

DATA SHEET

Fast. Dependable. Versatile.

BarraCuda 510 SSD



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 x4, 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



Specifications	512GB	256GB
Standard Model (TCG Pyrite)	ZP512CM30011	ZP256CM30011
SED Model (TCG Opal)	ZP512CM30031	ZP256CM30031
Interface	PCIe G3 x4, NVMe 1.3	PCIe G3 x4, 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 x64 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
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- | | |
|--|---|
| <ul style="list-style-type: none"> • M.2 (M key) slot, PCIe G3 x4 interface • Windows® 10, Windows 8.1, Windows 7 • Linux | <ul style="list-style-type: none"> • Seagate® BarraCuda® 510 SSD |
|--|---|

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

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