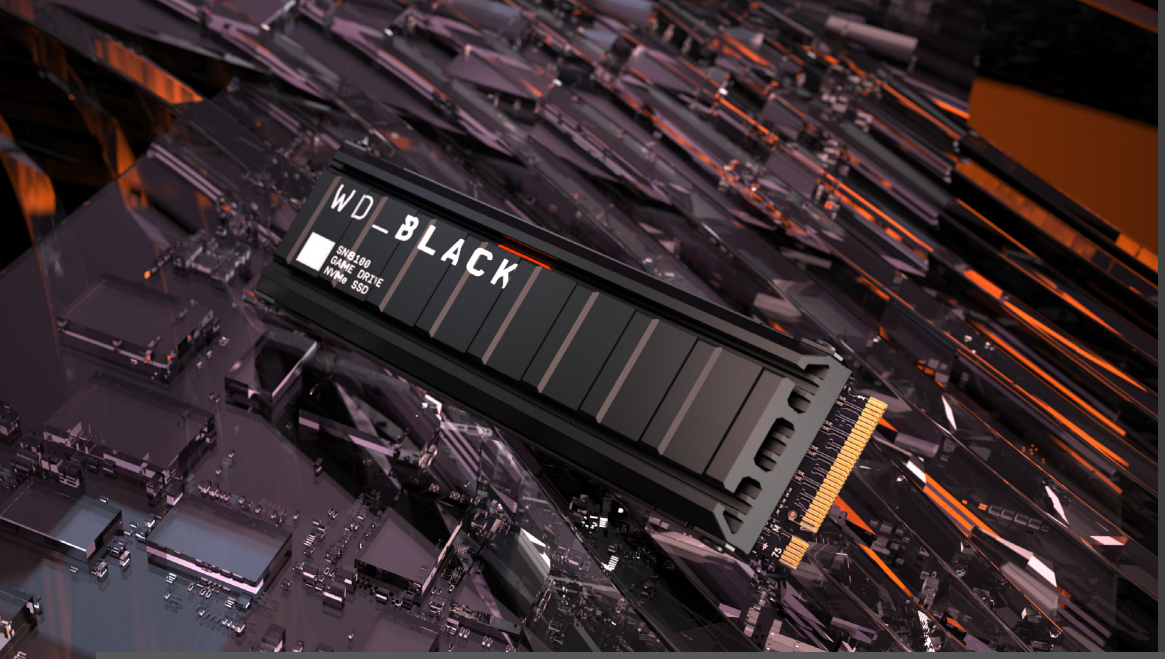

WD_BLACK™

WD_BLACK™ SN8100 NVMe™ SSD with Heatsink

PCIe® Gen 5.0 M.2 2280 NVMe™ SSD

EXPERIENCE THE PINNACLE OF SSD PERFORMANCE.

Build your new gaming or workstation system with our cutting-edge PCIe® Gen 5 SSD, delivering blistering speeds up to 14,900 MB/s[1] for demanding tasks like high-level gaming, professional content creation, and AI applications. As an industry-leader for PCIe® Gen 5 power efficiency, the WD_BLACK™ SN8100 NVMe™ SSD with Heatsink harnesses advanced TLC 3D CBA NAND technology to help ensure performance and reliability, while a low-power profile keeps your system running smoothly. Our new integrated heatsink features a signature WD_BLACK™ design and customizable RGB lighting. Engineered with anodized aluminum, double TIM pads, and a sleek low-profile design, it helps keep temperatures in check with a superior passive cooling design – no noisy fans or extra power cords required. With up to 4TB[2] of storage and a suite of powerful features, this SSD is the ultimate upgrade for discerning users.

KEY FEATURES

- EXPERIENCE PCIe® Gen 5. Drastically enhance your gaming and content creation experience with this PCIe® Gen 5.0x4 NVMe™ M.2 SSD.
- BREAKNECK SPEEDS. Your drive reaches sequential read speeds up to an astonishing 14,900MB/s,[1] sequential write speeds up to 14,000MB/s,[1] and over 2,300,000 IOPS[1] of random performance [2TB – 4TB[2] models].
- ADVANCED RELIABILITY. Our latest TLC 3D CBA NAND technology helps ensure your experience is exquisite, no matter if you're gaming or working.
- AN INDUSTRY-LEADER IN POWER EFFICIENCY. Enjoy over 100% more power efficiency than our PCIe® Gen4 drive.[4] Plus, run your machine at optimal performance with an average operating power of 7W[1] or under.
- CUSTOM WD_BLACK™ HEATSINK. Keep your SSD cool with a low-profile heatsink design with customizable RGB lighting to match your style and your build needs.
- ROOM FOR REVOLUTION. Hold your biggest projects and still have room for OS updates, models for AI-powered applications, and your game library thanks to immense capacities up to 4TB.[2]

PRODUCT FEATURES

EXPERIENCE THE BREAKNECK SPEED OF PCIE® GEN 5

Drastically enhance your gaming and content creation experience with the speed PCIe® Gen 5.0x4 NVMe™ M.2 SSD technology – perfect for gaming, content creation, and loading models for AI-powered applications.

