



MICRON[®] 7450

SSD WITH NVME[™]



Performance. Power. Precision.

The Micron[®] 7450 SSD enables advanced storage solutions with multiple U.3, M.2, and E1.S form factors, capacities up to 16TB-class, and multiple security options. Software defined storage, database and virtualization solutions excel on the Micron 7450, thanks to its PCIe[®] Gen4 throughput, low latency, and excellent quality-of-service. This vertically integrated solution includes many Micron-developed technologies, such as its industry-leading 176-layer NAND¹ that delivers sub-2ms² quality of service, controller, firmware, and memory. This combination of advanced technologies, performance, features, and design flexibility allows the Micron 7450 to meet or exceed data center server needs.

Best For

- Hyperconverged infrastructure
- Cloud infrastructure
- Big data
- Object storage

Key Features

- Power loss protection
- Enterprise data path protection
- Firmware activated without reset
- Secure erase
- Secure boot
- Hardware root of trust, secure signed firmware
- Full-drive encryption capable (TCG OPAL 2.01, specific part numbers)
- 5-year limited warranty⁴

World's Most Advanced NAND Technology

Industry-leading 176-layer NAND¹ coupled with Micron's CMOS-under-array technology, and combined with a maximum data transfer rate of 1600GT/s, yields 35% faster¹ read and write speeds, enabling faster application response.

Superior Quality-of-Service and Performance





For demanding data center applications such as software-defined storage, databases and virtualization, 99.999% quality-of-service latency is a critical design criterion. With the Micron 7450 SSD, latency crosses the sub-2ms² barrier and stays there, enabling consistent application response over time. This represents a 43% reduction in latency when compared to the previous generation⁵.

Extensive Form Factor and Capacity Options

With a capacity range from 400GB to 15.36TB³ — including a 7.68TB E1.S option — the industry's broadest variety of form factors⁶ (including multiple U.3, M.2 and E1.S) to meet evolving power and thermal needs. Security features like Micron's Secure Execution Environment (SEE), SED, and non-SED options tailor security to deployment requirements.

One of the Largest Memory and Storage Manufacturers Worldwide

Micron has produced some of the world's most advanced memory and storage technologies for more than 40 years. All Micron-branded products are developed by our engineering team to ensure best-in-class quality and reliability.

Micron 7450 SSD								
								
	U.3 7mm 15mm		E.1.S 5.9mm 15m		M.2 2280		M.2 22110	
	PRO 1 DWPD	MAX 3 DWPD	PRO 1 DWPD	MAX 3 DWPD	PRO 1 DWPD	MAX 3 DWPD	PRO 1 DWPD	MAX 3 DWPD
Capacities	960 1,920 3,840 7,680 15,360*	800 1,600 3,200 6,400 12,800*	960 1,920 3,840 7,680	800 1,600 3,200 6,400	480 960	400 800	960 1,920 3,840	800 1,600 3,200
Sequential reads (MB/s)	6800	6800	6800	6800	4400	4400	4400	4400
Sequential writes (MB/s)	5600	5600	5600	5600	1400	1400	2600	2600
Random reads (K IOPS)	1000	1000	1000	1000	457	457	655	655
Random writes (K IOPS)	180	400	180	400	73	135	130	300
Endurance (DWPD)	1 & 3 (random IO)	1 & 3 (random IO)	1 & 3 (random IO)	1 & 3 (random IO)	1 & 3 (random IO)	1 & 3 (random IO)	1 & 3 (random IO)	1 & 3 (random IO)

©2022 Micron Technology, Inc. All rights reserved. Information, products, and/or specifications are subject to change without notice. Micron Technology, Inc. is not responsible for omissions or errors in typography or photography. Micron and the Micron logo are trademarks or registered trademarks of Micron Technology, Inc. All other trademarks are the property of their respective owners.

1. Additional information available here: www.micron.com/176

2. Performance measured under the following conditions: Steady state as defined by SNIA Solid State Storage Performance Test Specification Enterprise v1.1; Drive write cache enabled; NVMe power state 0; sequential workloads measured using FIO with a queue depth of 32; random read workloads measured using FIO with a queue depth of 256 (1,000,000 IOPS statement based on 4K sector size; random write workloads measured using FIO with a queue depth of 128)

3. User capacity: 1GB = 1 billion bytes; formatted capacity is less

4. Warranty valid for 5 years from the original date of purchase or before writing the maximum total bytes written (TBW) as published in the product datasheet and as measured in the product's SMART data, whichever comes first.

5. Based on comparison to the Micron 7400 SSD

6. Based on comparison of publicly available mainstream NVMe SSDs

