

Solidigm Extends AI Portfolio Leadership with the Introduction of 122TB Drive, the World's Highest Capacity PCIe SSD

Solidigm™ D5-P5336 SSD improves power and space efficiency for critical IT infrastructure, meeting challenges from data center core to edge

Rancho Cordova, Calif., Nov. 13, 2024 – [Solidigm](#), a leading provider of innovative NAND flash memory solutions, announced today the introduction of the world's highest capacity PCIe solid-state drive (SSD): the 122TB (terabyte) [Solidigm™ D5-P5336 data center SSD](#). The D5-P5336 doubles the storage space of Solidigm's earlier [61.44TB](#) version of the drive and is the world's first SSD with unlimited Random Write endurance for five years — offering an ideal solution for AI and data-intensive workloads. Just how much storage is 122.88TB? Roughly enough for 4K-quality copies of every movie theatrically released in the 1990s, 2.6 times over.

Data storage power, thermal and space constraints are accelerating as AI adoption increases. Power and space-efficient, the new 122TB D5-P5336 delivers industry-leading storage efficiency from the core data center to the edge. Data center operators can deploy with confidence the 122TB D5-P5336 from Solidigm, the proven QLC (quad-level cell) density leader with more than 100EB (exabytes) of QLC-based product shipped since 2018.

“Data center architects are scrambling to solve their power and space efficiency needs, and they can help address these issues with Solidigm's 122TB D5-P5336 that is designed to make every watt and square inch count,” said Greg Matson, Senior Vice President of Strategic Planning and Marketing at Solidigm. “This massive capacity SSD is a game-changer — using far fewer watts per terabyte and freeing up valuable energy for other data center and edge power priorities.”

Ultra-High Density SSDs Improving Power and Space Equation

By the numbers, the 122TB D5-P5336 drive:

- Consumes up to 84 percent less storage power in network-attached storage (NAS) deployments versus legacy hybrid hard-disk drive (HDD) + TLC (triple-level cell) solutions;
- Improves power density at the edge with 3.4X more terabytes per watt versus 30TB TLC;
- Enables up to 4 petabytes of storage per one rack unit; and
- Is designed by the pioneers of QLC, so can be deployed with confidence.



The new Solidigm drives also store more data in a smaller footprint, enabling more efficient and more scalable data center and edge designs that:

- Achieve up to a 4:1 NAS footprint reduction versus legacy HDD + TLC solutions; and
- Store 4x more data in space-constrained edge installations versus 30TB TLC.

These modern-day high density QLC drives can perform up to 15 percent better on data intensive workloads including content delivery networks, general purpose storage applications and object store applications compared to an entry level high-density data center TLC offering from the competition. D5-P5336 can exhibit up to 40 percent better read response rate under sustained write workloads.¹

“The AI opportunity does not come without challenges, and organizations today are making unprecedented infrastructure power and space decisions,” said Travis Vigil, senior vice president, ISG Product Management, Dell Technologies. “Dell Technologies believes that higher density provides the path to maximizing storage energy efficiency while minimizing data center footprint. As we strive towards density in our own solutions, we look forward to continued storage innovations like Solidigm’s new 122TB D5-P5336 solid-state drive.”

With this launch, Solidigm continues its commitment to delivering industry-leading quality and reliability with SSDs in form factors that easily plug into standard storage servers.

Now sampling to customers, the new 122TB drive is a strong extension to the company’s high-capacity SSDs for AI and other data-intensive workloads. With this drive, Solidigm further extends its high-capacity QLC SSD leadership with drives from 7 to 122TB that share the same controller, making them easier for customers to qualify.

For more information on how Solidigm D5-P5336 drives can help you power data center workloads, [visit our website](#).

About Solidigm

Solidigm is a leading global provider of innovative NAND flash memory solutions. Solidigm technology unlocks data’s unlimited potential for customers, enabling them to fuel human advancement. Originating from the sale of Intel’s NAND and SSD business, Solidigm became a standalone U.S. subsidiary of semiconductor leader SK hynix in December 2021. Headquartered in Rancho Cordova, California, Solidigm is powered by the inventiveness of team members in 13 locations around the world. For more information, please visit [solidigm.com](https://www.solidigm.com) and follow us on [Twitter](#) and on [LinkedIn](#). “Solidigm” is a trademark of SK hynix NAND Product Solutions Corp. (d/b/a Solidigm).

Some results have been estimated or simulated using internal Solidigm analysis or architecture simulation or modeling, and provided to you for information purposes only. Any differences in your system hardware, software or configuration may affect your actual performance.

Footnote

¹ Compared against Micron 6500 30.72TB drive on content delivery network, general purpose server and object storage simulation workload.