



Blazing-Fast PCIe 4.0 Performance with Excellent Power Efficiency

Solidigm™ P44 Pro

PRODUCT BRIEF

The P44 Pro is Solidigm's flagship, high-performance client SSD for today's most demanding workloads. With remarkably fast speed and great power efficiency, the P44 Pro is ideal for intense performance workloads like gaming, content creation, video editing, and data analysis.

Product Overview

The P44 Pro delivers spectacular PCIe Generation 4 performance. With up to 7000 MB/s sequential read speeds, the P44 Pro is a winning combination of speed and efficiency in a compact M.2 form factor.



Key Features

Built for gaming & content creation on modern PCs and workstations

Solidigm has taken a thorough approach to client workload analysis and SSD design across many use cases – from daily student and office work to enthusiast-level gaming and content creation – to understand the actual components of user experience. As a result, Solidigm has designed the P44 Pro to work best for the real-world gaming and content creation use case and workloads on modern PCs and workstations.

Power and Thermal Efficiency

The P44 Pro is optimized for power savings and thermal efficiency to help deliver consistent performance with minimal throttling. So, game harder and game longer without concerns about performance loss due to excessive power and heat.

Endurance and Reliability

The P44 Pro is durable, allowing you to write more data and read it back with fewer errors over the life of your SSD. You can write hundreds of GB to the drive every day over a five-year warranty period, enabling you to rely on the P44 Pro to provide consistent high performance for the life of your SSD.

Enhanced Responsiveness with Solidigm Synergy™ Software

Combine the P44 Pro with optional Solidigm Synergy software, downloadable free of charge, for a complete client storage solution. Solidigm Synergy enhances performance with a new level of communication between the P44 Pro and your Windows PC, enabling the SSD to optimize your data for quickest access. For information on Solidigm Synergy and free download, see www.solidigm.com/synergy

Ready for Use in Sony PlayStation 5^{1,2}

Uplevel your gaming experience and add the P44 Pro to your Sony PS5 gaming console. With blazing-fast PCIe 4.0 performance and efficient power/heat architecture, the P44 Pro meets or exceeds published requirements for the Sony PS5. For details from Sony requirements on its and installation, see here: [Sony requirements](#)

Solidigm P44 Pro Specifications

Available Capacities	512GB	1TB	2TB
Performance Specifications			
Sequential Bandwidth - 100% Read (up to)	7000 MB/s	7000 MB/s	7000 MB/s
Sequential Bandwidth - 100% Write (up to)	4700 MB/s	6500 MB/s	6500 MB/s
Power - Active Sequential Write³	7.5 W		
Power - Idle/PS3⁴	< 50 mW		
Power - Idle/PS4⁵	< 5 mW		
Reliability			
Vibration - Operating	2.0 G (20-2000Hz)		
Vibration - Non-Operating	2.0 G (20-2000Hz)		
Shock (Operating and Non-Operating)	1,500 G (Max) at 0.5 msec 1,500 G (Max) at 0.5 msec		
Operating Temperature Range	0°C to 70°C		
Operating Temperature (Maximum)	70 °C		
Operating Temperature (Minimum)	0 °C		
Endurance Rating (Lifetime Writes)	500 TBW	750 TBW	1200 TBW
Mean Time Between Failures (MTBF)	1.6 million hours		
Uncorrectable Bit Error Rate (UBER)	< 1 sector per 10 ¹⁵ bits read		
Warranty Period	5 years		

Available Capacities	512GB	1TB	2TB
Package Specifications			
Form Factors	M.2 22 x 80mm		
Interface	PCIe 4.0 x4 NVMe 1.4		
Advanced Specifications			
Hardware Encryption	AES 256-bit Encryption, TCG Pyrite Supported		
End-to-End Data Protection	Supported		
NSIT Secure Erase	Supported		

About Solidigm

We're technology-driven and customer-inspired. We bring inventive, industry-changing data storage solutions that transform the way data is used and experienced. Our unsurpassed commitment to customer success enhances your ability to fuel your purpose and change the world.

Our Team

We're inventors, engineers, and problem solvers. We're a team that believes in data's unlimited potential to improve the world and fuel human advancement. Together, we will lead Solidigm and our industry into a new era of excellence, redefining the idea of data storage.

Why We Do What We Do

We believe that advancements in storage technology are critical to unlocking data's unlimited potential. We are united by a shared commitment to breaking barriers and turning that potential into reality. By reinventing how data is stored, accessed, and put to work in new ways, we empower our customers and unlock data's ability to do good.

Built on Decades of Innovation

Solidigm launched when SK hynix acquired Intel's NAND and solid-state storage (SSD) business.

For more information about Solidigm see: <https://www.solidigm.com/en/about-us.html>

How to Order

The Solidigm P44 Pro is available now and can be ordered from various resellers and distributors. For a list of authorized resellers and distributors, see:

<https://www.solidigm.com/en/products/authorized-distributors.html>

For More Information

For more information about the Solidigm P44 Pro see: Client Products | Solidigm

Or visit www.solidigm.com

Notes

- 1) Any reference to Sony or the Sony PS5 is not an indication of endorsement by Sony.
- 2) Heatsink is required by Sony for use in PS5. SSD + heatsink bundles will be available for purchase at select retailers.
- 3) Power measured during 128 KB sequential writes with Queue Depth 32 workload using 100 ms sample period. This represents power that would be thermal load on system during heavy workload.
- 4) Power consumption during PCIe L1.2 link state with NVMe PS3.
- 5) Power consumption during PCIe L1.2 link state with NVMe PS4 for lowest power consumption.



All information provided is subject to change at any time, without notice. Solidigm may make changes to manufacturing life cycle, specifications, and product descriptions at any time, without notice. The information herein is provided "as-is" and Solidigm does not make any representations or warranties whatsoever regarding accuracy of the information, nor on the product features, availability, functionality, or compatibility of the products listed. Please contact system vendor for more information on specific products or systems.

Refer to the spec sheet for formal definitions of product properties and features. Solidigm may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Solidigm reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

Solidigm technologies may require enabled hardware, software or service activation. No product or component can be absolutely secure. Your costs and results may vary. Performance varies by use, configuration and other factors. Solidigm is committed to respecting human rights and avoiding complicity in human rights abuses. Solidigm products and software are intended only to be used in applications that do not cause or contribute to a violation of an internationally recognized human right. Solidigm does not control or audit third-party data. You should consult other sources to evaluate accuracy.

Nothing herein is intended to create any express or implied warranty, including without limitation, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement, or any warranty arising from course of performance, course of dealing, or usage in trade.

The products described in this document may contain design defects or errors known as "errata," which may cause the product to deviate from published specifications. Current characterized errata are available on request.

"Solidigm" is a trademark of SK hynix NAND Product Solutions Corp (d/b/a Solidigm). Other names and brands may be claimed as the property of others.

© Solidigm 2022. All rights reserved.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Solidigm:](#)

[P44PRSK010TB](#)