# Micron<sup>®</sup> M500IT SATA SSD

# SSDs for Automotive and Industrial Markets



### Thrive in Extreme Conditions Using Solid State Storage

Boost performance and reliability of leading-edge automotive electronics systems and industrial-grade applications with the Micron<sup>®</sup> M500IT SATA SSD, which extends our proven client SSD portfolio into automotive and industrial domains.

From automotive solutions and heavy robotics to remote communication installations and medical equipment, embedded applications are extremely diverse — often requiring storage solutions that deliver reliable high performance in a variety of difficult and space-constrained conditions.

With an extended temperature range and robust data protection features, M500IT is built to withstand automotive and industrial applications' rigorous demands. Combine that functionality with Micron's long-term product commitment and customer collaboration to create a design that stands apart from the competition.

### Which Applications Are the Best Fit?

With an extended temperature range, robust data security and power-loss protection, the M500IT is a perfect fit for the newest technology developments in the fields of automotive, science, medicine and manufacturing.

- Automotive In-vehicle infotainment, navigation and driver information, adaptive driver assistance program, black box
- **Industrial** Aerospace solutions, heavy robotics, remote communication equipment, medical equipment
- Machine to Machine (M2M) Smart security, home, retail, energy and transportation solutions

## **Key Benefits**

- 1. Extended Temperature Range Withstand extreme environments via an automotivegrade temperature range of -40°C to 85°C and adaptive thermal throttling.
- 2. Robust Data Security Protect data with industry-leading and on-the-fly hardware-based encryption, secure firmware download and cryptographic erase.
- 3. Data Path Protection Help to protect user data as it passes through the SSD.
- 4. Power-Loss Protection Protect data at rest, helping to ensure data integrity in unexpected power-loss events.
- 5. Responsive Performance Deliver significantly faster boot, file and application load times compared to traditional hard drives.
- 6. Low Power Consumption Consume considerably less power than typical hard drives



### Micron M500IT SATA SSD

### Why Micron for SSDs?

#### **Broad Portfolio**

Choose from an extensive portfolio of IMM-focused solutions for automotive, industrial and commercial-grade categories.

#### **Extensive Testing**

Get predictably reliable, high-quality drives thanks to our rigorous product testing.

#### **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 you get reliability built into every drive.

#### **Industry Knowledge and Commitment**

Secure a trusted partner with more than 35 years of experience, investing and innovating to support your business.

#### **Roadmap Stability**

Take advantage of our extended product lifecycles offered via our <u>Product Lifecycle Solutions</u>.



Choose the M500IT form factor that meets your application's specific performance, power and space requirements.

### Key Specifications

Family	Part	Density	Form Factor	Sequential Read/Write Performance	Random Read/Write Performance	Read/Write Latency	Endurance (TBW)	Encryption	Operating Temperature	Mean Time to Failure	Shock Value
M500IT	MTFDDAK060MBD	60GB	2.5-inch	Up to 500/130 MB/s Up to 500/250 MB/s	Up to 55,000/ 35,000 IOPS	160/40µs		256-bit AES, Opal 2.0	-40°C to 85°C	3 million hours	20G at 7–2000Hz
	MTFDDAT060MBD		mSATA				60TB				
	MTFDDAK120MBD	120GB	2.5-inch								
	MTFDDAT120MBD		mSATA				120TB				
	MTFDDAK240MBD	240GB	2.5-inch		Up to 65,000/ 60,000 IOPS						
	MTFDDAT240MBD		mSATA				240TB				
	MTFDDAK064MBD	64GB	2.5-inch	Up to 500/130 MB/s	Up to 55,000/ 35,000 IOPS		60TB				
	MTFDDAT064MBD		mSATA								
	MTFDDAK128MBD	128GB	2.5-inch								
	MTFDDAT128MBD		mSATA				120TB				
	MTFDDAK256MBD	256GB	2.5-inch	Up to 500/250 MB/s	Up to 65,000/ 60,000 IOPS						
	MTFDDAT256MBD		mSATA				240TB				
	MTFDDAK032SBD	32GB	2.5-inch	Up to 500/350 MB/s			400TB				
	MTFDDAT032SBD		mSATA								
	MTFDDAK064SBD	64GB	2.5-inch								
	MTFDDAT064SBD		mSATA				800TB				
	MTFDDAK128SBD	128GB	2.5-inch	Up to 500/400	Up to 75,000/ 60,000 IOPS						
	MTFDDAT128SBD		mSATA	MB/s			800TB				

### **Contact Us**

Visit <u>micron.com</u> for more details on the M500IT SSD and how it can enhance your next innovative automotive, industrial or M2M solution. Contact your Micron sales representative with questions or for samples and support.

### micron.com

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