SATA III M.2 Solid State Drive

M.2 SSD 420S

Transcend's ultra-compact SATA III 6Gb/s M.2 SSD 420S addresses the high-performance needs and strict size limitations of small form factor devices, best suited for Ultrabooks and thin, light notebooks. Boasting high-quality flash chips and enhanced firmware algorithms, Transcend's M.2 SSD 420S delivers optimal reliability.

Perfect for your Ultrabook

Measured at just 42mm in length, the M.2 SSD 420S makes for an easy upgrade to your computer, taking up little space while giving it a much needed energy boost.

Superior transfer speeds

Transcend's M.2 SSD 420S reaches incredible read and write speeds of up to 500MB/s and 430MB/s. When used as a cache, the M.2 SSD 420S provides 1.5 times faster boot time than conventional hard drives.

Store more in less space

The M.2 form factor enables expansion and integration of functions onto a single form factor module solution. M.2 SSDs include a smaller form factor but with larger capacities than that of mSATA and half-slim SSDs.

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Features

· Space-saving M.2 Type 2242 form factor
· Up to 500 MB/s read; 430 MB/s write
· 3D NAND flash memory
· RAID engine and LDPC coding for data integrity; DDR3 DRAM cache for short access times
· Supports S.M.A.R.T., TRIM, and NCQ commands

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.

Specifications

Appearance

Dimensions (Max.)	42.0 mm x 22.0 mm x 3.88 mm (1.65" x 0.87" x 0.15")
Weight (Max.)	5 g (0.18 oz)

Interface

Bus Interface	SATA III 6Gb/s

Storage

Flash Type	3D NAND flash
Capacity	120 GB/240 GB

Operating Environment

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

Performance

Sequential Read/Write (CrystalDiskMark, max.)	Read: 500 MB/s Write: 430 MB/s
4K Random Read/Write (IOmeter, max.)	Read: 40,000 IOPS Write: 75,000 IOPS
Mean Time Between Failures (MTBF)	1,000,000 hour(s)
Terabytes Written (Max.)	80 TB
Drive Writes Per Day (DWPD)	0.3 (3 yrs)

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

Warranty

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

Ordering Information

120GB	TS120GMTS420S
240GB	TS240GMTS420S

SATA III M.2 SSDs Comparison

	SATA III 6Gb/s M.2 SSD 420S	SATA III 6Gb/s M.2 SSD 430S	SATA III 6Gb/s M.2 SSD 820S	SATA III 6Gb/s M.2 SSD 830S	SATA III 6Gb/s M.2 SSD 832S
Appearance					
Dimensions	42.0 mm x 22.0 mm x 3.88 mm (1.65" x 0.87" x 0.15")	42.0 mm x 22.0 mm x 3.58 mm (1.65" x 0.87" x 0.14")	80.0 mm x 22.0 mm x 3.58 mm (3.15" x 0.87" x 0.14")	80.0 mm x 22.0 mm x 3.58 mm (3.15" x 0.87" x 0.14")	80.0 mm x 22.0 mm x 2.23 mm (3.15" x 0.87" x 0.09")
Weight	5 g (0.18 oz)	5 g (0.18 oz)	9 g (0.32 oz)	9 g (0.32 oz)	9 g (0.32 oz)
Storage					
Flash Type	3D NAND flash				
Capacity	120GB ~ 240GB	128GB ~ 512GB	120GB ~ 960GB	128GB ~ 2TB	256GB ~ 1TB
Operating Environment					
Operating Temperature	0°C (32°F) ~ 70°C (158°F)				
Performance					
Sequential Read/Write (CrystalDiskMark, max.)	Read: 500 MB/s Write: 500 MB/s	Read: 560 MB/s Write: 500 MB/s	Read: 550 MB/s Write: 500 MB/s	Read: 560 MB/s Write: 520 MB/s	Read: 560 MB/s Write: 500 MB/s
4K Random Read/Write (IOmeter, max.)	Read: 40,000 IOPS Write: 75,000 IOPS	Read: 80,000 IOPS Write: 85,000 IOPS	Read: 70,000 IOPS Write: 75,000 IOPS	Read: 90,000 IOPS Write: 85,000 IOPS	Read: 85,000 IOPS Write: 85,000 IOPS
Mean Time Between Failures (MTBF)	1,000,000 hour(s)	1,000,000 hour(s)	1,000,000 hour(s)	2,000,000 hour(s)	2,000,000 hour(s)
Terabytes Written (Max.)	80 TB	280 TB	320 TB	1,120 TB	560 TB
Drive Writes Per Day (DWPD)	0.3 (3 yrs)	0.3 (5 yrs)	0.3 (3 yrs)	0.3 (5 yrs)	0.3 (5 yrs)
Warranty					
Warranty	Three-year Limited Warranty	Five-year Limited Warranty	Three-year Limited Warranty	Five-year Limited Warranty	Five-year Limited Warranty
Technology					
TRIM & NCQ Command	✓	✓	✓	✓	✓
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.