

WD Blue™

3D NAND SATA SSD

The WD Blue™ 3D NAND SATA SSD utilizes Western Digital 3D NAND technology for capacities up to 2TB with enhanced reliability. Featuring an active power draw up to 25% lower than previous generations of WD Blue SSDs, you're able to work longer before recharging your laptop, while sequential read speeds up to 560MB/s and sequential write speeds up to 530MB/s give the speed you want for your most demanding computing applications. Combined with the free, downloadable WD SSD Dashboard software and a 3-year limited warranty, you can confidently upgrade your system to the WD Blue 3D NAND SATA SSD.



INTERFACE

FORM FACTOR

CAPACITIES

SATA III 6 Gb/s

2.5"/7mm cased M.2 2280 250GB to 2TB

Product Features

High capacity with enhanced reliability

A WD Blue 3D NAND SATA SSD uses Western Digital 3D NAND technology not only for higher capacities (up to 2TB) than the previous generation WD Blue SSDs, but also to help reduce cell-to-cell interference for enhanced reliability.

Enhanced power efficiency

Offering improved endurance, a WD Blue 3D NAND SATA SSD features an active power draw up to 25% lower than previous generations of WD Blue SSDs. And with less power used, you're able to work longer before recharging your laptop.

Superior performance for high-end computing

For a variety of computing applications like gaming, HD media playback, or creative software, look to WD Blue 3D NAND SATA SSDs. Western Digital 3D NAND technology helps enable sequential read speeds up to 560MB/s and sequential write speeds up to 530MB/s for fast system boot-ups, quick application responses, and rapid transfer speeds.

Leading-edge reliability

An SSD is designed with no moving parts to help protect against data loss if it is accidentally bumped or dropped. And with 1.75M hours MTTF (mean time to failure), up

to 500 TBW (terabytes written), and several error correction technologies, WD Blue 3D NAND SATA SSDs can help guard data for years to come.

Broad compatibility

With a certification from the WD Functional Integrity Testing Lab (F.I.T. LabTM), every WD Blue 3D NAND SATA SSD is verified for compatibility with a wide range of desktop and laptop computers. Every WD Blue 3D NAND SATA SSD goes through extensive compatibility and reliability testing to ensure it meets the high standards of the WD brand.

Downloadable WD SSD Dashboard and Acronis software

Monitor your drive's available capacity, operating temperatures, SMART attributes and more with the WD SSD Dashboard. Acronis® True Image™ WD Edition software, available as a free download, can clone drives and backup your operating system, applications, settings and all of your data.

3-year limited warranty

Every WD Blue 3D NAND SATA SSD comes with a 3-year limited warranty, so you can be confident of your storage when you upgrade or replace any of your drives.

Applications

WD Blue 3D NAND SATA SSDs are available in either a 2.5"/7mm cased or an M.2 2280 model to evolve with smaller and thinner computers. With form factors to accommodate most laptops, desktop PCs, and small form PCs, a WD Blue 3D NAND SATA SSD is ready for the job.

The WD Advantage

WD puts our products through extensive Functional Integrity Testing (F.I.T.) prior to any product launch. This testing ensures our products consistently meet the highest quality and reliability standards of the WD brand.

WD also has a detailed Knowledge Base with more than 1,000 helpful articles as well as software and utilities. Our customer support lines have long operational hours to ensure you get the help you need when you need it. Our toll-free customer support lines are here to help or you can access our WD Support site for additional details.



