





3D expansion to break through limits

Unlike planar NAND memory, 3D NAND flash features memory cells stacked vertically in multiple layers. 3D NAND overcomes density limitations of 2D planar NAND, and delivers a higher level of performance and endurance.



Performance boost for everyday computing

Taking full advantage of the SATA III 6Gb/s interface and built-in SLC caching technology, Transcend's SSD220S achieves exceptional transfer speeds of up to 540MB/s read and 500MB/s write.



Guaranteed endurance and reliability

Transcend's SSD220S offers great
Terabytes Written (TBW) values (up to
160 TB) indicating the total amount of
data you can write into the drive over its
lifetime. It also features RAID engine and
LDPC coding, Garbage Collection,
Wear-leveling, and DevSleep.





2.5" Solid State Drive

SATA III 6Gb/s SSD220S

Features

- · Up to 540 MB/s read; 500 MB/s write
- · 3D NAND flash memory
- Engineered with a RAID engine and LDPC (Low-Density Parity Check) coding to ensure data integrity; built-in SLC caching technology for exceptional transfer speeds
- Supports DevSleep ultra low power state,
 S.M.A.R.T., TRIM, and NCQ commands
- Download the SSD Scope software from Transcend's official website

Transcend

SSD Scope Software

Transcend SSD Scope is advanced, user-friendly software that makes it easy to ensure your Transcend SSD remains healthy, and continues to run fast and error-free by determining the condition and optimizing the performance of your drive.

Specification

| Αр | р | е | а | r | а | r | ١ | C | е |
|----|---|---|---|---|---|---|---|---|---|
|----|---|---|---|---|---|---|---|---|---|

Dimensions (Max.) 100 mm x 69.85 mm x 6.8 mm (3.94" x 2.75" x 0.28")

Weight (Max.) 45 g (1.59 oz)

Storage

Flash Type 3D NAND flash
Capacity 120 GB / 240 GB / 480 GB

Operating Environment

Operating Temperature $0^{\circ}\text{C }(32^{\circ}\text{F}) \sim 60^{\circ}\text{C }(140^{\circ}\text{F})$ Operating Voltage $5\text{V}\pm10\%$

Performance

Sequential Read/Write Read: 540 MB/s (ATTO, max.) Write: 500 MB/s

Sequential Read/Write Read: 530 MB/s (CrystalDiskMark, max.) Write: 500 MB/s

4K Random Read/Write Read: 50,000 IOPS Write: 75,000 IOPS

Mean Time Between Failures (MTBF)

Terabytes Written (Max.) 160 TB

Drive Writes Per Day

(DWPD) 0.3 (3 yrs)

Note Speed may vary due to host hardware, software, usage, and storage capacity.

1,000,000 hour(s)

Warranty

Certificate CE/FCC/BSMI

Warranty Three-year Limited Warranty

Ordering Information

| 120GB | TS120GSSD220S | |
|-------|---------------|--|
| 240GB | TS240GSSD220S | |
| 480GB | TS480GSSD220S | |

Product specifications are subject to change without notice. Pictures shown may differ from actual products. When used as a storage capacity unit, one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.



2.5" SSD Comparison











SATA III 6Gb/s SSD230S

SATA III 6Gb/s SSD220S

SATA III 6Gb/s SSD370S

SATA III 6Gb/s SSD360S

SATA III 6Gb/s SSD340K

| Appearance | | | | | | | |
|---|--|------------------------------|------------------------------|------------------------------|------------------------------|--|--|
| Dimensions (Max.) | 100 mm x 69.85 mm x 6.8 mm (3.94" x 2.75" x 0.28") | | | | | | |
| Weight (Max.) | 53 g (1.87 oz) | 45 g (1.59 oz) | 63 g (2.22 oz) | 58 g (2.05 oz) | 59 g (2.08 oz) | | |
| Storage | | | | | | | |
| Flash Type | 3D NAND flash | 3D NAND flash | MLC NAND flash | MLC NAND flash | MLC NAND flash | | |
| Capacity | 128GB ~ 2TB | 120GB ~ 480GB | 32GB ~ 1TB | 32GB ~ 256GB | 32GB ~ 256GB | | |
| Operating Environment | | | | | | | |
| Operating Temperature | 0°C (32°F) ~ 70°C (158°F) | 0°C (32°F) ~ 60°C (140°F) | 0°C (32°F) ~ 70°C (158°F) | 0°C (32°F) ~ 70°C (158°F) | 0°C (32°F) ~ 70°C (158°F) | | |
| Performance | | | | | | | |
| Sequential Read/Write (ATTO, max.) | - | 540 MB/s 500 MB/s | 560 MB/s 460 MB/s | 560 MB/s 500 MB/s | 550 MB/s 330 MB/s | | |
| Sequential Read/Write CrystalDiskMark, max.) | 560 MB/s 520 MB/s | 530 MB/s 500 MB/s | 520 MB/s 460 MB/s | 540 MB/s 480 MB/s | 510 MB/s 320 MB/s | | |
| 4K Random Read/Write IOmeter, max.) | 85,000 IOPS 89,000 IOPS | 50,000 IOPS 75,000 IOPS | 75,000 IOPS 75,000 IOPS | 60,000 IOPS 86,000 IOPS | 75,000 IOPS 80,000 IOPS | | |
| Mean Time Between Failures MTBF) | 1,000,000 hour(s) | 1,000,000 hour(s) | 1,000,000 hour(s) | 1,000,000 hour(s) | 1,500,000 hour(s) | | |
| Ferabytes Written (Max.) | 1120 TB | 160 TB | 408 TB | 230 TB | 282 TB | | |
| Orive Writes Per Day (DWPD) | 0.3 (5 yrs) | 0.3 (3 yrs) | 0.19 (3 yrs) | 0.42 (3 yrs) | - | | |

Warranty

| vvairaiity | | | | | | |
|-----------------------------|-------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--|
| Warranty | Five-year Limited Warranty | Three-year Limited Warranty | Three-year Limited Warranty | Three-year Limited Warranty | Three-year Limited Warranty | |
| Technology | | | | | | |
| TRIM & NCQ Command | ✓ | ~ | ~ | ~ | ✓ | |
| S.M.A.R.T. | ✓ | ~ | ~ | ~ | ✓ | |
| DDR3 DRAM Cache | ✓ | - | ✓ | - | ✓ | |
| Advanced Garbage Collection | ✓ | ~ | ✓ | ~ | ✓ | |
| DevSleep Mode | ✓ | ~ | ✓ | ~ | ~ | |
| RAID Engine | ✓ | ✓ | - | - | - | |
| LDPC Coding | ✓ | ~ | - | - | - | |

^{*}Speed may vary due to host hardware, software, usage, and storage capacity.