MICRON® M510DC SATA SSD

SATA | 2.5”

Optimized for Read-Heavy, Write-Light Workloads

The read-heavy demands of data center appliances, content delivery networks, virtual desktop infrastructures, and databases using business intelligence and decision support systems (BI/DSS) are the target markets for Micron’s M510DC SATA enterprise SSD. The M510DC’s robust features, extended endurance, and competitive price point are ideal for sequential workloads with large block transfer sizes.

Get the solid performance you need from an SSD specifically designed for demanding 24/7 enterprise workloads, along with the world-class support and proven quality and reliability that can only be offered by a truly vertically integrated SSD supplier.

KEY BENEFITS

Balanced Total Cost of Ownership
Provides best alignment of features for cost-conscious data center customers who value performance, power efficiency, and reliability.

Optimized Performance
Addresses the growing needs of read-centric, high-capacity platforms while maintaining high levels of random write performance and endurance.

Enterprise-Class Endurance
Offers class-leading write endurance for superior drive life in mixed-workload and virtualized environments.

Increased Power Efficiency
Combines low average power consumption and optimized performance to provide the high level of power efficiency that data center customers require.

XPERT Features
Provides architectural enhancements, including data path protection, encryption, adaptive thermal monitoring and power loss protection, that are designed to greatly improve SSD performance, drive life, and reliability.

WHICH APPLICATIONS ARE THE BEST FIT?

BIG DATA	CONTENT DELIVERY	DATABASE MANAGEMENT	VIRTUALIZED ENVIRONMENTS	HIGH-PERFORMANCE COMPUTING	EMBEDDED	WORKSTATION
★★	★★★	★★	★★★	★	★★	★

Feature-rich M510DC SSD with enhanced performance and reliability delivers more value to your enterprise applications.

★ GOOD ★★ BETTER ★★★ BEST

M510DC *Performance you can trust*

Micron®

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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 and to optimize our SSDs for our NAND components.

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.

Key Specifications

	2.5-Inch
Capacity[1]	120GB, 240GB, 480GB, 960GB
Interface	SATA 6 Gb/s
Sequential read/write performance[2]	120GB: 420/170 MB/s 240GB: 420/290 MB/s 480GB: 420/380 MB/s 960GB: 420/380 MB/s
Random read/write performance[3]	120GB: 63,000/12,000 IOPS 240GB: 63,000/18,000 IOPS 480GB: 63,000/23,000 IOPS 960GB: 65,000/10,500 IOPS
Endurance[4]	Up to 2 drive fills/day (1 drive fill/day 960GB)
READ/WRITE latency	0.5ms/3.0ms
Active power consumption (MAX)	120GB, 240GB, 480GB: <6.0W (TYP) 960GB: <6.3W (TYP)
Active power consumption (AVG)	1.5W
Idle/standby/sleep power consumption	1.2W
Operating temp	0°C to 70°C
Dimensions	69.85 x 100.45 x 7mm
Extended Features	eXtended Performance and Enhanced Reliability Technology (XPERT) suite of enterprise performance and advanced data protection algorithms

1. Unformatted. 1GB = 1 billion bytes. Formatted capacity is less.
2. 128KB transfer size, steady state.
3. 4KB transfer size, steady state.
4. Random access workload.

Base Part Numbers

Part	Capacity	Form Factor
MTFDDAK120MBP	120GB	2.5-inch
MTFDDAK240MBP	240GB	2.5-inch
MTFDDAK480MBP	480GB	2.5-inch
MTFDDAK960MBP	960GB	2.5-inch

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M510DC ***Performance*** *you can trust*

Micron®