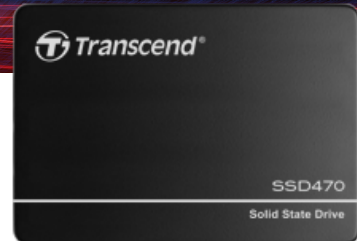


## Embedded Solutions



### 2.5" SATA & PATA SSDs

## SSD470N & SSD470N-I

Transcend's SSD470N features a SATA III 6Gb/s interface and state-of-the-art 3D NAND technology, which allows 112 layers of 3D NAND flash chips to be vertically stacked. Compared to 3D NAND at 96 layers, this density breakthrough greatly improves storage efficiency. Transcend's SSD470N comes with a powerful controller and a DRAM cache, ensuring data can be written to the flash over extended periods without compromising performance. The SSD470N is fully tested in-house to guarantee reliability in mission-critical applications, boasting an endurance rating of 3K Program/Erase cycles and an extended operating temperature ranging from -20°C~75°C.

Transcend also offers the SSD470N-I with wide temperature (-40°C ~ 85°C) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

### Hardware Features

- DDR3 DRAM Cache embedded
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Anti-sulfur technology implemented to prevent sulfurization in the environment
- Power Shield (PS) to ensure data transfer integrity and minimize data corruption in the drive during an abnormal power outage
- Extended Temp. (-20°C ~ 75°C) and Wide Temp. (-40°C ~ 85°C) options available

### Ordering Information

|     |               |
|-----|---------------|
| 1TB | TS1TSSD470N   |
|     | TS1TSSD470N-I |
| 2TB | TS2TSSD470N   |
|     | TS2TSSD470N-I |

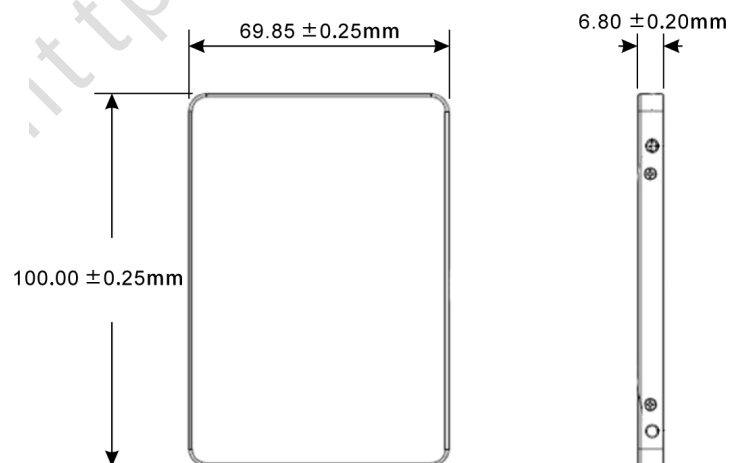
### Firmware Features

- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- Advanced Garbage Collection
- Advanced Global Wear-Leveling and Block management for reliability
- Built-in LDPC ECC (Error Correction Code) functionality
- Dynamic thermal throttling

## Specifications

|                       |                                         |                                                     |
|-----------------------|-----------------------------------------|-----------------------------------------------------|
| Appearance            | Dimensions                              | 100 mm x 69.85 mm x 6.8 mm (3.94" x 2.75" x 0.27")  |
|                       | Weight                                  | 54 g (1.9 oz)                                       |
|                       | Form Factor                             | 2.5"                                                |
| Interface             | Bus Interface                           | SATA III 6Gb/s                                      |
| Storage               | Capacity                                | 1 TB / 2 TB                                         |
|                       | Flash Type                              | 112-layer 3D NAND flash                             |
| Operating Environment | Operating Voltage                       | 5V±5%                                               |
|                       | Operating Temperature                   | Extended Temp.<br>-20°C (-4°F) ~ 75°C (167°F)       |
|                       |                                         | Wide Temp.<br>-40°C (-40°F) ~ 85°C (185°F)          |
|                       | Storage Temperature                     | -55°C (-67°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)           | 5.2 watt(s)                                         |
|                       | Power Consumption (IDLE)                | 0.6 watt(s)                                         |
| Performance           | Sequential Read/Write (CrystalDiskMark) | Read: Up to 560 MB/s<br>Write: Up to 510 MB/s       |
|                       | 4K Random Read/Write (IOMeter)          | Read: Up to 84,000 IOPS<br>Write: Up to 70,000 IOPS |
|                       | Mean Time Between Failures (MTBF)       | 3,000,000 hour(s)                                   |
|                       | Terabytes Written (TBW)                 | Up to 3800 TBW                                      |
|                       | Drive Writes Per Day (DWPD)             | 1.73 (3 yrs)                                        |
| Warranty              | Certificate                             | CE / UKCA / 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.