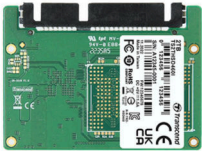



Half-Slim SSDs



HSD460I


Transcend's HSD460I half-slim SSD is built with 112 layers of 3D NAND flash and the SATA III 6Gb/s interface, delivering never-before-seen transfer speeds. Applied with the Corner Bond technology and anti-sulfur resistor, the HSD460I is fortified to withstand demanding industrial applications. Following JEDEC's MO-297 standard, the HSD460I is fully tested in-house and is able to operate in wide operating temperatures ranging from -40°C~85°C, ideal for read-heavy applications and space-limited mobile devices such as industrial control systems, medical equipment, mobile devices, and POS terminals.

Technologies




112-Layer 3D NAND Flash

(/embedded/technology/112-layer-3d-nand-flash)




Corner Bond

(/embedded/technology/corner-bond)




Wide Temperature

(/embedded/technology/wide-temperature)




Dynamic Thermal Throttling

(/embedded/technology/thermal-throttling)




Thermal Sensor

(/embedded/technology/thermal-sensor)




Read Disturbance

(/embedded/technology/read-disturbance)




Anti-Sulfur Technology

(/embedded/technology/anti-sulfur-technology)




Garbage Collection

(/embedded/technology/garbage-collection)




Wear Leveling

(/embedded/technology/wear-leveling)




TRIM


(/embedded/technology/trim)



Bad Block Management
(/embedded/technology/bad-block-management)



Power Shield (PS)
(/embedded/technology/power-shield-ps)



Early Move
(/embedded/technology/early-move)


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
- Static Data Refresh
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- TRIM command for better performance
- NCQ command for better performance
- Full drive encryption with Advanced Encryption Standard (AES) (optional)
- Power-saving DevSleep (Device Sleep) mode (optional)


Hardware Features

- Compliant with RoHS 2.0 standards
- Compliant with JEDEC MO-297
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Key components fortified by default with Corner Bond technology
- 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
- Promised operational reliability in a wide temperature range (from -40°C to 85°C)


Software Solutions



Management
Control Center
Improve your control by easily managing devices at anytime from edge to cloud.
(/Embedded/Software/Management)



Monitor
Scope Pro
Manage / analyze data in real time and capture more of your market.
(/Embedded/Software/Monitor)



Rescue
One Touch Recovery
Rescue your data with a click to create a reliable and robust environment.
(/Embedded/Software/Rescue)

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	64 GB / 128 GB / 256 GB / 512 GB / 1 TB / 2 TB
Flash Type	112-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)	1.5 watt(s)
Power Consumption (IDLE)	0.4 watt(s)

Performance

Sequential Read/Write (CrystalDiskMark)	Read: Up to 560 MB/s Write: Up to 500 MB/s
4K Random Read/Write (IOMeter)	Read: Up to 45,000 IOPS Write: Up to 80,000 IOPS
Mean Time Between Failures (MTBF)	3,000,000 hour(s)
Terabytes Written (TBW)	Up to 1,870 TBW
Drive Writes Per Day (DWPD)	1.75 (3 yrs)
Note	<ul style="list-style-type: none">Speed may vary due to host hardware, software, usage, and storage capacity.The workload used to rate DWPD may be different from your actual workload, which may vary due to host hardware, software, usage, and storage capacity.Terabytes Written (TBW) expresses the endurance under the highest capacity.

Warranty

Certificate	CE / UKCA / FCC / BSMI
Warranty	Three-year Limited Warranty
Warranty Policy	<ul style="list-style-type: none">Please click here (/Warranty) for more information about the Transcend Warranty Policy.Warranty does not apply when Scope Pro software wear-out indicator displays 0% within the warranty coverage.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.Scope Pro software is required by request. Please contact us for more information.

Order Information

64GB

27/4/24, 23:19

HSD460I | Half-Slim SSDs - Transcend Information, Inc.

TS64GHSD460I

128GB

TS128GHSD460I

256GB

TS256GHSD460I

512GB

TS512GHSD460I

1TB

TS1THSD460I

2TB

TS2THSD460I



Product Sheet

(https://CDN.transcend-info.com/products/images/modelpic/1277/Transcend-HSD460I_202212.pdf)

Consumer Products

- Internal SSDs (/product/internal-ssd)
- Portable SSDs (/product/portable-ssd)
- External Hard Drives (/product/external-hard-drive)
- Dashcams (/product/dashcam)
- Body Cameras (/product/body-camera)
- Memory Cards (/product/memory-card)
- USB Flash Drives (/product/usb)
- DRAM Modules (/product/dram-module)
- Card Readers, DVD Writers & Accessories (/product/card-reader-accessory)
- Customized Solutions (/products/oem.aspx)

Embedded Solutions

- Embedded SSD Solutions (/Embedded/Product/ssd)
- Embedded Flash Solutions (/Embedded/Product/flash)
- Embedded Memory Cards (/Embedded/Product/memory-cards)
- Embedded DRAM Modules (/Embedded/Product/modules)
- Technologies (/Embedded/Technologies)
- Applications (/Embedded/Applications)
- Software Solutions (/Embedded/Software)
- Resource Download (/embedded/download)

Support

- Product Support (/support/service)
- Software Download (/support/software)
- Compatibility (/support/compatibility)
- Warranty Policy (/warranty)
- Warranty Check (/support/verification)
- Where to Buy (/support/buy)
- Partner Center (/partnercenter/)

About Us

- Company Profile (/about/company-profile)
- Advantage (/about/advantage)
- Awards (/about/awards)
- Investor Relations (/about/investor-relations)
- Shareholder Services (/about/shareholder-services)
- Sustainable Development (/about/sustainable-development)
- (/about/social_responsibility)
- Press (/about/press)
- Green Initiatives (/about/green-initiatives)
- Contact Us (/support/contact)