



## SATA III M.2 SSDs

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## M.2 SSD 430S

Transcend's ultra-compact SATA III 6Gb/s M.2 SSD 430S 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, DDR3 DRAM cache, and enhanced firmware algorithms, Transcend's M.2 SSD 430S delivers optimal reliability.

### 3D expansion to break through limits

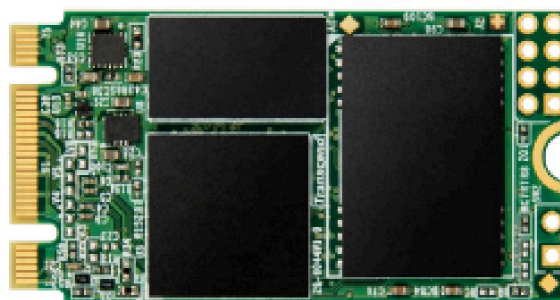
Unlike the existing planar NAND chips, 3D NAND flash is a type of flash memory in which the memory cells are stacked vertically in multiple layers. 3D NAND is developed to break through density limitations of the 2D planar NAND, and thus can deliver a greater level of performance and endurance.



## Perfect for your Ultrabook

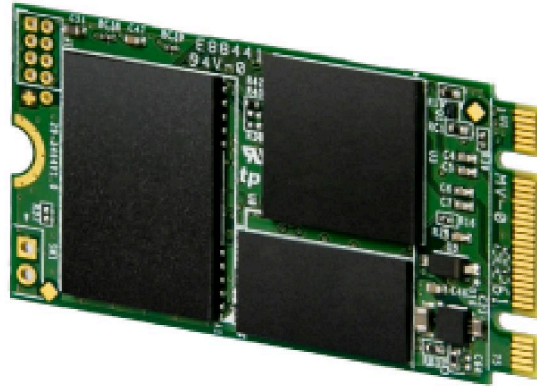
Compliant with M.2 form factors Type 2242 and 2280, Transcend's 3D NAND M.2 SSDs are perfect for use in Ultrabooks and lightweight notebooks.

Measured at just 42mm in length, the M.2 SSD 430S makes for an easy upgrade to your computer, taking up little space while giving it a much needed energy boost.



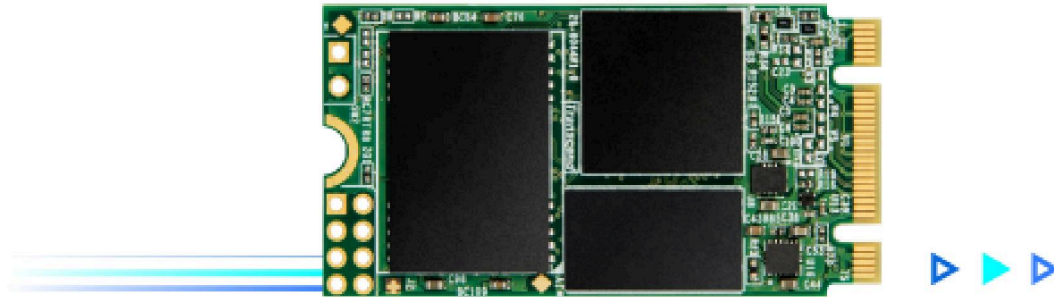
## Superior transfer speeds

Featuring the M.2 standard (42mm), the next generation SATA III 6Gb/s interface and a powerful controller, Transcend's M.2 SSD 430S reaches incredible read and write speeds of up to 560MB/s and 520MB/s. When used as a cache, the M.2 SSD 430S provides 1.5 times faster boot time than conventional hard drives.