DESIGNED TO PERFORM

Our latest TLC 3D CBA NAND technology provides the most advanced combination of speed and reliability to help ensure your experience is at top performance, no matter if you're gaming or working.

CUSTOM WD_BLACK™ HEATSINK

Keep your SSD cool with a low-profile heatsink design with customizable RGB lighting to match your style and your build needs. Our new and improved heatsink is engineered with anodized aluminum, redesigned for improved airflow. Allowing this heatsink drive to be completely noiseless, with no extra power or fans needed.

BLISTERING SPEEDS FOR INTENSE TASKS

With the help of our nCache™ 4.0 feature, the WD_BLACK™ SN8100 SSD reaches sequential read speeds up to an astonishing 14,900MB/s,[1] sequential write speeds up to 14,000MB/s,[1] and over 2,300,000 IOPS[1] of random performance [2TB – 4TB[2] models].

AN INDUSTRY-LEADER FOR PCIE® GEN 5 POWER EFFICIENCY

Enjoy over 100% more power efficiency than our PCIe® Gen4[4] drive and simplify your system design with our passive cooling heatsink. Plus, an average operating power of 7W[1] or under helps keep your drive running at optimal performance.

ROOM FOR REVOLUTION

Hold your biggest projects and still have room for OS updates, models for AI-powered applications, large datasets, and your game library thanks to immense capacities up to 4TB.[2] And with the latest security features like TCG Opal, you can help protect and encrypt your sensitive data.

PRODUCT SPECIFICATIONS

CAPACITIES[2]: / MODEL NUMBERS:	4TB WDS400T1XHM-00CMT0	2TB WDS200T1XHM-00CMT0	1TB WDS100T1XHM-00CMT0
FORM FACTOR	M.2 2280		
INTERFACE	PCIE® GEN 5X4 NVME™ 2.0		
NAND	TLC 3D CBA NAND		
DRAM	YES		
PERFORMANCE[1]			
Sequential Read [up to]:	14,900MB/S	14,900MB/S	14,900MB/S
Sequential Write [up to]:	14,000MB/S	14,000MB/S	11,000MB/S
Random Read [up to]:	2.3M IOPS	2.3M IOPS	1.6M IOPS
Random Write [up to]:	2.4M IOPS	2.4M IOPS	2.4M IOPS
POWER[5]			
Average Active Power Read	6.5W	6.5W	6.2W
Average Active Power Write	7.0W	7.0W	6.2W
Sleep [PS4]	5 mW		
RELIABILITY			
Endurance[3] [TBW]	2,400	1,200	600
MTTF up to [hours]	1.75M HOURS		
Limited Warranty[7]	5 YEARS		
STANDARDS			
Compatibility	BACKWARDS COMPATIBLE WITH PCIE® GEN4 X4, PCIE® GEN4 X2, PCIE® GEN4 X1, PCIE® GEN3 X4, PCIE® GEN3 X2, PCIE® GEN3 X1, PCIE® GEN2 X4, PCIE® GEN2 X2 AND PCIE® GEN2 X1, WINDOWS® 10+		
RoHS COMPLIANCE	YES		
SECURITY	TCG OPAL 2.02		
ENVIRONMENTAL			
Operating Temperature[8]	32ºF TO 185ºF [0ºC TO 85ºC]		
Non-Operating Temperature[9]	-40ºF TO 185ºF [-40ºC TO 85ºC]		

DIMENSIONS[6]	Length:	Width:	Height:	Weight:
	80mm	25mm	11.25mm	31.2g

[1] Based upon read speed, unless otherwise stated. 1MB/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.
[2] 1TB = one trillion bytes. Actual user capacity may be less depending on operating environment.
[3] TBW [terabytes written] values calculated using JEDEC client workload [JESD219] and vary by product capacity.
[4] Over 100% more power efficient than 2TB WD_BLACK™ SN850X NVMe™ SSD
[5] Power consumption is measured with IOmeter1.1.0 version with AMD Ryzen 9 9950X 16-Core Processor CPU@4.30GHz, DDR5 5600MT/s 16GBx2, OS-Windows 11 Pro 64bit, Chipset-Gigabyte-X870E. Based on internal testing; performance may vary depending upon host device, usage conditions, drive capacity and other factors.
[6] Physical product dimensions for length and width may vary by ± 0.20mm and product weight may vary by ± 1g.
[7] 5 years or Max Endurance [TBW] limit, whichever occurs first. See support.sandisk.com for region-specific warranty details.
[8] Operational temperature is defined as temperature reported by the drive. Note that drive temperature readings are expected to be higher than ambient temperature when the SSD is placed inside a system. The SSD box package is rated up to 60°C.
[9] Non-operational storage temperature does not guarantee data retention.

March 2025