Embedded Solutions

Half-Slim SSDs

HSD470T

Equipped with the SATA III 6Gb/s interface, a powerful controller, and state-of-the-art 112-layer 3D NAND flash, Transcend's HSD470T Half-Slim SSDs feature the Corner Bond technology for enhanced durability, built-in DRAM cache for fast access, an extended operating temperature range from -20°C to 75°C, and an endurance rating of 3K Program/Erase cycles for reliable operation. Following the MO-297 standard set by JEDEC, HSD470T SSDs undergo extensive reliability testing to ensure the utmost quality and performance, best suited to read-heavy applications and space-limited mobile devices such as industrial control systems, medical equipment, mobile devices, and POS terminals.

Hardware Features

- Compliant with RoHS 2.0 standards
- Compliant with JEDEC MO-297
- DDR3 DRAM Cache embedded
- Key components fortified by default with Corner Bond technology
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed

Firmware Features

- Dynamic thermal throttling
- Built-in LDPC ECC (Error Correction Code) functionality
- Advanced Global Wear-Leveling and Block management for reliability
- Advanced Garbage Collection
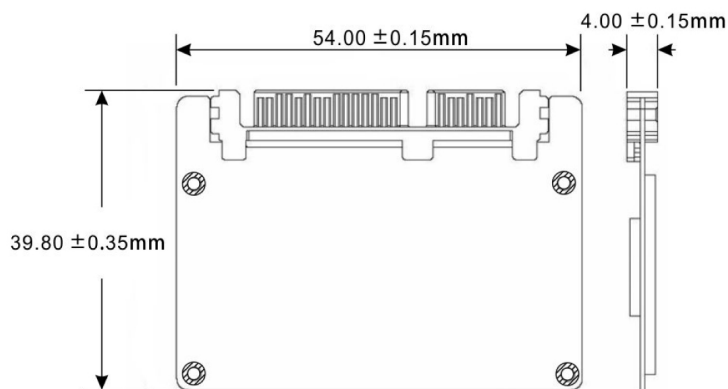- NCQ command for better performance

Ordering Information

128GB	TS128GHSD470T
256GB	TS256GHSD470T
512GB	TS512GHSD470T
1TB	TS1THSD470T

Specifications

Appearance	Dimensions	54 mm x 39.8 mm x 4 mm (2.13" x 1.57" x 0.15")
	Weight	9 g (0.32 oz)
	Pin Count	7+15 pin
	Form Factor	Half-slim (MO-297)
Interface	Bus Interface	SATA III 6Gb/s
Storage	Flash Type	112-layer 3D NAND flash
	Capacity	128 GB / 256 GB / 512 GB / 1 TB
Operating Environment	Operating Voltage	5V±5%
	Operating Temperature	Extended Temp. -20°C (-4°F) ~ 75°C (167°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 ~ 2,000 Hz (frequency)
Power	Power Consumption (Operation)	4 watt(s)
	Power Consumption (Sleep)	1.4 watt(s)
Performance	Sequential Read/Write (CrystalDiskMark)	Read: up to 560 MB/s Write: up to 520 MB/s
	4K Random Read/Write (IOmeter)	Read: up to 90,000 IOPS Write: up to 85,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	up to 2420 TBW
	Drive Writes Per Day (DWPD)	2.16 (3 yrs)
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.