

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 Read*	Sequential Write*	Random Read (4KB QD32)*	Random Write (4KB QD32)*	IOPS Random Read (4KB QD32)**	IOPS 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 $\pm$ 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