Micron® Automotive and Industrial SSDs

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® M500IT and 2100Al/AT SSDs, which extend our proven client SSD portfolio into automotive and industrial domains.

- Extended Temperature Ranges Withstand extreme environments via an industrial temperature range (M500IT: –40°C to 85°C, 2100AI: –40°C to 95°C), an automotive temperature range (2100AT: –40°C to 105°C), and adaptive thermal throttling.
- Robust Data Security

 Protect data with industry leading and on-the-fly hardware-based encryption, secure firmware download, and cryptographic erase.
- **Data Path Protection** Help protect user data as it passes through the SSD (2100Al/AT).
- Power-Loss Protection—Protect data at rest, helping to ensure data integrity in unexpected power-loss events.
- Responsive Performance—Deliver significantly faster boot, file and application load times compared to traditional hard drives.
- Low Power Consumption—Consume considerably less power than typical hard drives.



Spotlight: Micron's IT SSDs Withstand the Toughest Tests of the Global Defense Industry

Industrial-grade devices are a must-have for the global defense industry. Working with DRS Technologies, a leading supplier of integrated products, services and support for military forces, Micron's M500IT SSD became the product of choice for one of their largest customers: the U.S. Army.

DRS develops, manufactures and supports a broad range of systems for mission-critical military sustainment requirements, ruggedizing cost-effective, commercial technologies for combat.

DRS was challenged with consumer-grade products not designed for the rugged and unforgiving environment of modern warfighters. Additionally, available "ruggedized" storage designed for this environment was cost-prohibitive.

Micron developed the M500IT SSD to meet the needs of the automotive and embedded industries. The automotive industry's rigorous requirements match well with those of the defense industry.

Supporting DRS with early access to engineering sample drives and analysis testing, our products and roadmaps evolved together, resulting in our M500IT being fully qualified for use in DRS' most popular tactical computer platform.



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Which Applications are the Best Fit?

- Automotive In-vehicle infotainment, navigation and driver information, adaptive driver assistance program, black box.
- Industrial Factory automation, robotics, transportation, medical, defense, retail, industrial networking, video surveillance.

Choose the Form Factor that Meets Your Requirements



Family	Part Number	Density	Form Factor	Sequential Read/Write Performance	Endurance (TBW)	Encryption	Operating Temperature	Mean Time to Failure	Uncorrect- able Bit Error Rate (UBER)	Vibration Value
M500IT	MTFDDAK128MBD-2AK12ITYY	128GB	2.5-inch	Up to 500/ 130 MB/s	120TB	256-bit AES,	-40°C to 85°C	3 million hours	1E-16	20G at 7–2000Hz
	MTFDDAT128MBD-1AK12ITYY		mSATA							
	MTFDDAK256MBD-2AK12ITYY	256GB	2.5-inch	Up to 500/ 250 MB/s	240TB	Opal 2.0				
	MTFDDAT256MBD-1AK12ITYY		mSATA		24010					
2100AI	MTFDHBL128TDP-1AT12AIYY	128GB	BGA	Up to 1100/ 420 MB/	60TB	256-bit AES, Opal 2.0	Tcase = -40°C to 95°C	3 million hours	1E-16	N/A
	MTFDHBL256TDP-1AT12AIYY	256GB	BGA	Up to 2000/ 850 MB/s	120TB					N/A
	MTFDHBK256TDP-1AT12AIYY		M.2 2230							20G at 7-2000Hz
	MTFDHBL512TDP-1AT12AIYY	512GB	BGA	Up to 2000/ 1550 MB/s	240TB					N/A
	MTFDHBK512TDP-1AT12AIYY		M.2 2230							20G at 7-2000Hz
	MTFDHBM1T0TDP-1AT12AIYY	1TB	BGA	Up to 2000/ 1750 MB/s	480TB					N/A
	MTFDHBK1T0TDP-1AT12AIYY		M.2 2230							20G at 7-2000Hz
2100AT	MTFDHBL064TDQ-1AT12ATYY	64GB 128GB 256GB 512GB 1TB		Up to 550/ 200 MB/s	30TB	256-bit AES, Opal 2.0	Tcase = -40°C to 105°C	3 million hours	1E-16	N/A
	MTFDHBL128TDQ-1AT12ATYY			Up to 1100/ 420 MB/s	60TB					
	MTFDHBL256TDQ-1AT12ATYY		BGA	Up to 2000/ 850 MB/s	120TB					
	MTFDHBL512TDQ-1AT12ATYY			Up to 2000/ 1550 MB/s	240TB					
	MTFDHBM1T0TDQ-1AT12ATYY			Up to 2000/ 1750 MB/s	480TB					

Contact Us

Visit micron.com for more details on the M500IT and 2100Al/AT SSDs and how they can enhance your next automotive or industrial solution. Contact your Micron sales representative with questions or for samples and support.

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