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**Embedded Solutions** 



# 2.5" SATA SSDS SSD470K & SSD470K-I

Transcend's SSD470K features the 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, and its built-in DRAM cache allows faster access. The SSD470K 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 SSD470K-I 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
- DDR3 DRAM Cache embedded
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Promised operational reliability in an extended temperature range (from -20°C to 75°C)
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)

#### **Firmware Features**

- Dynamic thermal throttling
- NCQ command for better performance
- TRIM command for better performance
- Power-saving DevSleep (Device Sleep) mode
- Advanced Global Wear-Leveling and Block management for reliability

### **Ordering Information**

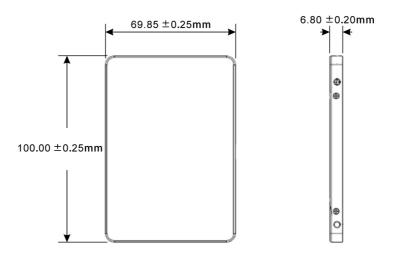
| 128GB | TS128GSSD470K   |
|-------|-----------------|
|       | TS128GSSD470K-I |
| 256GB | TS256GSSD470K   |
|       | TS256GSSD470K-I |
| 512GB | TS512GSSD470K   |
|       | TS512GSSD470K-I |
| 1TB   | TS1TSSD470K     |
|       | TS1TSSD470K-I   |
| 2TB   | TS2TSSD470K     |
|       | TS2TSSD470K-I   |
| 4TB   | TS4TSSD470K     |
|       | TS4TSSD470K-I   |



# 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                  | Flash Type              | 112-layer 3D NAND flash   |
|                          | Capacity                | 128 GB / 256 GB / 512 GB / 1 TB / 2 TB / 4 TB   |
| Operating<br>Environment | Operating Voltage       | 5V±5%   |
|                          | Operating Temperature   | Extended Temp.<br>-20°C (-4°F) ~ 75°C (167°F)<br>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)   |
| Performance              | Terabytes Written (TBW) | up to 2960 TBW  |
| Warranty                 | Certificate             | CE / FCC / BSMI / UKCA  |
|                          | 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.