

PCIe M.2 SSDs



PCIe SSD 110S & 112S

Transcend's PCIe SSD 110S/112S utilizes the PCI Express® Gen3 x4 interface supported by the latest NVMe™ standard, to unleash next-generation performance. The PCIe SSD 110S/112S aims at high-end applications, such as digital audio/video production, gaming, and enterprise use, which require constant processing heavy workloads with no system lags or slowdowns of any kind. Powered by 3D NAND flash memory, the PCIe SSD 110S/112S gives you not only fast transfer speeds but unmatched reliability.

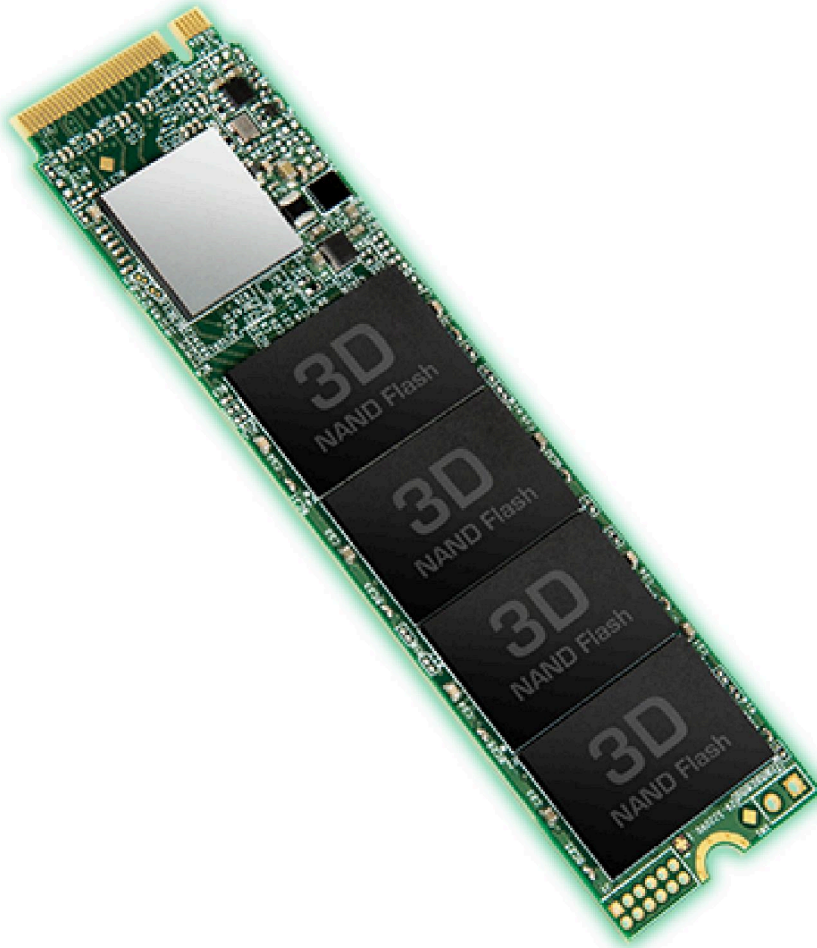
PCIe M.2 SSDs - Unleash performance beyond expectation



