



Right Performance, Right Capacities

Micron's M510 SATA solid state drive (SSD) provides the performance and reliability of a proven Micron SSD platform. Based on the architecture of our high-performance M550 drive, the M510 provides a cost-effective alternative for laptop OEMs and other designers who require 128GB and 256GB memory capacities.

Built with Micron's 20nm NAND Flash, the M510 offers solid performance and reliability at a compelling price point. You also get the full feature set of our latest personal storage SSDs: RAIN reliability technology, low-power device sleep mode, Opal 2.0 self-encryption, asynchronous power-loss protection, and adaptive thermal monitoring. Like all Micron SSDs, the M510 is built and tested entirely by Micron, so you get the high level of reliability that only comes from a trusted NAND manufacturer.

KEY BENEFITS

The Right Capacities

The M510's 128GB and 256GB memory capacities offer a perfect fit for many designs.

Low Power Consumption

Consume less power with features like device sleep mode, which extends battery life.

Versatility

Designed with industry-standard capacities and ultra-compact form factors.

Data Security

Build industry-leading encryption, enhanced data protection, adaptive thermal monitoring, and more into your designs.

WHICH APPLICATIONS ARE THE BEST FIT?



CORPORATE
NOTEBOOK



ULTRATHIN
PC TABLET



VIDEO
PRODUCTION



EMBEDDED



WORKSTATION

The M510 provides memory capacity, solid performance, and reliability—all at the right price.

M510 Performance you can trust



MICRON® M510 SATA SSD

SATA

M.2

mSATA

2.5"

WHY MICRON FOR SSDs?

Worldwide NAND Flash Leadership

Micron SSD customers have the assurance of working with the world's leader in NAND Flash design. Our expertise in NAND technology sets us apart as a vertically integrated supplier with the unique ability to ensure end-to-end quality.

Extensive Testing

Our rigorous product testing translates to predictably reliable, high-quality drives.

Proven Start-To-Finish Quality

From component design to fabrication to the finished package device, our stringent quality requirements, significant investments in SSD test equipment, and advanced NAND management algorithms mean that reliability is literally built into every drive.



Form Factor Flexibility for Small Designs: The M510 is offered in three thin, ultra-compact form factors—the 2.5-inch, mSATA, and M.2.

Key Specifications

	2.5-inch	mSATA	M.2
Capacity ¹	128GB, 256GB		
Interface	SATA 6 Gb/s		
Sequential performance (up to)	Read: 520 MB/s Write: 300 MB/s		
Random performance (up to)	Read: 85,000 IOPS Write: 65,000 IOPS		
PCMark®vantage scores (up to)	80,000		
Active average power consumption ^{2,3}	150mW (TYP)		
Idle average power consumption ²	<100mW		
Device sleep power consumption ²	<5mW		
Operating temp	Commercial (0°C to +70°C)		
Dimensions	100.45 x 69.85 x 7mm	50.80 x 29.85 x 3.75mm	80 x 22 x 3.58mm
Weight	70g (MAX)	10g (MAX)	10g (MAX)

1. Unformatted. 1GB = 1 billion bytes. Formatted capacity is less.

2. Data taken at 25°C using a SATA 6 Gb/s interface. Device-initiated power management (DIPM) enabled.

3. Active power measured while running MobileMark® Productivity Suite.

Orderable Part Numbers

Part	Capacity	Form Factor
MTFDDAK128MAZ	128GB	2.5-inch
MTFDDAK256MAZ	256GB	2.5-inch
MTFDDAT128MAZ	128GB	mSATA
MTFDDAT256MAZ	256GB	mSATA
MTFDDAV128MAZ	128GB	M.2
MTFDDAV256MAZ	256GB	M.2

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