WD Blue™ 3D NAND SATA SSD

SATA SSD DATA SHEET



Highlights

- 3D NAND SATA SSD for capacities up to 4TB1 with enhanced reliability.
- · Sequential read speeds up to 560MB/s and sequential write speeds up to 530MB/s.2
- An industry-leading 1.75M hours mean time to failure (MTTF)³ and up to 600 terabytes written (TBW)⁴ for enhanced reliability.
- WD F.I.T. Lab™ certification for compatibility with a wide range of computers.
- Free downloadable software to monitor the status of your drive and clone a drive, or backup vour data.
- Includes a 5-year limited warranty so upgrading your storage is worry-free.5

INTERFACE SATA 6 Gb/s **CAPACITIES** 250GB to 4TB

FORM FACTOR:

2.5"/7mm cased (up to 4TB) M.2 2280 (up to 2TB)

MODEL NUMBERS

2.5"/7mm cased

WDS400T2B0A, WDS200T2B0A, WDS100T2B0A, WDS500G2B0A WDS250G2B0A

M 2 2280

WDS200T2B0B, WDS100T2B0B, WDS500G2B0B WDS250G2B0B

THE WESTERN DIGITAL ADVANTAGE

Western Digital 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 Western Digital brand.

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

The Western Digital WD Blue™ 3D NAND SATA SSD utilizes Western Digital 3D NAND technology for capacities up to 4TB in the 2.5" 7mm form factor, or 2TB in the M.2 2280 form factor with enhanced reliability. With sequential read speeds up to 560MB/s and sequential write speeds up to 530MB/s you get the speed you want for your most demanding computing applications. Combined with the free, downloadable WD SSD Dashboard software and a 5-year limited warranty, you can confidently upgrade your system to the WD Blue 3D. NAND SATA SSD.

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 600 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 Western Digital 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 Western Digital SSD Dashboard and Acronis

Monitor your drive's available capacity, operating temperatures, SMART attributes and more with the Western Digital 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.

5-year limited warranty

Every WD Blue 3D NAND SATA SSD comes with a 5-year limited warranty, so you can be confident of your storage when you upgrade or replace any of your drives.

second (GD/s) = one Dillion bits per second.

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

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

5 See http://support.westerndigital.com for regional specific warranty details.

² Subsection storage Capacity, one terapyte (тВ) = one trillion bytes. Total accessible capacity varies depending on operating environment.

2 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.

3 MTTE - Magazing Total Land - Lan 1 As used for storage capacity, one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on

