Micron® 2300 SSD with NVMe™

NVMe

M.2

THE THINNEST, LIGHTEST HEAVYWEIGHT YET

The Micron® 2300 client solid-state drive (SSD) combines the power and storage density needed to drive workstation applications with the compact form factor and power-sipping features demanded by modern mobile users.

With blazing fast NVMe™ speed and optimized power for client computing, this SSD is built on Micron-developed controller, firmware and innovative flash technology.

Adaptive power management improves the customer experience through longer battery life and performance on demand.

The 2300 SSD includes end-to-end data path protection, power loss signal support, and secure firmware.

Micron enables industry-leading capacities up to 2TB for the popular M.2 form factor with Micron's innovative 96-layer 3D NAND.

HIGH-DENSITY, 96-LAYER TLC NAND. HIGH PERFORMANCE. LOW POWER.

The Micron 2300 client SSD combines the power and storage density needed to drive workstation applications.

KEY BENEFITS

The Freedom to Store More

Industry-leading 2TB capacity using Micron's innovative 96-layer 3D NAND technology in a single-sided M.2 form factor provides flexibility in design.

Power Smart for All-Day Freedom

The Micron 2300 SSD manages power intelligently within the device to drive predictable performance with low power.

Micron's power-smart features help to keep your client devices cool and to eliminate hot spots so you have fewer thermal design challenges.

Big Performance in a Small Package

Micron's high-density 96-layer 3D TLC NAND provides density, high performance and low power consumption for a low total cost of ownership (TCO).

Built on Micron-developed controller, firmware and innovative flash technology, the Micron 2300 SSDs offer massive bandwidth in flexible capacity at a competitive price. The small, dense M.2 form factor (22x80mm) fits a broad set of desktop and mobile design needs.

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Data Security. End to End.

Robust Security to Keep Your Data Safe

To combat advanced security threats, the Micron 2300 SSD delivers enhanced client-technology security features and capabilities to protect your data, with TCG Opal 2.0 and Pyrite 2.0.

Micron's end-to-end security expertise in hardware and software development gives you confidence that your data is safe.[1]

Through many generations of development and OEM-level testing, Micron has developed a mature hardware and software stack for SSDs so you can trust that they will quickly run through your validation testing gauntlet.

MICRON 2300 M.2 SSD

micron.com/2300

1. Advanced features: No hardware, software or system can provide absolute security under all conditions. Micron assumes no liability for lost, stolen or corrupted data arising from the use of any Micron products, including those products that incorporate any of the mentioned security features
2. Capacities: Unformatted. 1GB = 1 billion bytes. Formatted capacity is less
3. Sequential read/write: 128KB transfer size, fresh-out-of-box (FOB)
4. Random read/write: 4KB transfer size, fresh-out-of-box (FOB)
5. More details are available from the NVM Express working group: https://nvmexpress.org/wp-content/uploads/NVM-Express-1_3d-2019.03.20-Ratified.pdf
6. More details are available from Microsoft Technet: https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-server-2012-R2-and-2012/hh831627(v=ws.11)?redirectedfrom=MSDN
7. SED = self-encrypting drive

Micron® 2300 SSD with NVMe™				
Category	Corporate PCs and Notebooks			
Model	Micron 2300 SSD			
Form Factor	M.2 (22x80mm)			
Interface	PCIe Gen3, NVMe 1.3			
Capacities[2]	**256GB**	**512GB**	**1TB**	**2TB**
Seq Read (MB/s)[3]	3,300	3,300	3,300	3,300
Seq Write (MB/s)[3]	1,400	2,700	2,700	2,700
Random Read (IOPS)[4]	210K	225K	400K	430K
Random Write (IOPS)[4]	355K	500K	500K	500K
Endurance (TBW)	150TB	300TB	600TB	1,200TB
MTTF (Million Hours)	2	2	2	2
Sleep/PS4 Power (mW)	<5	<5	<5	<5
Idle Power (mW)	<600	<600	<600	<600
Active Read Power (mW)	<5,500	<5,500	<5,500	<5,500
Advanced Features[1]	• AES 256-bit encryption • Power-loss protection (data at rest) • Host-controlled thermal management • Dynamic write acceleration • RAIN & S.M.A.R.T. • Power loss signal support[5] • TCG Opal 2.0, TCG Pyrite 2.0, eDrive[6] • Micron Storage Executive management tool			

Micron 2300 Part Numbers		
TCG Pyrite (non-SED[7])	**Capacity**	**Form Factor**
MTFDHBA256TDV-1AY1AABYY	256GB	M.2
MTFDHBA512TDV-1AZ1AABYY	512GB	M.2
MTFDHBA1T0TDV-1AZ1AABYY	1TB	M.2
MTFDHBA2T0TDV-1AZ1AABYY	2TB	M.2
TCG Opal (SED)	**Capacity**	**Form Factor**
MTFDHBA256TDV-1AY15ABYY	256GB	M.2
MTFDHBA512TDV-1AZ15ABYY	512GB	M.2
MTFDHBA1T0TDV-1AZ15ABYY	1TB	M.2
MTFDHBA2T0TDV-1AZ15ABYY	2TB	M.2
TCG Opal + Microsoft® eDrive	**Capacity**	**Form Factor**
MTFDHBA256TDV-1AY12ABYY	256GB	M.2
MTFDHBA512TDV-1AZ12ABYY	512GB	M.2
MTFDHBA1T0TDV-1AZ12ABYY	1TB	M.2
MTFDHBA2T0TDV-1AZ12ABYY	2TB	M.2