



WD Blue™ SN570 NVMe™ SSD

Stay in the moment and create beyond your expectations with the WD Blue™ SN570 NVMe™ SSD. This powerful internal drive delivers up to 5X the speed of our best SATA SSDs so you can let your imagination flow and worry less about PC lag or load times. Purpose-built for endurance, the WD Blue SN570 SSD delivers reliable data protection while keeping your storage health in check with the downloadable Western Digital® SSD Dashboard¹⁰. Whether you're working on your next passion project or crunching large amounts of data, take advantage of the high performance and capacities up to 1TB² in an affordable M.2 2280 form factor to do more, faster.

Product Highlights

- Keep your imagination flowing as you create faster while maintaining low power consumption. With read speeds up to 3500MB/s³ (500GB – 1TB² models), your system can run up to 5X faster than our best SATA SSDs so you can stay in your creative moment.
- Remarkable reliability features to help protect your content so you can stress less about losing your brilliant work
- Work with extra confidence and peace of mind as the downloadable Western Digital® SSD Dashboard¹⁰ helps you monitor your drive's health, available space, temperature and more.
- Build your ideal creation engine. Upgrade your system or optimize your next custom build with the slim M.2 2280 form factor. All you need is a PCIe® Gen3 x4 NVMe™ slot¹.
- Save on space as you pack a lot of performance into your small-form factor PC with a single-sided M.2 2280 PCIe® Gen3 x4 NVMe™ SSD¹.
- As an industry-leading flash drive manufacturer and OEM drive manufacturer, Western Digital stands behind WD Blue™ SN570 NVMe™ SSD with a 5-year limited warranty⁹.
- Acronis True Image for Western Digital software backs up everything from operating systems and applications to settings and project files with support for PCs.

Spark Imagination

Inspire creativity with a one-month membership to Adobe Creative Cloud offering access to some of the world's best creative apps and services such as Adobe Photoshop, Illustrator, Lightroom, Premiere Pro and InDesign.

Tune Up Your Performance

Build your ideal creation engine. Upgrading your system or optimizing your next custom build with the slim M.2 2280 form factor. All you need is an NVMe™ slot.

Stay in the Moment

Keep your imagination flowing as you create faster while maintaining low power consumption. With read speeds up to 3500MB/s³ (500GB – 1TB² models), your system can run up to 5X faster than our best SATA SSDs so you can stay in your creative moment.

A Standard for Reliability

We value your content. That's why the WD Blue™ reliability features help protect your content so you can stress less about losing your brilliant work.

Get Extra Peace of Mind

Work with extra confidence and keep your projects on point as the downloadable Western Digital® SSD Dashboard¹⁰ helps you monitor your drive's health, available space, temperature and more.

Save on Space

Pack a lot of performance into your small-form factor PC with a single-sided M.2 2280 PCIe® Gen3 x4 NVMe™ SSD¹.

Stay Organized

Back up your photos, videos, and other personal files with included Acronis® True Image™ for Western Digital® software.

* Individual subscription. Internet connection and Adobe ID required. Available in countries where Adobe Creative Cloud Individual Subscription is available. Offer limited to 1 per WD Blue SN570 NVMe SSD purchase; up to 5 per Adobe user account, subject to acceptance of applicable Terms of Use. Offer must be redeemed by October 31, 2023, while activation code supplies last. Western Digital reserves the right to change or discontinue this offer at any time without notice. See www.adobe.com/legal for applicable terms and Privacy Policy.

