Transcend®

www.transcend-info.com

SATA III M.2 Solid State Drive

M.2 SSD 830S

Transcend's ultra-compact SATA III 6Gb/s M.2 SSD 830S 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 830S delivers optimal reliability.

Perfect for your Ultrabook

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

Transcend's M.2 SSD 830S reaches incredible read and write speeds of up to 560MB/s and 500MB/s. When used as a cache, the M.2 SSD 830S 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.

SATA III M.2 Solid State Drive

M.2 SSD 830S

Features

- Space-saving M.2 Type 2280 form factor
- Up to 560 MB/s read; 500 MB/s write
- 3D NAND flash memory
- RAID engine and LDPC coding for data integrity; DDR3 DRAM cache for short access times
- Supports DevSleep ultra low power state, 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.)	80.0 mm x 22.0 mm x 3.58 mm (3.15" x 0.87" x 0.14")
Weight (Max.)	9 g (0.32 oz)

Interface

Bus Interface	SATA III 6Gb/s

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, max.)	Read: 560 MB/s Write: 500 MB/s
4K Random Read/Write (IOmeter, max.)	Read: 85,000 IOPS Write: 85,000 IOPS
Mean Time Between Failures (MTBF)	1,000,000 hour(s)
Terabytes Written (Max.)	560 TB
Drive Writes Per Day (DWPD)	0.3 (5 yrs)

Note

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

Warranty

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

Ordering Information

128GB	TS128GMTS830S
256GB	TS256GMTS830S
512GB	TS512GMTS830S
1TB	TS1TMTS830S

Product specifications are subject to change without notice. Pictures shown may differ from actual products. When used as a storage capacity unit, one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.

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
Appearance				
Dimensions (Max.)	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")
Weight (Max.)	5 g (0.18 oz)	5 g (0.18 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 ~ 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: 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: 85,000 IOPS Write: 85,000 IOPS
Mean Time Between Failures (MTBF)	1,000,000 hour(s)			
Terabytes Written (Max.)	80 TB	280 TB	320 TB	560 TB
Drive Writes Per Day (DWPD)	0.3 (3 yrs)	0.3 (5 yrs)	0.3 (3 yrs)	0.3 (5 yrs)
Warranty				
Warranty	Three-year Limited Warranty	Five-year Limited Warranty	Three-year Limited Warranty	Five-year Limited Warranty
Technology				
TRIM & NCQ Command	✓	✓	✓	✓
S.M.A.R.T.	✓	✓	✓	✓
DDR3 DRAM Cache	-	✓	-	✓
Advanced Garbage Collection	✓	✓	✓	✓
DevSleep Mode	✓	✓	✓	✓
RAID Engine	✓	✓	✓	✓
LDPC Coding	✓	✓	✓	✓

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