit MB/s

\*\*\*\* The recorded performance is obtained while the SSD is not operating as an OS disk

Power Requirements		
Input Voltage		5V ± 5% @25°C
Mode P/N / Power Consumption		Typical (mA)
TS32GSSD500I	Read	415
	Write	645
	Idle	157

Note: Reference to the IEC 60068-2-6 Testing procedures; Operating-Sine wave, 5-800Hz/1 oct., 1.5mm, 3g, 0.5 hr./axis, total 1.5 hrs.

Reliability	
Data Reliability	Supports BCH ECC 16/24 bits in 1024 bytes
MTBF	1,000,000 hours

Vibration	
Operating	5G(peak-to-peak), 5 - 800Hz
Non-Operating	20G(peak-to-peak), 5 - 800Hz

Shock	
Operating	1500G, 0.5ms
Non-Operating	1500G, 0.5ms