

Micron 2600 SSD: Excellent performance and user experience for daily PC storage

The Micron® 2600 SSD, made with advanced G9 QLC NAND and boosted with Micron Adaptive Write Technology™ (AWT), outperforms competitive TLC-based client SSDs. It delivers excellent performance and user experience for daily PC storage, effectively replacing TLC drives.¹

Optimal storage performance that beats the competition²

As a leading QLC SSD, the Micron 2600 offers better sequential and random performance compared to DRAM-less TLC and QLC SSDs.

Unmatched user experience³

The Micron 2600 SSD leads the pack with superior user experience benchmark results. Its AWT feature enables fast write performance⁴ in a broad range of form factors and capacity options.

The most advanced QLC NAND node in production today⁴

Micron's G9 QLC NAND is the only ninth-generation QLC NAND that is shipping to OEMs in an SSD. It is also the world's first 2Tb ninth-generation QLC NAND die used in any major supplier's SSD. With up to 3.6 GB/s, Micron's G9 QLC is the fastest QLC NAND I/O rate shipping in an SSD.



Figure 1: Micron 2600 NVMe SSD (22mm x 80mm, 22mm x 42mm, and 22mm x 30mm, 512GB to 2TB)⁵

Micron 2600 SSD key benefits

Class-leading performance to push your everyday computing to the next level

The Micron 2600 SSD, enhanced with Micron AWT, is engineered to boost productivity by delivering exceptional performance for everyday applications.

With AWT, the 2600 SSD bridges the write performance gap typically seen with legacy QLC SSDs, enabling faster factory or IT image loading for quicker platform deployment by accelerating large file copies.

Enhancing your daily user experience

With industry-leading benchmark results from PCMark® 10 and SPECwpc® V2.0, the Micron 2600 SSD excels in everyday applications, delivering:

- Superior bandwidth and overall PCMark 10 scores.
- Enhanced results across various use cases, including media and entertainment, product development, energy industry applications, and general operations, which help you get more done every day.

Leading innovation designed to deliver energy-efficient storage

Micron G9 QLC NAND brings leading innovations like six-plane architecture and 3.6 GT/s IO speed to help build an SSD that is performant and designed to support Intel's Project Athena, ensuring over nine hours of battery life in devices with HD displays.

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1. Micron AWT manages how a QLC SSD writes data to the NAND to help deliver the performance of SLC and TLC with the economics of QLC. Results are based on the volume and rate of data being written, the SSD capacity, how the SSD is used, and a host of other factors. Micron AWT adjusts among different NAND "modes" (SLC, TLC, and QLC) depending on demand.
2. All SSD comparisons are based on currently in-production and available 2TB QLC and TLC NAND client SSDs from the top five competitive suppliers of OEM SSDs by revenue as of February 2025 (using 1TB where the supplier does not offer 2TB), excluding consoles and Apple® products, as per Forward Insights analyst report, "SSD Supplier Status Q4/24. Performance comparisons are based on publicly available information as per footnote 1. Performance refers to random read and write IOPS and sequential read and write throughput.
3. User experience statements refer to benchmark results using the PCMark 10 Full System Drive and SPECwpc v2.0 benchmarks (testing conducted in Micron labs on SSDs per footnote 1). For additional information on the PCMark 10 Full System Drive Benchmark, see <https://support.benchmarks.ul.com/support/solutions/articles/44002171465>. For additional information on the SPECwpc V2.0 benchmark, see <https://www.spec.org/gwpg/wpc.static/wpcv2info.html>. Percentage improvements calculated as (Micron 2600 SSD result)/(competitor result) - 1, expressed as a percentage.
4. NAND comparisons are based on production NAND from the top five competitive NAND suppliers as of March 2025, as noted in the Forward Insights analyst report, "NAND Quarterly Insights Q1/25." Comparisons are based on publicly available NAND information and Micron engineering data available at the time of this product launch. NAND IO speed is rated in Giga transfers per second).
5. 1GB = 1 billion bytes (formatted capacity will be less).

Optimal storage performance that beats the competition

The Micron 2600 is the world's first QLC SSD with G9 NAND and delivers superior overall performance that beats competitors, even when they use TLC NAND.

Micron 2600 SSD performance improvement⁶

Performance type	Micron 2600 SSD advantage	
	vs. TLC	vs. QLC
Sequential read	Up to 50%	Up to 44%
Sequential write	Up to 48%	Up to 63%
Random read	Up to 54%	Up to 41%
Random write	Up to 38%	Up to 49%

Table 1: Public performance information comparison

Unmatched user experience

The Micron 2600 SSD also demonstrates best-in-class user experience benchmark results compared to the competition.

Micron 2600 SSD benchmark improvement⁶

Benchmark	Micron 2600 SSD advantage
PCMark 10	
Full drive	Up to 44% better
Bandwidth	Up to 43% better
SPECwpc	
Media and entertainment	Up to 162% better
Product development	Up to 219% better
Energy industry	Up to 37% better
General operations	Up to 92% better

Table 2: User experience benchmark results comparison

Micron 2600 NVMe SSD

Category	Everyday use PCs and notebooks		
Model	Micron 2600 SSD		
Form factor	M.2 (22mm x 30mm, 22mm x 42mm, 22mm x 80mm)		
Interface	PCIe Gen4, NVMe 2.0d		
Capacities	512GB	1TB	2TB
Sequential read (MB/s) ⁸	5,000	7,200	7,200
Sequential write (MB/s) ⁸	3,000	5,800	6,500
Random read (KIOPS) ⁹	370	740	1,000
Random write (KIOPS) ⁹	690	1,000	1,100
Read latency (TYP) ¹⁰	50µs	50µs	50µs
Write latency (TYP)	12µs	12µs	12µs
Endurance (TBW)	200TB	400TB	700TB
MTTF (million hours)	2	2	2
Sleep/PS4 power (mW)	<2.5	<2.5	<2.5
Active idle power (mW)	<100	<100	<100
Active read power (mW)	<5,000	<5,000	<5,000

Advanced features

Micron G9 QLC NAND
 Hardware-based AES 256-bit encryption¹¹
 Power-loss protection (data at rest)
 Host-controlled thermal management
 Performance-enhancing Micron AWT
 Thermal S.M.A.R.T. via SMBus
 Basic management commands (BMC)
 FW activate without reset
 Sanitize block and crypto erase
 Power-loss signal support
 TCG Opal 2.02, TCG Pyrite 2.01
 Micron Storage Executive SSD management tool

Micron 2600 SSD part numbers

MT FD K BA 2T0 Q HK - 1 BO 1 A AB YY

Drive form factor

BA = M.2 (22mm x 80mm)
 CD = M.2 (22mm x 42mm)
 BK = M.2 (22mm x 30mm)

Drive Capacity

512 = 512GB
 1T0 = 1024GB
 2T0 = 2048GB

Security Features

A = Non-SED⁷ TCG Pyrite
 5 = SED TCG Opal

6. Performance improvements calculated as (Micron 2600 value/competitor value) - 1, expressed as a percentage.

7. SED = self-encrypting drive. No 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.

8. Sequential workloads measured at the fresh-out-of-box (FOB) state (see <https://www.snia.org/education/online-dictionary/term/fob> for details); SSD unformatted; SSD write cache enabled; NVMe power state 0; measured using FIO with a 128KB transfer size and a queue depth of 32.

9. Random workloads measured at FOB, SSD unformatted, write cache enabled, NVMe power state 0. Measured using FIO with a 4KB transfer size and a queue depth of 128.

10. TYP refers to typical values. Read/write latency measured using a 4KB transfer size, queue depth 1.

11. No 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.

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