

DATA SHEET

Fast. Dependable. Versatile. BarraCuda 510 SSD



SEAGATE

The Seagate[®] BarraCuda[®] 510 SSD—legendary storage designed for taking your data to the next level of performance, reliability, and efficiency.



Best-Fit Applications

- Ultra-thin laptops
- Business PCs and laptops
- Workstations and all-in-one PCs

Key Advantages

Amazing speed with next-level 3D TLC NAND and a PCIe Gen3 ×4, NVMe 1.3 unlock sequential read/write speeds of up to 3400/2180MB/s

The trusted dependability of the BarraCuda brand with a 5-year limited warranty and MTBF of 1.8M hours.

Amazing versatility with capacities of 256GB and 512GB lets you pick the right drive for the job and budget

Slim form factor with single-sided M.2 2280 for ultra-thin/ultra-small laptops, mini PCs, and desktop PCs

Low power consumption with up to 4.2W active power and multiple low power modes make for longer battery life and cooler running speeds



	🕑 SEAGATE	BARRACODA	
ZP612CM30011	512GB	BarraCuda ⁺ 510 SSD	
Interference and the interference and the		PCIe GS x4 NVMe	ä
((@[High base break of	CALINGE	11
CCO Divide	20001	No York STates	ш.

Specifications	512GB	256GB	
Standard Model (TCG Pyrite)	ZP512CM30011	ZP256CM30011	
SED Model (TCG Opal)	ZP512CM30031	ZP256CM30031	
Interface	PCIe G3 ×4, NVMe 1.3	PCIe G3 ×4, NVMe 1.3	
NAND Flash Memory	3D TLC	3D TLC	
Form Factor	M.2 2280-S2	M.2 2280-S2	
Performance			
Sequential Read (Max, MB/s), 128KB ¹	3400	3100	
Sequential Write (Max, MB/s), 128KB ¹	2180	1050	
Random Read (Max, IOPS), 4KB QD32 T8 ¹	350,000	180,000	
Random Write (Max, IOPS), 4KB QD32 T8 ¹	530,000	260,000	
Endurance/Reliability			
Total Bytes Written (TB)	320	160	
Mean Time Between Failures (MTBF, hours)	1,800,000	1,800,000	
Warranty, Limited (years)	5	5	
Power Management			
Active Power, Average (W)	4.2	3.0	
Idle Power PS3, Average (mW)	16	16	
Low Power L1.2 mode (mW)	2	2	
Environmental			
Temperature, Operating Internal (°C)	0 to 70	0 to 70	
Temperature, Nonoperating (°C)	-40 to 85	-40 to 85	
Shock, Nonoperating: 0.5ms (Gs)	1500 1500		
Special Features			
TRIM	Yes	Yes	
S.M.A.R.T.	Yes	Yes	
Halogen Free	Yes Yes		
RoHS Compliance	Yes	Yes	
Physical			
Length,(mm)	80.15 80.15		
Width (mm)	22.15	22.15	
Height (mm)	2.23	2.23	
Weight (g)	6.9	6.5	

1 Fresh out of box (FOB) performance obtained on newly formatted drive. Performance may vary based on SSD's firmware version, system hardware, and configuration. Performance based on CrystalDiskMark v.5.2.1 × 64 on Windows 10 host.

Ordering Information						
Specifications						
Retail Packaging		Box Dimensions	Master Carton Dimensions	Pallet Dimensions		
Depth/Length (in/mm)		5.285in/134.25mm	5.078in/129mm	47.244in/1200mm		
Width (in/mm)		4.291in/109mm	10.944in/278mm	39.37in/1000mm		
Height (in/mm)		0.944in/24mm	6.653in/169mm	51.968in/1320mm		
Weight (lb/kg)		0.134lb/0.061kg	2.006lb/0.91kg	424.389lb/192.5kg		
Quantities						
Boxes per Master Carton	10					
Master Cartons per Pallet	196					
Pallet Layers	7					

System Requirements

What's Included

- M.2 (M key) slot, PCIe G3 ×4 interface
- Windows[®] 10, Windows 8.1, Windows 7

Seagate[®] BarraCuda® 510 SSD

• Linux

Region	Model Number	Capacity	Limited Warranty (years)	UPC Code	EAN Code	Multi-Pack UPC
ww	ZP256CM30041	256GB	5	763649134009	8719706016612	10763649134006
WW	ZP512CM30041	512GB	5	763649134016	8719706016629	10763649134013

1 Fresh out of box (FOB) performance obtained on newly formatted drive. Performance may vary based on SSD's firmware version, system hardware, and configuration. Performance based on CrystalDiskMark v.5.2.1 ×64 on Windows 10 host.

seagate.com

AMERICAS ASIA/PACIFIC EUROPE, MIDDLE EAST, AND AFRICA

Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, 408-658-1000 Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888 Seagate Technology SAS 16-18, rue du Dôme, 92100 Boulogne-Billancourt, France, 33 1-4186 10 00

© 2019 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. BarraCuda and Seagate Secure are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors, such as chosen interface and drive capacity. Complying with all applicable copyright laws is the responsibility of the user. Seagate reserves the right to change, without notice, product offerings or specifications. DS2000.3-1904US April 2019