Compelling performance for high-end applications

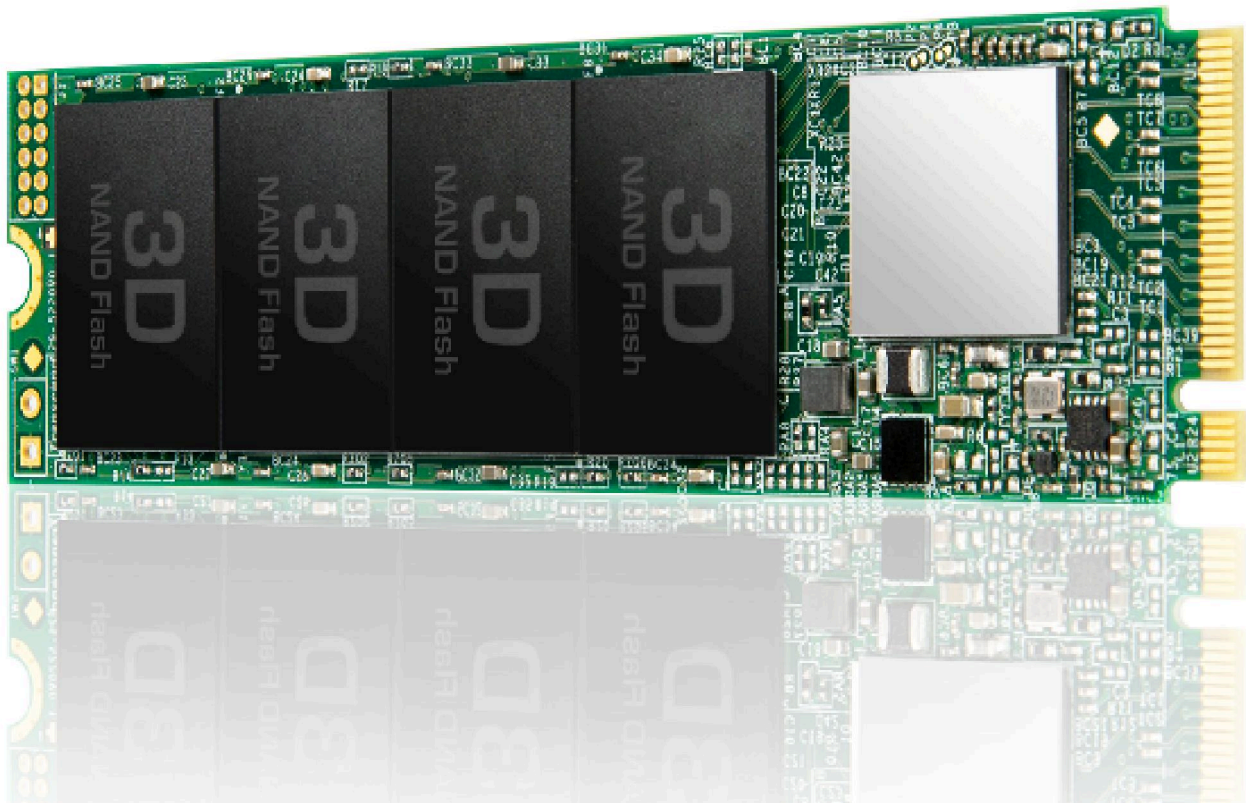
Transcend's PCIe SSD 110S/112S follows NVMe 1.3 and utilizes the PCIe™ Gen3 x4 interface, meaning four lanes are used for transmitting and receiving data simultaneously, resulting in compelling performance of up to 2,500MB/s read and 1,700MB/s write.

Note: Performance is based on CrystalDiskMark v5.0.2.



