Western Digital® PC SN720 NVMe™ SSD

Performance Reimagined

Cutting-edge NVMe Architecture

With future-ready, scalable NVMe architecture, the Western Digital PC SN720 NVMe SSD is breaking through performance limits of commercial and embedded applications, and supporting higher storage uses in today's IoT market, while providing a compact storage device with high capacity points from 256GB to 2TB.

Powerful Construction Suited for IoT

The Western Digital PC SN720 NVMe SSD, supporting PCIe Gen3 x4, is designed for applications that require both high performance and low power. Partners that could benefit from NVMe technology include:

- **Edge Equipment and IoT Gateway:** Such as network equipment, industrial machinery, medical equipment, or embedded PC that need the high capacities to capture the floor's and sensors' data and the high IOPS to support the system's data analytics
- **Media Content Delivery and Streaming:** In-flight entertainment systems, train control and monitoring systems, data recorder and video surveillance that require high capacity and reliability
- **Commercial:** Interactive kiosks, ATMs and Point-of-Sales (POS), Multi-Functional Printers (MFP) and industries that require high-volume transaction processing

WESTERN DIGITAL PC SN720 NVMe SSD KEY BENEFITS & FEATURES

READ SPEEDS UP TO 3,400MB/S SATURATES THE PCIe GEN3 x4 INTERFACE SUPPORTING NVMe ARCHITECTURE

256GB-2TB CAPACITIES AVAILABLE IN M.2 2280 FORM FACTOR

ENDURANCE OF UP TO 500 TBW

5 YEAR LIMITED WARRANTY

Pushing the Performance for IoT

Equipped with a fully integrated solution which includes in-house controller, 64-layer 3D NAND, firmware, and testing, Western Digital provides longevity of supply in a robust and reliable design.

Designed with Western Digital's in-house tiered-caching NVMe architecture, the Western Digital PC SN720 NVMe SSD delivers extreme performance with sequential read and write speeds up to 3,400MB/s and 2,800MB/s respectively and high endurance up to 500 TBW, all of which is available in a M.2 2280 form factor.

Summary

The Western Digital PC SN720 NVMe SSD packs a powerful punch in a compact design, which enables outstanding performance for the most demanding IoT and embedded applications that seek a reliable storage device with capacity points from 256GB to 2TB.

Western Digital PC SN720 NVMe SSD

Specifications are subject to change

Form Factors				M.2 2280
Interface				PCIe Gen3 x4 NVMe v1.3
Formatted Capacities[1]				256GB, 512GB, 1TB, (2TB version for later release)
Performance[2]	**256GB**	**512GB**	**1TB**	**2TB**
Sequential Read up to (MB/s)	3,000	3,400	3,400	
Sequential Write up to (MB/s)	1,600	2,400	2,800	
Random Read up to (IOPS)	225K	400K	500K	Coming Soon
Random Write up to (IOPS)	185K	330K	400K	
Endurance[3] (TBW)	200	300	400	
Power	**256GB**	**512GB**	**1TB**	**2TB**
Peak Power (10µs) (A)	2.8	2.8	2.8	
Avg. Active Power[4,5] (mW)	110	110	140	
Low Power (PS3)[5] (mW)	70	70	100	Coming Soon
Sleep (PS4)[5] (mW)	2.5	2.5	2.5	
Supply Voltage (V / ±5%)	3.3	3.3	3.3	
Reliability				
MTTF[6]				Up to 1.752M hours
Environmental				
Operating Temperature[7]				32°F to 158°F (0°C to 70°C)
Non-operating Temperature[8]				-67°F to 185°F (-55°C to 85°C)
Operating Vibration				5 gRMS, 10–2000 Hz, 3 axes
Non-operating Vibration				4.9 gRMS, 7–800 Hz, 3 axes
Shock				1,500G @0.5 ms half sine, 3 pulses per face
Certifications				FCC, UL, TUV, KCC, BSMI, VCCI, C-Tick
Limited Warranty[9]				5 years
Physical Dimensions				
Width				22mm ±0.15mm
Length				2280: 80mm ±0.15mm
Thickness (max)				2.38mm
Weight				7.5g ±1g

SKU	Form Factor	Capacity
SDAPNTW-256G	M.2 2280 S3-M	256GB
SDAPNTW-512G	M.2 2280 S3-M	512GB
SDAPNTW-1T00	M.2 2280 S3-M	1TB
SDAPNTW-2T00	M.2 2280 S3-M	2TB

Western Digital.

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[1] As used for storage capacity, one gigabyte (GB) = one billion bytes and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.

[2] Test Conditions: Performance is based on the CrystalDiskMark 5.2.2 benchmark using a 1000MB LBA range ASUS Z170A desktop with Intel® i7-6700K 4.0GHz, 8GB 2133MHz DDR4. Windows 10 Pro 64-bit using Microsoft StorNVMe driver, secondary drive. Performance may vary based on host device. 1 MB = 1,000,000 bytes. IOPS = input/output operations per second.

[3] TBW (terabytes written) values calculated using JEDEC client workload (JESD219) and vary by product capacity.

[4] Measured using MobileMark™ 2014 on HP EliteBook X360 1030 G2 with i7-7600U, 8GB RAM. Windows 10 Pro, 64-bit RS3 using Microsoft StorNVMe driver, primary drive.

[5] Power measurements at 25°C.

[6] MTTF = Mean Time To Failure based on internal testing using Telcordia stress part testing. MTTF is based on a sample population and is estimated by statistical measurements and acceleration algorithms. MTTF does not predict an individual drive's reliability and does not constitute a warranty. (Telecordia SR-332, GB, 40°C)

[7] Operational temperature as reported by device (composite temperature.)

[8] Non-operational storage temperature does not guarantee data retention.

[9] 5 years or Max Endurance (TBW) limit, whichever occurs first. 5 year warranty in regions not recognizing "limited." See http://support.wdc.com for more details.

Product specifications subject to change without notice. Not all products are available in all regions of the world.