

Solidigm™ P41 Plus

PRODUCT BRIEF

Excellent Performance for Everyday Work and Play

The P41 Plus is an innovative PCIe 4.0 SSD that delivers an excellent value to PC users for everyday productivity and gaming. The free, optional Solidigm Synergy software enhances performance even further by optimizing the relationship between PC and SSD.

Product Overview

The P41 Plus features 144-layer 3D NAND, a PCIe 4.0 interface, and is available in an M.2 2280 form factor in capacities of 512GB, 1TB, and 2TB.

Capable of delivering up to 4,125 MB/s sequential read speed, the P41 Plus represents a breakthrough in cost efficiency, delivering great performance at a price that won't break the budget for everyday PC users.



Key Features

Performance with Impact on real-world workloads

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 P41 Plus to work best for the real-world workloads and applications that you use daily.

Power and Thermal Efficiency

The P41 Plus is optimized for power savings and thermal efficiency to help deliver consistent performance with minimal throttling.

Endurance and Reliability

The P41 Plus is highly 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 P41 Plus to provide consistent high performance for the life of your SSD.

Increased Performance and Consistency with Solidigm Synergy

Combine the P41 Plus with the Solidigm Synergy software for a complete client storage solution. Solidigm Synergy enhances performance with a new level of communication between the P41 Plus and your PC, enabling the SSD to optimize your most important files and optimizations for quickest access.

For information on Solidigm Synergy, see www.solidigm.com/synergy

Revision 1

Available Capacities	512GB	ІТВ	2ТВ
Performance Specifications			
Sequential Bandwidth - 100% Read (up to)	3500 MB/s	4125 MB/s	4125 MB/s
Sequential Bandwidth - 100% Write (up to)	1625 MB/s	2950 MB/s	3325 MB/s
Power - Active	80mW		
Power - Idle	25mW		
Reliability			
Vibration - Operating	2.17 GRMS (5-700Hz)		
Vibration - Non-Operating	3.13 GRMS (5-700Hz)		
Shock (Operating and Non- Operating)	1,000 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)	200 TBW	400 TBW	800 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		
Package Specifications			
Form Factors	M.2 22 x 80mm		
Interface	PCIe 4.0 x4 NVMe		
Advanced Specifications			
Hardware Encryption	No		
End-to-End Data Protection	Yes		
NSIT Secure Erase	No		

Revision 1 2

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 P41 Plus is available now and orderable with various retailers and distributors, see:

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

For More Information

For more information about the Solidigm P41 Plus see: https://www.solidigm.com/en/products/client-products.html

Or visit www.solidigm.com



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 Curent characterized errata are available on request.

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

© Solidigm 2022. All rights reserved

Revision 1 3