# Selling Micron® 7450 SSDs





Performance. Power. Precision.
The Micron® 7450 SSD – Driving the Future of Data Centers

The Micron® 7450 SSD enables advanced storage solutions with multiple U.3, M.2 and E1.S form factors, capacities up to a 16TB-class and multiple security options. Software defined storage, databases and virtualization solutions excel on the Micron 7450, thanks to its PCle® Gen4 throughput, low latency, and excellent quality-of-service.

Speed <sup>1</sup> Up to 6800MB/s	Interface NVMe™ PCIe® Gen4 x4	Form Factors M.2 (2280) M.2 (22110) U.3 (7mm)
Capacities <sup>2</sup> 400GB - 15360GB	<b>Warranty</b> <sup>3</sup> 5-year limited	U.3 (15mm) E1.S (5.9mm) E1.S (15mm)

#### Best for

Hyperconverged infrastructure, cloud infrastructure, big data, object storage



### Benefits for Business

- World's Most Advanced NAND Technology
   Industry-leading 176-layer NAND<sup>4</sup> coupled with Micron's CMOS-under-array technology, and combined with a maximum data transfer rate of 1600GT/s, yields 35% faster<sup>5</sup> 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-2ms¹ 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 15.36TB<sup>4</sup> — including a
7.68TB E1.S option — the industry's broadest variety of form
factors<sup>6</sup> (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.

# Built From the Ground Up for Mainstream Workloads

Micron 7450 SSD Features	BENEFITS			
<b>U.3</b> (7mm, 15mm)	Optimize space (7mm) or thermals (15mm), both of which are U.2 compatible			
<b>M.2</b> (2280, 22110)	Ultracompact M.2 form factors that are well-suited for boot devices			
<b>E1.S</b> (5.9mm, 15mm)	New EDSFF specification optimized for 1U platforms			
Up to 128 namespaces	Isolated logical blocks of NAND that are separately accessible for noninterfering I/O and multitenancy			
Vertical integration	Industry-leading 176L NAND⁴ combined with Micron-developed flash controller and firmware			
Power loss protection	SSD power holdup mechanism that helps ensure data in flight is properly written when SSD power is lost			

## Micron® 7450 SSD with NVMe™ Competitive Comparison

SPECS	Micron 7450 SSD	Samsung PM9A3	Kioxia CD6-R	Intel P5510
SEQUENTIAL READ (MB/s)	6800MB/s <sup>1</sup>	6950MB/s	6200MB/s	7000MB/s
SEQUENTIAL WRITE (MB/s)	5600MB/s <sup>1</sup>	4000MB/s	4000MB/s	4194MB/s
4KB RANDOM READ (IOPS)	1000K <sup>1</sup>	1000K	1000K	930K
4KB RANDOM WRITE (IOPS)	<b>250K</b> <sup>1</sup> (PRO), <b>410K</b> <sup>1</sup> (MAX)	180K	85K	190K
ENDURANCE (DWPD)	<b>1</b> (PRO), <b>3</b> (MAX) <b>DWPD</b> <sup>3</sup>	1 DWPD	1 DWPD	1 DWPD
MTTF (million hours)	2	2	2.5	2
WARRANTY (years)	5	5	5	5

#### Micron® 7450 SSD with NVMe™ Product Line



#### Micron 7450 PRO M.2 (2280, 22110)

480GB, 960GB, 1920GB, 3840GB<sup>2,7</sup> Sequential read up to 5000MB/s<sup>1</sup> Sequential write up to 2500MB/s<sup>1</sup> 5-year limited warranty<sup>3</sup>

#### Micron 7450 MAX M.2 (2280)

400GB, 800GB<sup>2</sup> Sequential read up to 5000MB/s<sup>1</sup> Sequential write up to 1400MB/s<sup>1</sup> 5-year limited warranty<sup>3</sup>



#### Micron 7450 PRO E1.S (5.9mm, 15mm)

960GB, 1920GB, 3840GB, 7680GB<sup>2</sup> Sequential read up to 6800MB/s<sup>1</sup> Sequential write up to 5600MB/s<sup>1</sup> 5-year limited warranty<sup>3</sup>



# Micron 7450 PRO U.3 (7mm, 15mm)

960GB, 1920GB, 3840GB, 7680GB, 15360GB<sup>2</sup>

# Micron 7450 MAX U.3 (7mm, 15mm)

800GB, 1600GB, 3200GB, 6400GB, 12800GB<sup>2</sup> Sequential read up to 6800MB/s<sup>1</sup> Sequential write up to 5600MB/<sup>1</sup> 5-year limited warranty<sup>3</sup>

Contact your Micron sales representative for more details.

1. 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 256 (1,000,000 IOPS statement based on 4K sector size; Random WRITE workloads measured using FIO with a queue depth of 128. 2. User capacity: IGB = 1 billion bytes. Formatted capacity is less. 3. Warranty valid for five 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. 4. Additional information available here: www.micron.com/176 5. Based on comparison to the Micron 7400 SSD 6. Based on comparison of publicly available Mainstream NVMe SSDs. 7. 1920G8 and 3840GB Micron 7450 Pro M.2 in 22110 form factor only.

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