



FireCuda 520 PCIe Gen4 SSD

Upgrade Your Gaming Experience

Accelerate and dominate with the Seagate® FireCuda® 520 PCIe Gen4 SSD. Featuring blazing fast read/write speeds of up to 5,000/4,850 MB/s, this FireCuda 520 SSD is nearly 50% faster than its previous version. Powered by the latest 3D TLC NAND technology, this plug-and-play SSD is equipped with staying power — handling upwards of 1,200 TB total bytes written with ease.



Key Features

Beyond Acceleration

Features blazing fast sequential read/write speeds of up to 5,000/4,850 MB/s.

Hold On Tight

Transfer speeds up to 45% faster than PCIe Gen3 NVMe SSDs and up to 9× faster than SATA SSDs.

Built to Last

Up to 1,200 TB TBW means the 2 TB drive can write and delete 600 GB a day, every day, for five years.

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Seek and Deploy

Host Memory Buffer boosts performance by targeting extra memory resources from the CPU.

Game and Create Like a Pro

Up to 2 TB of space lets you accumulate and keep your most important files on your boot drive — ready to fire up in seconds.

We've Got Your Back

When the unexpected happens — like water damage or natural disaster — Rescue Services help you defend against data loss and retrieval costs so you can rest easier.



RETAIL PACKAGING	BOX DIMENSIONS	MASTER CARTON DIMENSIONS	PALLET DIMENSIONS
Length (in/mm)	0.945 in/24 mm	6.024 in/153 mm	40 in/1,016 mm
Width (in/mm)	4.291 in/109 mm	11.496 in/292 mm	47.992 in/1,219 mm
Depth (in/mm)	6.102 in/155 mm	5.512 in/140 mm	33.15 in/842 mm
Weight (lb/kg)	0.157 lb/0.071 kg	2.138 lb/0.97 kg	390.218 lb/177 kg

QUANTITIES	
Boxes per Master Carton	10
Master Cartons per Pallet	168
Pallet Layers	7

SYSTEM REQUIREMENTS	WHAT'S INCLUDED
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- M.2 (M key) slot, PCIe® G4 x4 interface (backwards compatible with PCIe G3 interface)
- Windows® 11 , Windows® 10
- Linux

- Seagate® FireCuda® 520 SSD

REGION	MODEL NUMBER	CAPACITY	LIMITED WARRANTY (YEARS)	UPC CODE	EAN CODE	MULTI-PACK UPC
WW	ZP500GV3A012	500GB	5	763649177587	8719706433143	10763649177584
WW	ZP1000GV3A012	1 TB	5	763649177594	8719706433150	10763649177591
WW	ZP2000GV3A012	2 TB	5	763649177600	8719706433167	10763649177607

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FIRECUDA 520 PCIE GEN4 SSD

SPECIFICATIONS	2 TB	1 TB	500GB
Standard Model	ZP2000GV30012	ZP1000GV30012	ZP500GV30012
Interface	PCIe Gen4 x4 NVMe 1.4	PCIe Gen4 x4 NVMe 1.4	PCIe Gen4 x4 NVMe 1.4
NAND Flash Memory	3D TLC	3D TLC	3D TLC
Form Factor	M.2 2280-S2	M.2 2280-S2	M.2 2280-S2
PERFORMANCE			
Sequential Read (Max, MB/s), 128KB ¹	4,850	5,000	5,000
Sequential Write (Max, MB/s), 128KB ¹	4,750	4,850	3,900
Random Read (Max, IOPS), 4 KB QD32 T8 ¹	800,000	830,000	460,000
Random Write (Max, IOPS), 4KB QD32 T8 ¹	950,000	950,000	900,000
ENDURANCE/RELIABILITY			
Total Bytes Written (TB)	1,200	600	300
Mean Time Between Failures (MTBF, hours)	1,800,000	1,800,000	1,800,000
Rescue Data Recovery Services (years) ²	3	3	3
Warranty, Limited (years)	5	5	5
POWER MANAGEMENT			
Active Power, Average (W)	4.3	3.9	3.8
Idle Power PS3, Average (mW)	20	17	15
Low Power L1.2 mode (mW)	2	2	2
ENVIRONMENTAL			
Temperature, Operating Internal (°C)	0°C – 70°C	0°C – 70°C	0°C – 70°C
Temperature, Non-operating (°C)	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C
Shock, Non-operating: 0.5 ms (Gs)	1,500	1,500	1,500
SPECIAL FEATURES			
TRIM	Yes	Yes	Yes
S.M.A.R.T.	Yes	Yes	Yes
Halogen-free	Yes	Yes	Yes
RoHS compliance	Yes	Yes	Yes
PHYSICAL			
Length (mm/in, max)	80.15 mm/3.155 in	80.15 mm/3.155 in	80.15 mm/3.155 in
Width (mm/in, max)	22.15 mm/0.872 in	22.15 mm/0.872 in	22.15 mm/0.872 in
Height (mm/in, max)	2.23 mm/0.088 in	2.23 mm/0.088 in	2.23 mm/0.088 in
Weight (lb/g)	8 g/0.0176 lb	8 g/0.0176 lb	7.5 g/0.0165 lb

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.6.0.2 x64 on Windows 10 host with PCIe Gen4 motherboard.

² Rescue Data Recovery Services not available in all countries.

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