





## 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 80mm in length, the M.2 SSD 830S 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 (80mm), the next generation SATA III 6Gb/s interface and a powerful controller, Transcend's M.2 SSD 830S reaches incredible read and write speeds of up to 560MB/s and 520MB/s. When used as a cache, the M.2 SSD 830S provides 1.5 times faster boot time than conventional hard drives.





# SATA III M.2 SSDs M.2 SSD 830S

## **Features**

- Space-saving M.2 Type 2280 form factor
- 3D NAND flash
- Engineered with a RAID engine and LDPC (Low-Density Parity Check) coding to ensure data integrity
- DDR3 DRAM cache shortens access times
- ECC (Error Correction Code) function and wear-leveling algorithm ensure reliable data transfers



**SSD Scope** 

SSD Scope features useful functions to maintain your SSD in a healthy status and also copy data from your original HDD to Transcend's new SSD.

## **Specifications**

#### Appearance

Dimensions	80.0 mm x 22.0 mm x 3.58 mm (3.15" x 0.87" x 0.14")
Weight	9 g (0.32 oz)
Туре	M.2 2280

#### 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 / 2 TB / 4 TB

## Operating Environment

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

up to 560 MB/s

## Performance Read Speed (Max.)

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Write Speed (Max.)	up to 520 MB/s
4K Random Read/Write (IOmeter)	Read: up to 90,000 IOPS Write: up to 85,000 IOPS
Mean Time Between Failures (MTBF)	2,000,000 hour(s)
Drive Writes Per Day (DWPD)	1.33 (5 yrs)
Terabytes Written (TBW)	up to 2240 TBW
Note	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 / FCC / BSMI / KC / RCM / UKCA
Warranty	Five-vear Limited Warranty

## **Ordering Information**

128GB	TS128GMTS830S
256GB	TS256GMTS830S
512GB	TS512GMTS830S
1TB	TS1TMTS830S
2TB	TS2TMTS830S
4TB	TS4TMTS830S