WD Blue™3D NAND SATA SSD

Specifications	2ТВ	1TB	500GB	250GB
Model Numbers ¹				
WD Blue SSD 2.5"/7mm cased	WDS200T2B0A	WDS100T2B0A	WDS500G2B0A	WDS250G2B0A
WD Blue SSD M.2 2280	WDS200T2B0B	WDS100T2B0B	WDS500G2B0B	WDS250G2B0B
Interface ^{2, 3}				
WD Blue SSD 2.5"/7mm cased	SATA III 6 Gb/s	SATA III 6 Gb/s	SATA III 6 Gb/s	SATA III 6 Gb/s
WD Blue SSD M.2 2280	SATA III 6 Gb/s	SATA III 6 Gb/s	SATA III 6 Gb/s	SATA III 6 Gb/s
Performance ⁴ [4KB QD32]				
Sequential Read up to (MB/s)	560	560	560	550
Sequential Write up to (MB/s)	530	530	530	525
Random Read up to (IOPS)	95k	95k	95k	95k
Random Write up to (IOPS)	84k	84k	84k	81k
Endurance (TBW) ⁵	500	400	200	100
Power ⁶		,		
Avg. Active Power (mW) ⁷	60	60	52	52
Max Read Operating (mW)	3,000	2,550	2,050	2,200
Max Write Operating (mW)	3,800	3,750	3,350	2,250
Slumber (mW)	56	56	56	56
DEVSLP (mW)	5-12	5-12	5-7	5-7
Reliability				
MTTF ⁸	Up to 1.75M hours	Up to 1.75M hours	Up to 1.75M hours	Up to 1.75M hours
Environmental				
Operating Temperatures	0°C to 70°C	0°C to 70°C	0°C to 70°C	0°C to 70°C
Non-operating Temperatures	-55°C to 85°C	-55°C to 85°C	-55°C to 85°C	-55°C to 85°C
Operating Vibration	5.0 gRMS, 10-2000 Hz	5.0 gRMS, 10-2000 Hz	5.0 gRMS, 10-2000 Hz	5.0 gRMS, 10-2000 Hz
Non-operating Vibration	4.9 gRMS, 7-800 Hz	4.9 gRMS, 7-800 Hz	4.9 gRMS, 7-800 Hz	4.9 gRMS, 7-800 Hz
Shock	1,500 G @ 0.5 msec half sine	1,500 G @ 0.5 msec half sine	1,500 G @ 0.5 msec half sine	1,500 G @ 0.5 msec half sine
Certifications	FCC, UL, TUV, KC, BSMI, VCCI Morocco	FCC, UL, TUV, KC, BSMI, VCCI Morocco	FCC, UL, TUV, KC, BSMI, VCCI, Morocco	FCC, UL, TUV, KC, BSMI, VCCI Morocco
Limited Warranty ⁹	3 years	3 years	3 years	3 years
Physical Dimensions				
Size: 2.5"/7mm cased	7.00mm x 69.85mm x 100.2mm	7.00mm x 69.85mm x 100.2mm	7.00mm x 69.85mm x 100.2mm	7.00mm x 69.85mm x 100.2mm
Size: M.2 2280	2.38mm x 22.00mm x 80.0mm	2.23mm x 22.00mm x 80.0mm	2.23mm x 22.00mm x 80.0mm	2.23mm x 22.00mm x 80.0mm
Weight: 2.5″/7mm cased	57.9g	37.4g	37.4g	37.4g
Weight: M.2 2280	7±1g	7±1g	7±1g	7±1g

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Specifications subject to change without notice.

1 Not all products may be available in all regions of the world.

2 Backward compatible to SATA II and I.

3 As used for storage capacity, one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second and gigabit per second (Gb/s) = one billion bits per second.

4 Measured using CrystalloistMark, 1000MB LBA range, on Laptop Asus NS501 HM86 Express chipset, Windows 8.1 Pro with Intel iRST version 14.8.16.1063, secondary drive with Intel® CoreTM 17-4700HQ 2.4GHz, 8GB DDR3

1800MHz RAM.

¹⁶⁰⁰MHz RAM.

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

*Power measurements at 25°C. Based on firmware version with DIPM enabled. Measured using MobileMark® 2014 on Lenovo T560, Intel® Core™ i5−6200U 2.30GHz Processor, DDR3L 4GB 1600MHz RAM, Windows 10 with Intel Driver iRST 14.8.0.1042.

*Active power draws are up to 25% lower during sequential reads than previous generations of WD Blue™ SSD at the 500GB capacity point.

*MTTF = Mean Time To Failure based on internal testing using Telcordia stress part testing.

*See http://support.wdc.com for regional specific warranty details.