



Data hungry, not power hungry

The Micron® 6550 ION delivers massive capacities and class-leading performance.



The Micron® 6550 ION's massive capacities and class-leading performance enables highly dense, highly responsive AI data lakes and other AI workloads

When building high-density AI data lakes, architects need to match capacity with high performance. The Micron® 6550 delivers the superior performance that speeds AI workloads. At 60TB, the Micron 6550 delivers up to 250% better performance than competing SSDs while consuming up to 20% less power.¹ Available across E3.S, E1.L and U.2 form factors, the Micron 6550 is designed to maximize storage density and reduce data center footprints.

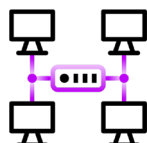
Best for



Artificial
intelligence



Cloud
Storage



Content
Delivery
Networks

Key Features

Vertical integration

- Fully integrated Micron IP and components
- Micron-designed SSD controller ASIC
- Micron-produced and validated SSD firmware
- G8 NAND

Broad range of capacities and form factors

- 30TB to 60TB capacity
- U.2, E1.L, and E3.S-1T standard form factors

Open standard support

- Compliance with the Open Compute Standard Project (OCP) 2.5 standards

Security features built in²

- SPD 1.2 device security
- Self-encrypting drive (SED) options
- Micron Secure Execution Environment (SEE)
- FIPS 140-3 Level 2
- TAA-compliant options

5-year limited warranty³

Accelerate exascale AI workloads

Best-in-class 60TB read and write bandwidth delivers faster data collection, loading, pre-processing, checkpointing, ingesting, and more for better networked artificial intelligence (AI) data lake performance.

Outperform the 60TB competition

The Micron 6550 ION needs just 20W to achieve its rated performance versus competing 60TB QLC SSDs, which need to run at 25W to achieve rated performance.

Powering sustainable data centers

Sustainable data centers thrive with power-efficient, ultra-dense servers and storage. Better performance with lower power consumption can help reduce power and cooling requirements and carbon footprint through server footprint reduction (which can also decrease license costs).⁴ This is achieved while meeting real-world workload goals for high capacity NVMe SSDs, such as networked AI data lakes, object stores, all-flash arrays, software-defined storage, public cloud storage, general-purpose storage, analytics, NoSQL databases, content delivery, and more.

Micron® 6550 ION NVMe™ SSD			
			
	E3.S-1T 7.5mm	U.2 15mm	E1.L 9.5mm
	6550 1 DWPD	6550 1 DWPD	6550 1 DWPD
Capacities ⁶	30.72TB-61.44TB	30.72TB-61.44TB	30.72TB-61.44TB
Sequential reads (MB/s) ⁵	14,000MB/s	14,000MB/s	14,000MB/s
Sequential writes (MB/s) ⁵	8,000MB/s	8,000MB/s	8,000MB/s
Random reads (K IOPS) ⁵	2,000K	2,000K	2,000K
Random writes (K IOPS) ⁵	70K	70K	70K
Endurance (DWPD)	0.25 (random 4K IO)	0.25 (random 4K IO)	0.25 (random 4K IO)

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- 1. The Micron 6550 ION offers a capacity of up to 61.44TB. Comparisons are made with other 61.44TB NVMe SSDs from Samsung, Solidigm, and Western Digital. These comparisons use publicly available competitor information from public sources at the time of the 6550 ION announcement, with the 6550 ION and Western Digital using a maximum power of 20W and Solidigm and Samsung at 25W, resulting in up to 20% less maximum power consumption for the 6550 ION.
- 2. 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 featur4es. Not all features are available on all products.
- 3. 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.
- 4. License consolidation refers to software that is licensed per server. The Micron 6550 ION enables the storage of a similar amount of data in fewer servers compared to SSDs with lower capacity.
- 5. 30.72TB capacity is the largest option. User capacity: 1GB = 1 billion bytes; formatted capacity is less.
- 6. Sequential performance based on a 128KB transfer size and a queue depth of 128. Random read performance based on 4KB transfer size and a queue depth of 512.