



Big capacity. Bigger value.

The Micron 6500 ION tames even the largest, densest and most demanding cloud storage and content delivery systems.



Big capacities make cloud storage challenges look small

Just a few years ago, multi-terabyte SSDs and petabyte-level deployments were the exception, not the norm. Today, customers are demanding, and applications are requiring, an ever-increasing level of storage capacity without sacrificing performance. The Micron® 6500 ION represents a leap forward in that respect by offering a 30.72TB¹ capacity, which maximizes server density while maintaining excellent PCIe® Gen4 performance. The Micron 6500 ION delivers 6.8GB/s sequential reads and 1 million read IOPS, while delivering 53% better read quality-of-service than the QLC competition². The Micron 6500 ION has standout write performance as well, with random writes 25x faster than the QLC competition².

Sustainability in the data center

Balancing the multitude of factors, a storage architect must consider when designing a system whether it be performance, power or endurance, is a difficult task. With the Micron 6500 ION, customers now have a storage solution that has 20% lower active power, 56% better power efficiency and up to 10x more random write endurance than the QLC competition². Combined with industry-leading density of 30.72TB¹ in a 2.5-inch U.2/U.3 form factor, you have a solution that reduces the number of racks, significantly lowering your infrastructure costs, which is a cornerstone of long-term sustainability.

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.

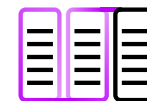
Micron 6500 ION SSD

Speed	6,800MB/s
Capacity	30.72TB
Interface	NVMe™ PCIe® Gen4 x4
Form factor	U.3 (15mm)
Warranty	5-year limited

Best for



Cloud storage



Content delivery
networks

Built from the ground up for mainstream workloads

Micron 6500 ION features	Benefits
U.3 (15mm)	Optimized thermals (15mm), U.2 compatible
Industry leading capacity	30.72TB capacity enables petabyte-level applications
Vertical integration	Built on Micron's world-leading 232-Layer NAND ³
Security	Extensive security features such as FIPS 140-3 L2, TCG-Opal v2.01 and TAA compliance
Power efficiency	Up to 56% better power efficiency than the competition ²
Power loss protection	SSD power holdup mechanism that helps ensure data in flight is properly written when SSD power is lost

Micron® 6500 ION SSD competitive comparison

Specs	Micron 6500 ION	Intel®/Solidigm™ P5316
Sequential reads ¹ (MB/s, 128KB, QD 128)	6,800MB/s	7,000MB/s
Sequential writes ¹ (MB/s, 128KB, QD 128)	5,000MB/s	3,600MB/s
4KB Random reads (MB/s, QD 128)	1.0M	800K
4KB Random writes (MB/s, QD 128)	200K @ 20W	7.8K @ 25W
Endurance (DWPD)	1.0 SDWPD 0.3 RDWPD	SDWPD not specified 0.026 RDWPD (100% 4KB writes, <1TB/day)
MTTF (million hours)	2.5	2.0
Warranty ⁴ (years)	5	5



Micron® 6500 ION SSD product line

Micron 6500 ION U.3 (15mm)

30.72TB
Sequential reads 6,800MB/s
Sequential writes 5,000MB/s
5-year limited warranty⁴

Contact your Micron sales representative for more details.

1. 30.72TB capacity is the largest option. User capacity: 1GB = 1 billion bytes; formatted capacity is less
2. All comparisons to public datasheet values for 30.72TB Solidigm™ D5-P5316 QLC SSD as of March 2023
3. Additional information available here: www.micron.com/232
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.