

Balanced Access is Better Access

Speed time to value from your data—get it into your applications, understand it, act on it, repeat.



Micron's 9300 series of NVMe™ SSDs: Performance-focused and designed to get more from massive, sequential workloads

SSDs have always had incredible read performance—surpassing legacy storage by one to two orders of magnitude. They provide incredibly fast access for reading mission-critical data. But what about *writing* data so you can process it, learn from it, and use it?

An SSD's amazing write performance has always been slower than its read performance. While it can access data very quickly, there has always been an inherent imbalance with writing data.

Until now.

The 9300 series can help you get better insight faster by enabling data to be loaded as quickly as you can use it.



Micron's 9300 brings balanced data loading and data access to the fastest NVMe SSD we have ever released.

Turn data into insight, analysis into action

Empower your data center and your cloud with insight, enlightenment and intelligence through the 9300's balanced design.

Your Data Cache

Caches thrive when they can be filled and read at the same speed.

Your Cloud

Cloud providers and on-premises/hybrid cloud data centers operate efficiently. Balanced read/write performance helps improve multitenant service levels.

Your Analytics

Load vast data sets quickly so you can process them, learn from them, and make better decisions.



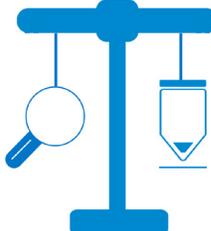
What is Balanced Access?

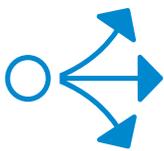
Balanced access means you can use data as fast as it comes in: help capture data streams in real time, analyze data on the fly, build a local or hybrid cloud, or even expand cloud service platforms.

More efficient utilization of data resources is one of the primary benefits of balanced access, whether local, hybrid or cloud. Are you moving some workloads to off-premises clouds? Keeping mission-critical services in house? If so, an IO-balanced, high-performance infrastructure relies on a balanced, high-performance storage solution. Using Micron's 9300 can help you get there. Unlike traditional performance-focused NVMe SSDs, the 9300 offers the same read and write speeds for large, sequential accesses. The read/write mismatch that has been so common is now gone.

Why Balanced Access Matters

Balanced ingest/export brings benefits to multiple applications, workloads and use cases. Whether you're building on-premises physical or virtual platforms, a private or hybrid cloud infrastructure, or an expanding cloud service provider, balanced access could help.

Micron 9300 SSD	Traditional SSDs
	
Balanced Read and Write Micron's 9300 series of NVMe SSDs support symmetric reading and exporting large data blocks and large data sets.	Unbalanced Read and Write Before the 9300, even the fastest SSDs had a significant read-to-write imbalance, limiting their value in some applications (like caching and hosting).



Balanced Caches and Cache Tiers

Data delivery is never fast enough. The constant pursuit of more and faster data leads to the idea of caching. Caching uses ultra-fast storage to 'front' slower, usually higher capacity storage. Larger infrastructures have groups of caching devices (cache tiers) fronting slower storage (for example, a large-scale storage platform where recently accessed files and blocks are copied into the cache tier). Balanced ingest/export means data gets into the cache faster while it is destaged from the cache at the same rate, filling the cache as quickly as it is drained. This symmetry enables efficiency.



Performance Gains in the Cloud

Conventional thinking says that when applications are moved to the cloud, performance can suffer and compromises must be made. The 9300 can help build a different cloud.

When your primary focus is on cloud performance and application workload results, build your cloud with a no-compromise approach. Migrating workloads into cloud architectures and moving data within your cloud infrastructure is now faster. As you migrate workloads to the cloud or within, the 9300's symmetric ingest and export removes some of the frustrating delays.



Thriving Real-time Analytics

As complex on-premises and cloud infrastructures have become the norm, data architects and systems administrators have gotten savvier. They expect SSD monitoring and management to be available via standard communications channels, not proprietary.

The first step in real-time analytics is collecting the dataset. When the elements of those datasets can come from disparate sources (potentially in very different formats), rapid ingest is critical—it is the first step in turning data into insight. It can also be the most difficult.

Because data can come from several (hundreds, possibly thousands of) sources simultaneously, platforms need to capture incoming data in real time, from potentially different delivery rates and formats. These resources need to be delivered to processing engines as quickly as possible. Symmetric ingest and export helps with both, enabling us to capture and deliver more.

Learn More

Visit www.micron.com to learn more about the 9300 series of SSDs with NVMe. Contact our [sales team](#) to learn about evaluating the 9300 in your environment.

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