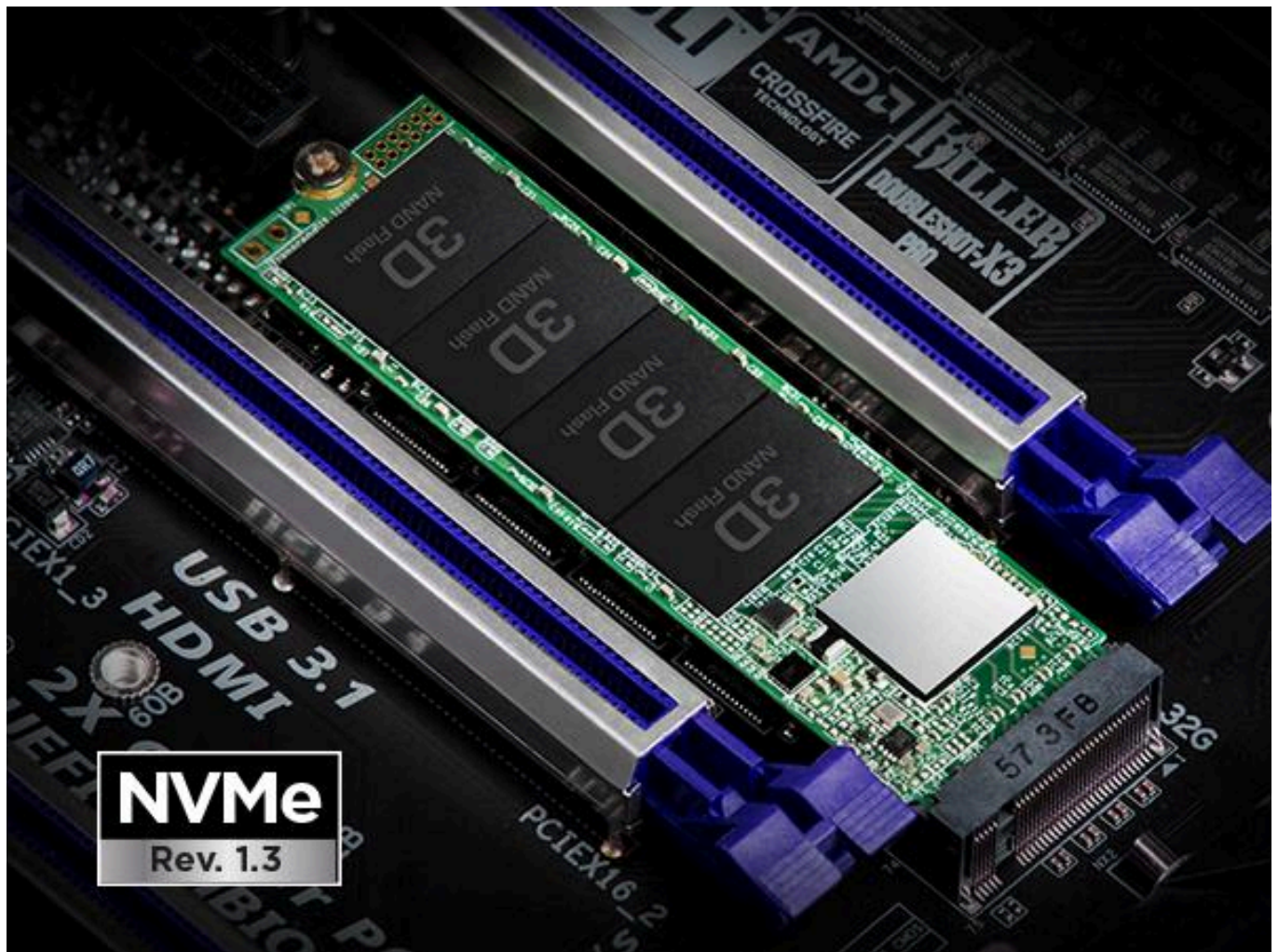
Understanding the PCIe interface

PCIe (or PCI Express®) is a much faster interface than SATA (or Serial ATA) for connecting a host computer to solid-state storage devices over one or more lanes consisting of one transmit and one receive serial interface in each lane, meaning it can better fulfill new performance requirements.



