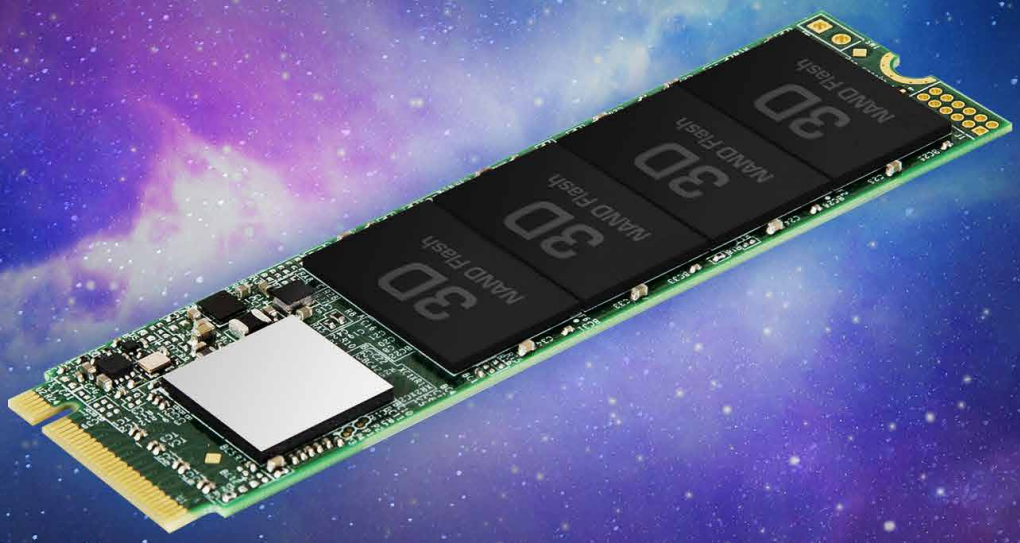
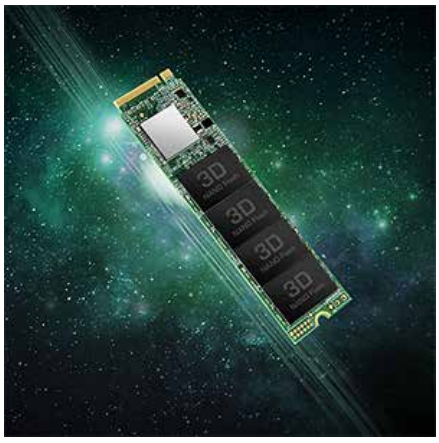


PCIe M.2 SSDs

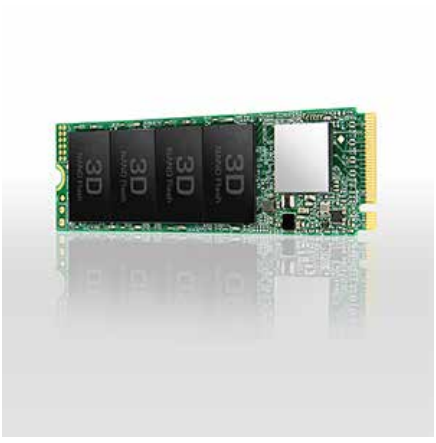
PCIe SSD 110S

Transcend's PCIe SSD 110S utilizes the PCI Express® Gen3 x4 interface supported by the latest NVMe™ standard, to unleash next-generation performance. The PCIe SSD 110S 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 gives you not only fast transfer speeds but unmatched reliability.



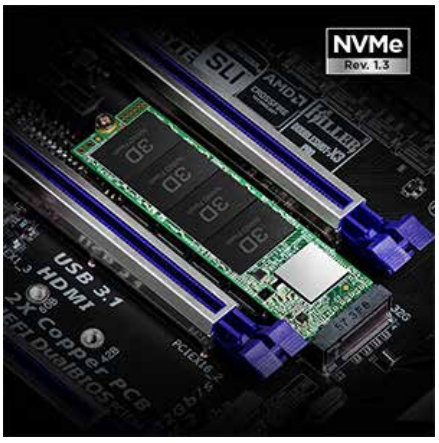
Compelling performance for high-end applications

Transcend's PCIe SSD 110S 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 1,700MB/s read and 1,500MB/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.

