

Western Digital

Western Digital® PC SN730 NVMe™ SSD Unleashed Performance

NVMe Architecture

With future-ready, scalable NVMe architecture, the Western Digital PC SN730 NVMe SSD is breaking through performance limits of client computing and enabling partners to support higher storage applications in today's mobile and ultrathin computing markets while supporting an extreme sleep mode of 3.5mW.

The Western Digital PC SN730 NVMe SSD offers an exceptional performance option for all computing customers who seek a compact storage device with high capacity points from 256GB to 1TB.

The Western Digital PC SN730 NVMe SSD, supporting PCIe Gen3 x4, is designed for applications that require both high performance and low power. Applications that could benefit from NVMe technology include gaming, Ultra HD or 4K video and VR content creation, post production processing and high-bandwidth corporate computing such as for software development and compilation.

Unmatched Performance

Equipped with a fully integrated solution that includes an in-house controller, 96-layer 3D NAND, firmware, and extensive 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 SN730 NVMe SSD delivers extreme performance with streaming sequential read and write speeds up to 3,400MB/s and 3,100MB/s respectively and high endurance up to 400 TBW, all of which is available in a M.2 2280 form factor.

Summary

The Western Digital PC SN730 NVMe SSD packs the knockout punch in a compact design that enables outstanding performance for the most intensive compute applications seeking a reliable storage device with capacity points from 256GB to 1TB.

PRODUCT BRIEF



Key Benefits and Features:

- Read speeds up to 3,400MB/s
- 256GB-1TB capacities available in M.2 2280 Form Factor
- Endurance of up to 400 TBW
- 5-year limited warranty

Western Digital PC SN730 NVMe SSD

Product Features and Specifications

Form Factor	M.2 2280		
Interface	PCIe Gen3 x4 NVMe v1.3		
Formatted Capacities ¹	256GB, 512GB, 1TB		
Performance²	256GB	512GB	1TB
Sequential Read up to (MB/s)	3,150	3,400	3,400
Sequential Write up to (MB/s)	2,100	2,700	3,100
Random Read up to (IOPS)	270K	460K	550K
Random Write up to (IOPS)	280K	400K	550K
Endurance ³ (TBW)	200	300	400
Power			
Peak Power (10µs) (A)	1.7	1.9	2.3
Average Active Power ^{4,5} (mW)	100	100	100
Low Power (PS3) ⁵ (mW)	30	30	30
Sleep (PS4) ⁵ (mW)	3.5	3.5	3.5
Supply Voltage (VDC/ ±5%)	3.3	3.3	3.3
Reliability			
MTTF ⁶	Up to 1.75M 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, 10–2000Hz, 3 axes		
Non-Operating Vibration	4.9 gRMS, 7–800Hz, 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	2280: 7.3g ±0.5g		
Ordering Information	256GB	512GB	1TB
Security Type: Non-SED	SDBPNTY-256G	SDBPNTY-512G	SDBPNTY-1TOO
Security Type: SED	SDBQNTY-256G	SDBQNTY-512G	SDBQNTY-1TOO

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.

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