SATA SSD **DATA SHEET**

WD Blue SSD 2.57/mm (apacid) WDS200T2B0A WDS200T2B0A WDS200T2B0B SATA III 6 Gb/s SATA III 6	Specification	IS	2ТВ	1TB	500GB	250GB
Carper C	Model Number ¹					
March Marc		WDS400T2B0A	WDS200T2B0A	WDS100T2B0A	WDS500G2B0A	WDS250G2B0A
MO Dilue SSD 1.97mm	WD Blue SSD M.2 2280		WDS200T2B0B	WDS100T2B0B	WDS500G2B0B	WDS250G2B0B
SATA	Interface ^{2,3}					
Sequential Read up to Se0	WD Blue SSD 2.5"/7mm cased	SATA III 6 Gb/s		SATA III 6 Gb/s	· 	
Sequential Read up to	WD Blue SSD M.2 2280		SATA III 6 Gb/s			
MRS Sequential Write up to \$30 \$30 \$30 \$30 \$30 \$35 \$25 MRS MRS	Performance ⁴ [4KB QD	032]				
MRB/S SPK S		560	560	560	560	550
Random Write up to (IOPS) 82K		530	530	530	530	525
Common		95K	95K	95K	95K	95K
Power ⁶ Avg. Active Power (mW) 60 60 60 52 52 Max Read Operating (mW) 3,000 3,000 2,550 2,050 2,200 Max Write Operating (mW) 3,800 3,800 3,750 3,350 2,250 Slumber (mW) 56 56 56 56 56 56 DEVSLP (mW) 5-12 5-12 5-12 5-7 5-7 Reliability The Properating Temperatures Up to 1,75M hours Up		82K	84K	84K	84K	81K
Avg. Active Power (mW) 60 60 60 52 52 Max Read Operating (mW) 3,000 3,000 2,550 2,050 2,200 (mW) Max Write Operating (mW) 3,800 3,800 3,800 3,750 3,350 2,250 (mW) Slumber (mW) 56 56 56 56 56 56 56 DEVSLIP (mW) 5-12 5-12 5-12 5-7 5-7 Reliability MTTF' Up to 1,75M hours Environmental Operating Temperatures 0°C to 70°C 0°C to 85°C 55°C to 85°C	Endurance (TBW) ⁵	600	500	400	200	100
Max Read Operating (mW) 3,000 3,000 2,550 2,050 2,200 Max Write Operating (mW) 3,800 3,800 3,750 3,350 2,250 Slumber (mW) 56 56 56 56 56 56 DEVSLP (mW) 5-12 5-12 5-12 5-7 5-7 Reliability MTTP? Up to 1.75M hours	Power ⁶					
(mW) Max Write Operating (mW) 3,800 3,800 3,750 3,350 2,250 (mW) 56 56 56 56 56 56 DEVSLP (mW) 5-12 5-12 5-12 5-7 5-7 Reliability MTTP' Up to 1,75M hours	Avg. Active Power (mW)	60	60	60	52	52
Slumber (mW) 56 56 56 56 56 56 56 5	Max Read Operating (mW)	3,000	3,000	2,550	2,050	2,200
DEVSLP (mW) 5-12 5-12 5-12 5-12 5-7 5-7 S-7		3,800	3,800	3,750	3,350	2,250
MTTF7	Slumber (mW)	56	56	56	56	56
### MTTF7	DEVSLP (mW)	5-12	5-12	5-12	5-7	5-7
Coperating Temperatures	Reliability					
Operating Temperatures 0°C to 70°C 0°C to 85°C 0°C to	MTTF ⁷	Up to 1.75M hours				
Non-operating Temperatures Non-operating Temperatures Tempe	Environmental					
Temperatures	Operating Temperatures	0°C to 70°C				
Operating Vibration 5.0 gRMS, 10-2000 Hz 4.9 gRMS, 7-800 Hz 4.9 gRMS,		-55°C to 85°C				
Non-operating Vibration 4.9 gRMS, 7-800 Hz 4.9	· <i>- '</i>	5.0 gRMS, 10-2000 Hz				
Certifications FCC, UL, TUV, KC, BSMI, VCCI, Morocco Morocco Morocco Morocco Morocco FCC, UL, TUV, KC, BSMI, VCCI, Morocco FCC, UL, TUV, KC, BSM		4.9 gRMS, 7-800 Hz				
Morocco Morocco Morocco Morocco Morocco Morocco Morocco Limited Warranty ⁸ 5 years 5 years 5 years 5 years 5 years Physical Dimensions Size: 2.5"/7mm cased 100.2mm x 69.85mm x 7.00mm 80.0mm x 22.00mm x 2.38mm	Shock	1,500 G @ 0.5 msec half sine				
Physical Dimensions Size: 2.5"/7mm cased 100.2mm x 69.85mm x 7.00mm 100.2mm x 2.38mm 80.0mm x 22.00mm x 2.38mm 80.0mm x 2.38mm	Certifications					
Size: 2.5"/7mm cased 100.2mm x 69.85mm x 7.00mm 100.2mm x 2.38mm 80.0mm x 2.38mm 8	Limited Warranty ⁸	5 years				
Size: M.2 2280 80.0mm x 22.00mm x 2.38mm	Physical Dimensions					
	Size: 2.5"/7mm cased	100.2mm x 69.85mm x 7.00mm				
Weight: 2.5"/7mm cased 57.9g 57.9g 37.4g 37.4g 37.4g	Size: M.2 2280		80.0mm x 22.00mm x 2.38mm			
	Weight: 2.5"/7mm cased	57.9g	57.9g	37.4g	37.4g	37.4g

Specifications are subject to change without notice

with Intel iRST version 14.8.16.1063, secondary drive with Intel® CoreTM $\,$ i7–4700HQ 2.4GHz, 8GB DDR3 1600MHz

Western Digital.

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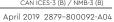












¹ Not all products may be available in all regions of the world. $^{\rm 2}$ Backward compatible to SATA II and I.

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 CrystalDiskMark, 1000MB LBA range, on

⁵TBW (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® CoreTM i5-6200U 2.30GHz Processor, DDR3L 4GB 1600MHz RAM, Windows 10 with Intel Driver iRST 14.8.0.1042.

Laptop Asus N550J HM86 Express chipset, Windows 8.1 Pro $^{-7}$ MTTF = Mean Time To Failure based on internal testing using Telcordia stress part testing.

⁸ See http://support.westerndigital.com for regional specific warranty details.