Micron® P320h 2.5-Inch PCIe SSD

Serviceability and Scalability for Servers

Our P320h 2.5-inch PCIe solid state drive (SSD) is an industry first—delivering unmatched performance and scalability for servers by integrating high-performance PCIe architecture into a compact, accessible form factor.

Designed to dramatically improve serviceability and lower total cost of ownership (TCO), the hot-swappable P320h 2.5-inch drive can easily be inserted into the front of a server (unlike standard card form factor drives) and does not require the server to be removed from the rack or powered down.

Inside the case, the P320h 2.5-inch SSD is built on Micron's server-grade SLC NAND, providing market-leading throughput, exceptional reliability, and remarkable power efficiency.

The drive utilizes a new SATA/SAS/PCIe combination connector developed according to the SNIA specification. Our custom controller is designed specifically to interact with and optimize our high-performance NAND, achieving ultra-high IOPS and sequential read/write speeds without burdening the host.

Because we're a NAND manufacturer with direct control over the NAND design, controller firmware, assembly, testing, and supply chain; we provide the best that our product innovations, test and compatibility tools, and integrated support structure have to offer.

	P320h
Capacity[1]	175GB, 350GB
Interface	x4 PCIe Gen2
Connector	SATA/SAS/PCIe combination
Sequential read/write performance[2]	Up to 1.75/1.1 GB/s
Random read/write performance[3]	Up to 415,000/145,000 IOPS
Latency	<50µs
Active power consumption	25W (MAX)
Idle power consumption	6.1mW
MTTF	2 million device hours
Form factor	2.5in

1. Unformatted. 1GB = 1 billion bytes. Formatted capacity is less.
2. 128KB transfer size, steady state.
3. 4KB transfer size, steady state.

Advantages for Enterprise Applications

Serviceable and Scalable

Front-plane access means you can service or add drives without interrupting the host.

Ultra-High Performance

Our custom controller, specifically paired with our high-speed NAND, delivers outstanding sequential and random performance without burdening the host processor.

Industry-Leading NAND Technology

Micron's proven NAND quality and test capabilities provide best-in-class drive reliability.

Vertical Integration for Silicon-to-Systems Solutions

Our vertical integration delivers start-to-finish quality control and design optimization that are unmatched by other SSDs.

Ideal for Applications That Require:

- Constant uptime
- High throughput
- Power efficiency
- High reliability and durability

Typical Applications:

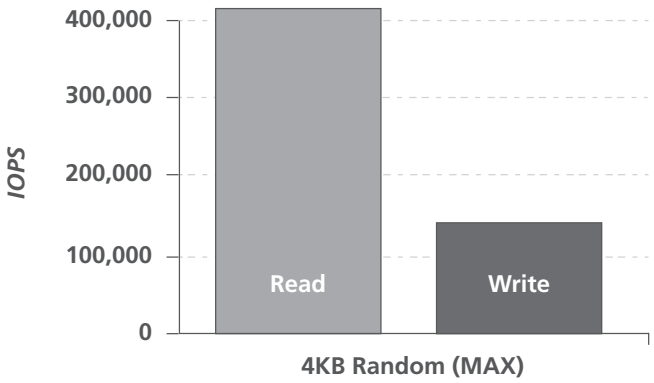
- Cloud and data center servers
- Blade servers
- Transaction processing
- Virtualization appliances
- Video-on-demand systems
- Web accelerators
- Server-side cache

Micron® P320h 2.5-Inch PCIe SSD

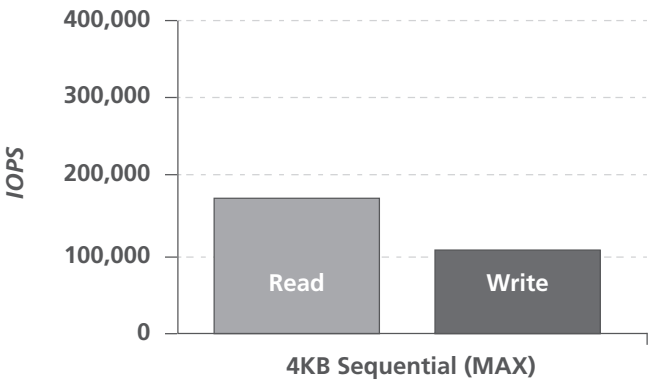
Workhorse Performance

The unique design and features of the P320h 2.5-inch PCIe drive deliver solid performance. The charts below show how our drive takes full advantage of the x4 PCIe Gen2 interface.

P320h 2.5-Inch PCIe Random Performance



P320h 2.5-Inch PCIe Sequential Performance



Micron Advantage	Customer Benefit
NAND Flash leadership and experience	*Assurance that your data is being handled by a product built start to finish by NAND Flash experts*
Worldwide technical support and factory engineering teams	*A network of experienced engineers dedicated to solving problems and delivering customer solutions*
Proven quality record	*Lower product failure rates and increased end-product marketability and brand reputation*
Controlled SSD BOM with PCN notifications	*Easy supply-chain management and planning*
Extensive testing	*Predictably reliable high-quality drives that work with your platform*

Part	Capacity	Form Factor	Voltage	128KB Sequential Read (MAX)	4KB Random Read (MAX)
MTFDGAL175SAH	175GB	2.5in	12V	1.75 GB/s	415,000 IOPS
MTFDGAL350SAH	350GB	2.5in	12V	1.75 GB/s	415,000 IOPS

micron.com/ssd