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PCIe M.2 SSDs

PCIe SSD 110S

Features

- Adopts PCIe Gen3 x4 interface and NVMe 1.3 standard
- Up to 1,700 MB/s read; 1,500 MB/s write
- 3D NAND flash memory
- Engineered with LDPC (Low-Density Parity Check) coding to ensure data integrity; built-in SLC caching technology for exceptional transfer speeds
- Engineered dynamic thermal throttling mechanism

SSD Scope Software

Transcend SSD Scope is advanced, user-friendly software that makes it easy to ensure your Transcend SSD remains healthy, and continues to run fast and error-free by determining the condition and optimizing the performance of your drive.

Specification

Appearance

Dimensions (Max.)	80 mm x 22 mm x 3.58 mm (3.15" x 0.87" x 0.14")
Weight (Max.)	8 g (0.28 oz)

Interface

Bus Interface	NVMe PCIe Gen3 x4

Storage

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

Operating Environment

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

Performance

Sequential Read/Write (ATTO, max.)	Read: 1,700 MB/s Write: 1,500 MB/s
Sequential Read/Write (CrystalDiskMark, max.)	Read: 1,700 MB/s Write: 1,500 MB/s
4K Random Read/Write (IOmeter, max.)	Read: 160,000 IOPS Write: 140,000 IOPS
Mean Time Between Failures (MTBF)	1,000,000 hour(s)
Terabytes Written (Max.)	400 TB
Drive Writes Per Day (DWPD)	0.2 (5 yrs)

Warranty

Certificate	CE/FCC/BSMI
Warranty	Five-year Limited Warranty

Note

1. Speed may vary due to host hardware, software, usage, and storage capacity.
2. Some motherboards only provide PCIe x2 connections for the M.2 slot, creating a bottleneck on even the fastest drives.

Ordering Information

128GB	TS128GMTE110S
256GB	TS256GMTE110S
512GB	TS512GMTE110S
1TB	TS1TMTE110S

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PCIe M.2 SSDs Comparison

PCIe SSD 220S

PCIe SSD 110S

	PCIe SSD 220S	PCIe SSD 110S
Appearance		
Dimensions (Max.)	80 mm x 22 mm x 3.58 mm (3.15" x 0.87" x 0.14")	
Weight (Max.)	8 g (0.28 oz)	
Interface		
Bus Interface	NVMe PCIe Gen3 x4	
Storage		
Flash Type	3D NAND flash	
Capacity	256 GB/512 GB/1 TB	128 GB/256 GB/512 GB/1 TB
Operating Environment		
Operating Temperature	0°C (32°F) ~ 70°C (158°F)	
Operating Voltage	3.3V±5%	
Performance		
Sequential Read/Write (ATTO, max.)	Read: 3,300 MB/s Write: 2,800 MB/s	Read: 1,700 MB/s Write: 1,500 MB/s
Sequential Read/Write (CrystalDiskMark, max.)	Read: 3,500 MB/s Write: 2,800 MB/s	Read: 1,700 MB/s Write: 1,500 MB/s
4K Random Read/Write (IOmeter, max.)	Read: 360,000 IOPS Write: 425,000 IOPS	Read: 160,000 IOPS Write: 140,000 IOPS
Mean Time Between Failures (MTBF)	1,500,000 hour(s)	1,000,000 hour(s)
Terabytes Written (Max.)	800 TB	400 TB
Drive Writes Per Day (DWPD)	0.4 (5 yrs)	0.2 (5 yrs)
Warranty		
Warranty	Five-year Limited Warranty	
Technology		
S.M.A.R.T.	✓	✓
DDR3 DRAM Cache	✓	-
Advanced Garbage Collection	✓	✓
RAID Engine	✓	-
LDPC Coding	✓	✓

*Speed may vary due to host hardware, software, usage, and storage capacity.

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