WD Blue™ SN570 NVMe™ SSD

PRODUCT BRIEF

NVMe SSD

Specifications

	250GB	500GB
Interface M.2 2280 ¹	PCIe Gen3 8 Gb/s, up to 4 Lanes	PCIe Gen3 8 Gb/s, up to 4 Lanes
Formatted Capacity ²	250GB, 500GB, 1TB	250GB, 500GB, 1TB
NAND Type	TLC	TLC
Performance³		
Sequential Read (MB/s) up to (Queues = 32, Threads = 1)	3,300	3,500
Sequential Write (MB/s) up to (Queues = 32, Threads = 1)	1,200	2,300
Random Read 4KB IOPS up to (Queues=32, Threads=16)	190K	360K
Random Write 4KB IOPS up to (Queues=32, Threads=16)	210K	390K
Endurance (TBW) ⁴	150	300
Power		
Average Active Power ⁵	90mW	90mW
Low Power (PS3) ⁵	30mW	30mW
Sleep (PS4) (low power) ⁵	5mW	5mW
Maximum Operating Power	3.5W	4.0W
Reliability		
MTTF (hours) ⁶	1.5M	1.5M
Environmental		
Operating Temperatures ⁷	32°F to 158°F (0°C to 70°C)	32°F to 158°F (0°C to 70°C)
Non-operating Temperatures ⁸	-40°F to 185°F (-40°C to 85°C)	-40°F to 185°F (-40°C to 85°C)
Operating Vibration	5.0 gRMS, 10-2000 Hz, 3 axes	5.0 gRMS, 10-2000 Hz, 3 axes
Non-Operating Vibration	4.9 gRMS, 7-800 Hz, 3 axes	4.9 gRMS, 7-800 Hz, 3 axes
Shock	1,500 G @ 0.5 msec half sine	1,500 G @ 0.5 msec half sine
Certifications	BSMI, CAN ICES-3(B)/NMB-3(B), CE, FCC, KCC, Morocco, RCM, TUV, UL, VCCI	BSMI, CAN ICES-3(B)/NMB-3(B), CE, FCC, KCC, Morocco, RCM, TUV, UL, VCCI
Limited Warranty ⁹	5 years	5 years
Physical Dimensions		
Form Factor	M.2 2280	M.2 2280
Length	80 ± 0.15mm	80 ± 0.15mm
Width	22 ± 0.15mm	22 ± 0.15mm
Height	2.38mm	2.38mm
Weight	6.5g ± 1g	6.5g ± 1g
Ordering Information		
Model Number	WDS250G3B0C	WDS500G3B0C

Footnotes:

Specifications subject to change without notice.

¹ Backwards compatible with PCIe Gen3 x2, PCIe Gen2 x4, PCIe Gen2 x2, and PCIe Gen2 x1.

² 1GB = 1 billion bytes and 1TB = 1 trillion bytes. Actual user capacity may be less depending on operating environment.

³ Test Conditions: Performance is based on the CrystalDiskMark 7.0.0f benchmark using a 1000MB LBA range ASUS Z170A desktop with Intel® i7-6700K 4.0Ghz, 8GB 2133MHz DDR4. Windows 10 Pro 64-bit version 1903 using Microsoft StorNVMe driver, secondary drive. 1 MB/s = 1 million bytes per second. IOPS = input/output operations per second. Based on internal testing; performance may vary depending upon host device, usage conditions, drive capacity, and other factors.

⁴ TBW (terabytes written) values calculated using JEDEC client workload (JESD219) and vary by product capacity.

⁵ Measured using MobileMark™ 2018 on Dell Precision 7730 intel® Core™ i5-8300 CPU @ 2.30GHz 8GB Windows 10 RS5 (1809) Bios 1.13.1

⁶ MTTF = Mean Time To Failure based on internal testing using Telcordia stress part testing (Telcordia SR-332, GB, 25°C). 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.

⁷ Operational temperature is measured by thermal sensors in NAND package. The SSD box package is rated up to 60°C.

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

⁹ 5 years or Max Endurance (TBW) limit, whichever occurs first. See support.wdc.com/warranty for regional specific warranty details.

¹⁰ Available for download at www.westerndigital.com.