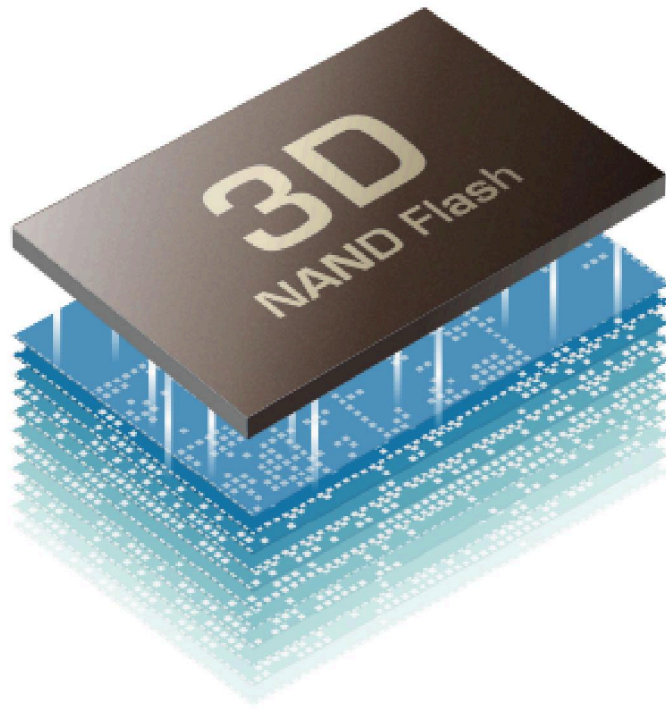
Understanding the NVMe standard

NVMe (or NVM Express®) is a host controller interface standard designed to address the needs of enterprise and client applications that utilize PCI Express-based solid-state storage. NVMe calls for better performance vectors than AHCI (Advanced Host Controller Interface), including scalable bandwidth, increased IOPS, and low latency.



3D expansion to break through limits

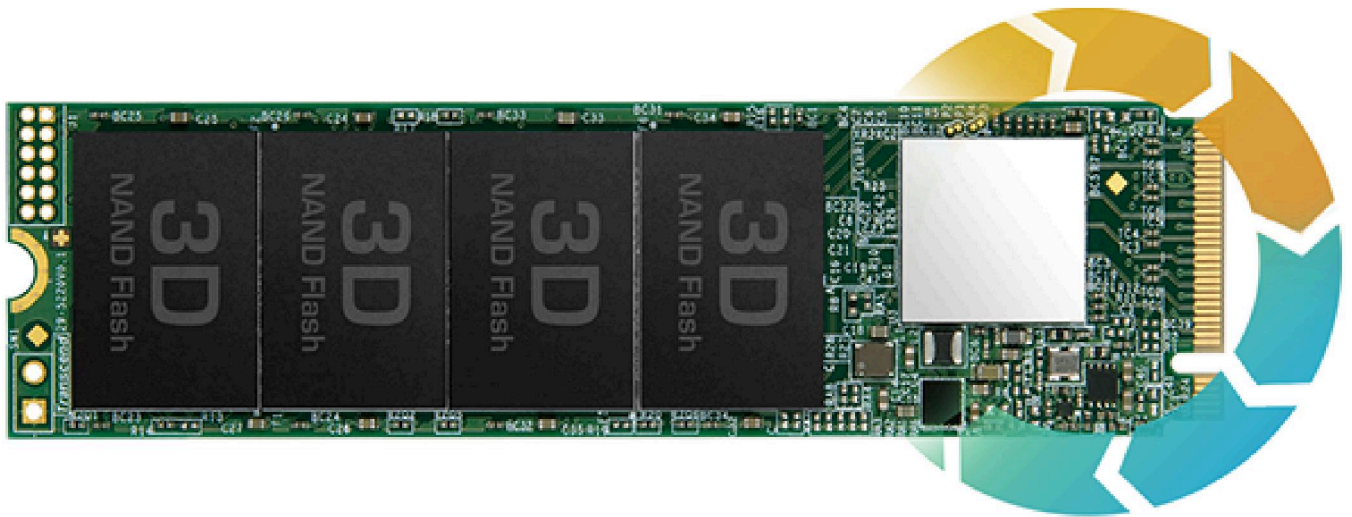
Unlike the existing planar NAND chips, 3D NAND flash is a type of flash memory in which the memory cells are stacked vertically in multiple layers. 3D NAND is developed to break through density limitations of the 2D planar NAND, and thus can deliver a greater level of performance and endurance.



Better endurance, higher reliability

Transcend's PCIe SSD 110S/112S is engineered with LDPC (Low-Density Parity Check) coding, a powerful ECC algorithm, to keep data secure.

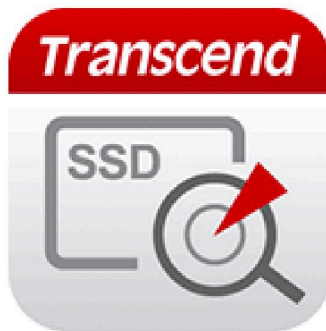
Manufactured with high-quality NAND flash chips, and engineered dynamic thermal throttling mechanism, the PCIe SSD 110S/112S guarantees superior endurance and stability for high-end applications.



