

Half-Slim SSDs

HSD470I

Transcend's HSD470I SATA III Half-Slim DRAM-less SSD features BiCS8 218-layer 3D NAND flash memory. Its DRAM-less architecture helps reduce power consumption and system costs. Compliant with the JEDEC MO-297 Half-Slim standard, its compact form factor is ideal for space-constrained embedded systems, industrial equipment, and specialized computing platforms.

The wide-temperature HSD470I operates from -40°C to 85°C, meeting the requirements of demanding industrial applications. Built with Corner Bond technology, the SSD is fully tested in-house to help ensure durability and stability during long-term operation and under fluctuating temperature conditions.

Hardware Features

- Compliant with RoHS 2.0 standards
- Compliant with JEDEC MO-297
- Key components fortified by default with Corner Bond technology
- Power Shield (PS) to ensure data transfer integrity and minimize data corruption in the drive during an abnormal power outage
- Anti-sulfur technology implemented to prevent sulfurization in the environment

Ordering Information

128GB	TS128GHSD470I
256GB	TS256GHSD470I
512GB	TS512GHSD470I
1TB	TS1THSD470I
2TB	TS2THSD470I

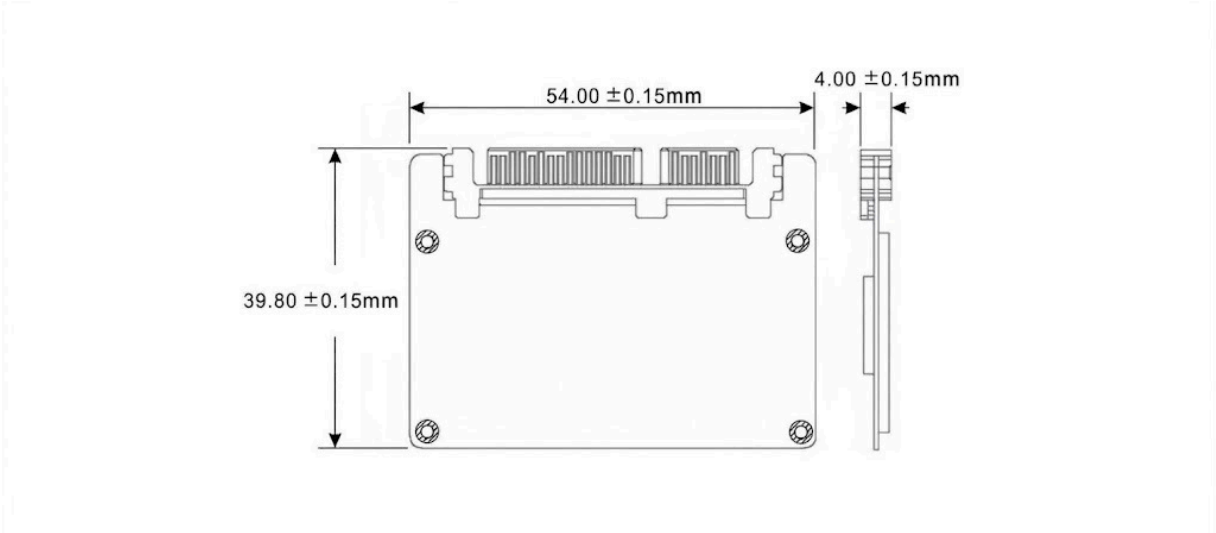
Firmware Features

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

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)
	Form Factor	Half-slim (MO-297)
Interface	Bus Interface	SATA III 6Gb/s
Storage	Capacity	128 GB / 256 GB / 512 GB / 1 TB / 2 TB
	Flash Type	218-layer 3D NAND flash
Operating Environment	Operating Voltage	5V±5%
	Operating Temperature	Wide Temp. -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 ~ 2,000 Hz (frequency)
Power	Power Consumption (Operation)	0.73 watt(s)
	Power Consumption (IDLE)	0.38 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 70,000 IOPS Write: Up to 85,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	Up to 5,400 TBW
	Drive Writes Per Day (DWPD)	2.46 (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.