Specifications

1TB	
Interface M.2 2280 ¹	PCIe Gen3 8 Gb/s, up to 4 Lanes
Formatted Capacity ²	250GB, 500GB, 1TB
NAND Type	TLC
Performance³	
Sequential Read (MB/s) up to (Queues=32, Threads=1)	3,500
Sequential Write (MB/s) up to (Queues=32, Threads=1)	3,000
Random Read 4KB IOPS up to (Queues=32, Threads=16)	460K
Random Write 4KB IOPS up to (Queues=32, Threads=16)	450K
Endurance (TBW) ⁴	600
Power	
Average Active Power ⁵	90mW
Low Power (PS3) ⁵	30mW
Sleep (PS4) (low power) ⁵	5mW
Maximum Operating Power	3.5W
Reliability	
MTTF (hours) ⁶	1.5M
Environmental	
Operating Temperatures ⁷	32°F to 158°F (0°C to 70°C)
Non-operating Temperatures ⁸	-40°F to 185°F (-40°C to 85°C)
Operating Vibration	5.0 gRMS, 10–2000 Hz, 3 axes
Non-Operating Vibration	4.9 gRMS, 7–800 Hz, 3 axes
Shock	1,500 G @ 0.5 msec half sine
Certifications	BSMI, CAN ICES-3(B)/NMB-3(B), CE, FCC, KCC, Morocco, RCM, TUV, UL, VCCI
Limited Warranty ⁹	5 years
Physical Dimensions	
Form Factor	M.2 2280
Length	80 ± 0.15mm
Width	22 ± 0.15mm
Height	2.38mm
Weight	6.5g ± 1g
Ordering Information	
Model Number	WDS100T3B0C

Footnotes:

Specifications subject to change without notice.

- ¹ Backwards compatible with PCIe Gen3 x2, PCIe Gen2 x4, PCIe Gen2 x2, and PCIe Gen2 x1.
- ² 1GB = 1 billion bytes and 1TB = 1 trillion bytes. Actual user capacity may be less depending on operating environment.
- ³ Test Conditions: Performance is based on the CrystalDiskMark 7.0.0f benchmark using a 1000MB LBA range ASUS Z170A desktop with Intel® i7-6700K 4.0Ghz, 8GB 2133MHz DDR4. Windows 10 Pro 64-bit version 1903 using Microsoft StorNVMe driver, secondary drive. 1 MB/s = 1 million bytes per second. IOPS = input/output operations per second. Based on internal testing; performance may vary depending upon host device, usage conditions, drive capacity, and other factors.
- ⁴ TBW (terabytes written) values calculated using JEDEC client workload (JESD219) and vary by product capacity.
- ⁵ Measured using MobileMark™ 2018 on Dell Precision 7730 intel® Core™ i5-8300 CPU @ 2.30GHz 8GB Windows 10 RS5 (1809) Bios 1.13.1
- ⁶ MTTF = Mean Time To Failure based on internal testing using Telcordia stress part testing (Telcordia SR-332, GB, 25°C). 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.
- ⁷ Operational temperature is measured by thermal sensors in NAND package. The SSD box package is rated up to 60°C.
- ⁸ Non-operational storage temperature does not guarantee data retention.
- ⁹ 5 years or Max Endurance (TBW) limit, whichever occurs first. See support.wdc.com/warranty for regional specific warranty details.
- ¹⁰ Available for download at www.westerndigital.com.

Western Digital

5601 Great Oaks Parkway
San Jose, CA 95119, USA

www.westerndigital.com

© 2021 Western Digital Corporation or its affiliates. All rights reserved. Western Digital, the Western Digital logo and WD Blue are registered trademarks or trademarks of Western Digital Corporation or its affiliates in the U.S. and/or other countries. All other marks are the property of their respective owners. Pictures shown may vary from actual products. The NVMe word mark is a trademark of NVM Express, Inc. PCIe is a registered trademark of PCI-SIG in the United States and/or other countries." before "All other marks References in this publication to Western Digital products, programs, or services do not imply that they will be made available in all countries. Product specifications provided are sample specifications that are subject to change and do not constitute a warranty. Please visit our website, <http://www.westerndigital.com> for additional information on product specifications.