SEAGATE GAMING™

FIRECUDA™

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.

Upgrade Your Gaming Experience

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

- M.2 (M key) slot, PCIe® G4 ×4 interface (backwards compatible with PCIe G3 interface)
- Windows® 11 , Windows® 10
- Linux

WHAT'S INCLUDED

- 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	1TB	5	763649177594	8719706433150	10763649177591
WW	ZP2000GV3A012	2TB	5	763649177600	8719706433167	10763649177607

Upgrade Your Gaming Experience

SPECIFICATIONS	2TB	1TB	500GB
Standard Model	ZP2000GV30012	ZP1000GV30012	ZP500GV30012
Interface	PCIe Gen4 ×4 NVMe 1.4	PCIe Gen4 ×4 NVMe 1.4	PCIe Gen4 ×4 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 ×64 on Windows 10 host with PCIe Gen4 motherboard.

2 Rescue Data Recovery Services not available in all countries.

SEAGATE.COM