mSATA Solid State Drive

mSATA SSD 230S

Transcend's mSATA SSD 230S uses the SATA III 6Gb/s interface and a powerful controller, delivering blazing-fast performance, long-term reliability, and high cost-effectiveness. The compact mSATA form factor is just one-eighth the size of a standard 2.5" SSD, making it perfect for use in space-constricted portable devices such as Ultrabooks, tablet PCs, and slim servers.
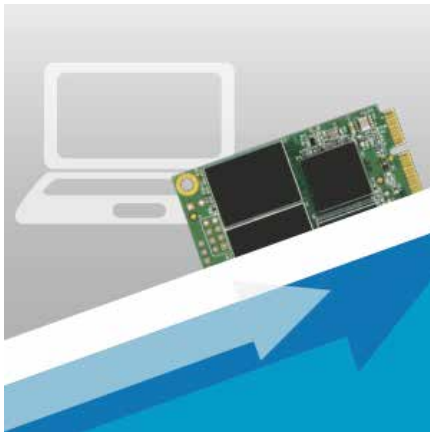
Superior upgrade option

Transcend's mSATA SSD 230S adopts the SATA III 6Gb/s interface, DDR3 DRAM cache, and a powerful controller, providing ultra-fast transfer speeds of up to 550MB/s read and 400MB/s write for faster boot time and application launching time.
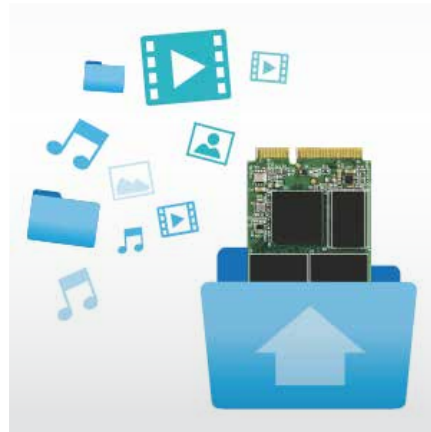
Up to 256GB capacity

Transcend's mSATA SSD 230S provides up to 256GB capacity, giving you more options to suit your demands while storing large multimedia files and applications in faster speeds.

Speed up loading times

Dedicated to maximizing high-performance computing, the mSATA SSD 230S features maximum 4K random file read 55,000 IOPS and write 70,000 IOPS that delivers incredibly short loading times and almost instant response for heavy graphics and multimedia applications.

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Features

· mSATA form factor and SATA III 6Gb/s interface
· Up to 550MB/s read; 400MB/s write
· 3D NAND flash memory
· Engineered with a RAID engine and LDPC coding to ensure data integrity, and built-in SLC caching technology for exceptional transfer speeds
· 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.)	50.8 mm x 29.85 mm x 4.85 mm (2.00" x 1.18" x 0.19")
Weight (Max.)	9 g (0.32 oz)

Interface

Bus Interface	SATA III 6Gb/s

Storage

Flash Type	3D NAND flash
Capacity	64 GB/128 GB/256 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: 550 MB/s Write: 400 MB/s
4K Random Read/Write (IOmeter, max.)	Read: 55,000 IOPS Write: 70,000 IOPS
Mean Time Between Failures (MTBF)	1,000,000 hour(s)
Terabytes Written (Max.)	160 TB
Drive Writes Per Day (DWPD)	0.5 (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

64GB	TS64GMSA230S
128GB	TS128GMSA230S
256GB	TS256GMSA230S

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.

mSATA SSDs Comparison

SATA III 6Gb/s
mSATA SSD 370

SATA III 6Gb/s
mSATA SSD 230S

Appearance

	mSATA SSD 370	mSATA SSD 230S
Dimensions (Max.)	50.8 mm x 29.85 mm x 4.85 mm (2.00" x 1.18" x 0.19")	
Weight (Max.)	8 g (0.28 oz)	9 g (0.32 oz)

Storage

Flash Type	MLC NAND flash	3D NAND flash
Capacity	16GB ~ 256GB	64GB ~ 256GB

Operating Environment

Operating Temperature	0°C (32°F) ~ 70°C (158°F)	

Performance

Sequential Read/Write (ATTO, max.)	Read: 570 MB/s Write: 400 MB/s	-
Sequential Read/Write (CrystalDiskMark, max.)	Read: 520 MB/s Write: 400 MB/s	Read: 550 MB/s Write: 400 MB/s
4K Random Read/Write (IOmeter, max.)	Read: 70,000 IOPS Write: 75,000 IOPS	Read: 55,000 IOPS Write: 70,000 IOPS
Mean Time Between Failures (MTBF)	1,500,000 hour(s)	1,000,000 hour(s)
Terabytes Written (Max.)	740 TB	160 TB
Drive Writes Per Day (DWPD)	2.2 (3 yrs)	0.5 (3 yrs)

Warranty

Warranty	Three-year Limited Warranty	

Technology

	mSATA SSD 370	mSATA SSD 230S
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.