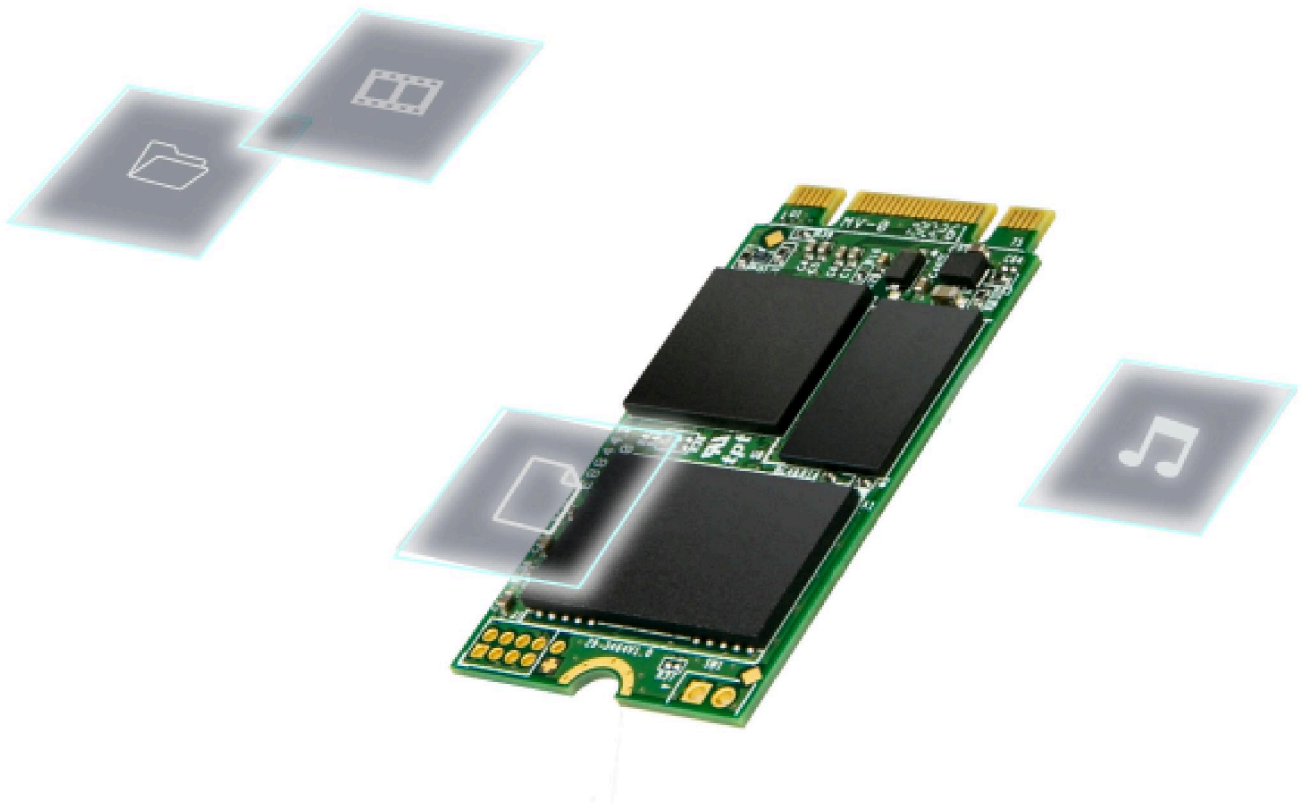
## High IOPS to speed up loading times

Dedicated to maximizing high-performance computing, the M.2 SSD 430S features 4k random file read and write speeds up to 85,000 IOPS that deliver incredibly short loading times and almost instant response for heavy graphics and multimedia applications.



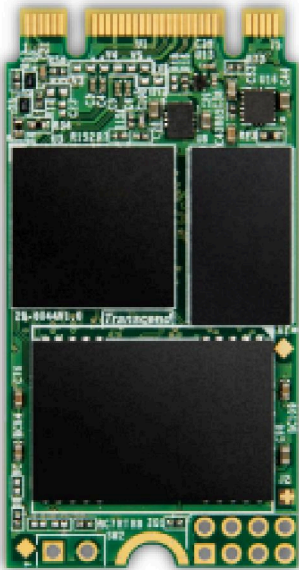
## Store more in less space

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.