Transcend SSD Scope software

To keep your Transcend SSD running fast and error-free, Transcend's SSD Scope software application is available for download free of charge. Monitor your SSD's health status with S.M.A.R.T. technology, enable the TRIM command for optimum write speeds, keep your SSD's firmware up-to-date, and migrate data from your original drive to a new SSD with just a few clicks.

[Learn more \(/support/software/ssd-scope\)](https://support/software/ssd-scope)



Guaranteed quality

To ensure the utmost level of quality, Transcend SSDs undergo rigorous testing at all stages of production, including tests for vibration, temperature and humidity, speed, and functionality.

Specifications



Appearance

Dimensions	Single-sided: 80 mm x 22 mm x 2.23 mm (3.15" x 0.87" x 0.09")
	Double-sided: 80 mm x 22 mm x 3.58 mm (3.15" x 0.87" x 0.14")
Weight	8 g (0.28 oz)
Type	M.2 2280

Interface

Bus Interface	NVMe PCIe Gen3 x4
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Storage

Flash Type	3D NAND flash
Capacity	128 GB / 256 GB / 512 GB / 1 TB / 2 TB

Operating Environment

Operating Temperature	0°C (32°F) ~ 70°C (158°F)
Operating Voltage	3.3V±5%

Performance

Sequential Read/Write (CrystalDiskMark)	2 TB	Up to 2,500/1,700 MB/s
	1 TB	Up to 1,700/1,400 MB/s
	512 GB	Up to 1,700/1,400 MB/s
	256 GB	Up to 1,600/1,100 MB/s
	128 GB	Up to 1,500/550 MB/s
4K Random Read/Write (IOmeter)	2 TB	Up to 200,000/250,000 IOPS
	1 TB	Up to 200,000/250,000 IOPS
	512 GB	Up to 160,000/250,000 IOPS
	256 GB	Up to 90,000/250,000 IOPS
	128 GB	Up to 95,000/130,000 IOPS
Terabytes Written (TBW)	2 TB	800 TBW
	1 TB	400 TBW
	512 GB	200 TBW
	256 GB	100 TBW
	128 GB	50 TBW
Mean Time Between Failures (MTBF)	2,000,000 hour(s)	
Drive Writes Per Day (DWPD)	0.2 (5 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.Some motherboards only provide PCIe x2 connections for the M.2 slot, creating a bottleneck on even the fastest drives.	

Warranty

Certificate	CE / UKCA / FCC / BSMI / KC / RCM
Warranty	Five-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 SSD Scope's lifetime indicator displays 0% within the warranty coverage.

System Requirement

Operating System	<ul style="list-style-type: none">Microsoft Windows 7 or laterLinux Kernel 2.6.31 or later
Note	Systems for use with the PCIe M.2 SSD must have an M.2 connector with only an M key. B-key connectors are not compatible. Improper insertion may lead to damage. Please click here (/Support/FAQ-1206) for more information.

Technology

S.M.A.R.T.	✓
Advanced Garbage Collection	✓
RAID Engine	-
LDPC Coding	✓
DRAM Cache	-

Awards



(<http://www.transcend-info.com/Goto/5825>)

Optimal Ratio - Price/Opportunity

Gecid
Ukraine



Best Quality

PC Format
Poland



Best Cost/Performance

PC Format
Poland



(<https://megaobzor.com/review-Transcend-PCIe-SSD-110S.html>)

Editor's Choice

Megaobzor
Russia

Order Information

128GB

TS128GMTE110S Single-sided

256GB

TS256GMTE110S Double-sided

TS256GMTE112S Single-sided

512GB

TS512GMTE110S Double-sided

TS512GMTE112S Single-sided

1TB

TS1TMTE110S Double-sided

TS1TMTE112S Single-sided

2TB

TS2TMTE110S Double-sided



Product Sheet

(https://CDN.transcend-info.com/products/images/modelpic/953/Transcend-MTE110S_112S_2022.pdf)



Support

(</support/product/internal-ssd/mte110s-112s>)



Compatibility

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 (/support/compatibility/product/internal-ssd)
- (/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 (mte110s-112s)

- 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/)

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