



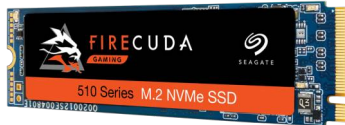
DATA SHEET — PRELIMINARY SPECIFICATIONS

Accelerate. Dominate. Endure.

FireCuda 510 SSD



Built specifically for professional-level gamers, the Seagate® FireCuda® 510 SSD brings the intense speeds, lasting endurance, and large capacity needed to accelerate PC storage performance.



Best-Fit Applications

- Gaming PC desktops
- Gaming PC laptops
- High-performance PCs and workstations
- Creative professional systems

Key Advantages

NVMe PCIe Gen3 x4 interface unleashes the speed of NAND and delivers up to 6× faster performance than SATA SSDs

Blazing-fast sequential read/writes bring faster load times, faster program installations, and faster processing

Ultra-high random read/write IOPS translates to faster program response times and more responsive multiple program multitasking

Enhanced dynamic SLC cache with up to 28 GB reserved provides longer bursts of data

1 TB and 2 TB capacities for the storage of huge files and games without the worry of maxing out your drive or partitioning

M.2 2280 form factor for massive speed and capacity in a compact package for installation in tight spaces, leaving room for other components

Top-tier endurance gives pro-level gamers peace of mind with a 5-year limited warranty and MTBF of 1.8 M hours

SeaTools™ SSD enhanced gaming tool with drive management and health monitoring so gamers can tune the drive to their performance needs



Specifications	2 TB	1 TB
Standard Model Numbers	ZP2000GM30001	ZP1000GM30001
Interface	PCIe G3 x4, NVMe 1.3	PCIe G3 x4, NVMe 1.3
NAND Flash Memory	3D cTLC	3D cTLC
Form Factor	M.2 2280-D2	M.2 2280-D2
Performance		
Sequential Read (Max, MB/s), 128KB ¹	3,450	3,450
Sequential Write (Max, MB/s), 128KB ¹	3,200	3,050
Random Read (Max, IOPS), 4KB QD32 T8 ¹	485,000	620,000
Random Write (Max, IOPS), 4KB QD32 T8 ¹	600,000	590,000
Endurance/Reliability		
Total Bytes Written (TB)	2600	1300
Mean Time Between Failures (MTBF, hours)	1,800,000	1,800,000
Limited Warranty (years)	5	5
Power Management		
Active Power, Average (W)	5.9	5.9
Idle Power, Average (mW)	20	20
Low Power L1.2 mode (mW)	2	2
Environmental		
Temperature, Operating Internal (°C)	0°C – 70°C	0°C – 70°C
Temperature, Non-operating (°C)	-40°C – 85°C	-40°C – 85°C
Shock, Nonoperating: 0.5ms (Gs)	1,500	1,500
Special Features		
TRIM	Yes	Yes
S.M.A.R.T.	Yes	Yes
Halogen-free	Yes	Yes
RoHS compliance	Yes	Yes
Physical		
Length, Max (mm/in)	80.15 mm/3.156 in	80.15 mm/3.156 in
Width, Max (mm/in)	22.15 mm/0.872 in	22.15 mm/0.872 in
Height, Max (mm/in)	3.58 mm/0.141 in	3.58 mm/0.141 in
Weight, Max (g/lb)	8.3 g/0.0183 lb	8.1 g/0.0179 lb
Carton Unit Quantity	20	20
Cartons per Pallet / Cartons per Layer	54/6	54/6

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.