## Potent and feature-laden

Despite its extra-small dimensions, the M.2 SSD 430S boasts a DDR3 DRAM cache and contains advanced features to enhance the performance of the SSD.



Error Correcting Code (ECC)

Detects and corrects transfer errors to prevent data corruption

Garbage Collection

Relocates existing data to release memory blocks

Wear-leveling

Distributes data evenly across memory cells to prolong SSD's lifespan

DDR3 DRAM cache

Stores a temporary copy of the most active data to shorten access times

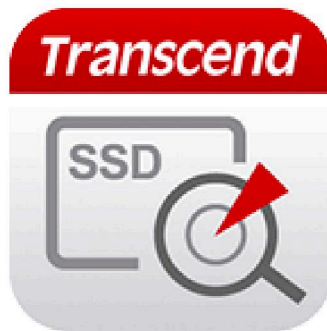
DevSleep

Intelligently shuts down SATA interface when not in use to prolong device's battery life

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.

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



## Guaranteed quality

Transcend's solid state drives are built to the highest standards and rigorously tested, and offer outstanding quality, performance, and reliability.



Specifications



Appearance

Dimensions	42.0 mm x 22.0 mm x 3.58 mm (1.65" x 0.87" x 0.14")
Weight	5 g (0.18 oz)
Type	M.2 2242

Interface

Bus Interface	SATA III 6Gb/s
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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 (CrystalDiskMark)	1 TB	Up to 560/520 MB/s
	512 GB	Up to 560/500 MB/s
	256 GB	Up to 530/400 MB/s
	128 GB	Up to 560/350 MB/s
4K Random Read/Write (IOMeter)	1 TB	Up to 85,000/85,000 IOPS
	512 GB	Up to 65,000/85,000 IOPS
	256 GB	Up to 45,000/70,000 IOPS
	128 GB	Up to 35,000/80,000 IOPS
Terabytes Written (TBW)	1 TB	560 TBW
	512 GB	280 TBW
	256 GB	140 TBW
	128 GB	70 TBW
Mean Time Between Failures (MTBF)	2,000,000 hour(s)	
Drive Writes Per Day (DWPD)	0.3 (5 yrs)	
Note	<ul style="list-style-type: none"><li>Speed may vary due to host hardware, software, usage, and storage capacity.</li><li>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.</li><li>Terabytes Written (TBW) expresses the endurance under the highest capacity.</li></ul>	

Warranty

Certificate	CE / UKCA / FCC / BSMI / KC / RCM
Warranty	Five-year Limited Warranty
Warranty Policy	<ul style="list-style-type: none"><li>Please click here (/Warranty) for more information about the Transcend Warranty Policy.</li><li>Warranty does not apply when SSD Scope's lifetime indicator displays 0% within the warranty coverage.</li></ul>

System Requirement

Operating System	<ul style="list-style-type: none"><li>Microsoft Windows 7 or later</li><li>Linux Kernel 2.6.31 or later</li></ul>
Note	Please make sure that your computer has a M.2 slot.

Technology

TRIM & NCQ Command	✓
S.M.A.R.T.	✓
DDR3 DRAM Cache	✓
Advanced Garbage Collection	✓
DevSleep Mode	✓
RAID Engine	✓
LDPC Coding	✓

Awards



(<http://www.transcend-info.com/Goto/5828>)

Editor’s Choice

GreenTech Reviews  
Russia

Order Information

128GB

TS128GMTS430S

256GB

TS256GMTS430S

512GB

TS512GMTS430S

1TB

TS1TMTS430S



Product Sheet

([https://CDN.transcend-info.com/products/images/modelpic/981/Transcend-MTS430S\\_1TB.pdf](https://CDN.transcend-info.com/products/images/modelpic/981/Transcend-MTS430S_1TB.pdf))



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