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 5000/4850MB/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 1200TB total bytes written with ease.

Key Features

Beyond Acceleration
Features blazing fast sequential read/write speeds of up to 5000/4850MB/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 1200TB TBW means the 2TB drive can write and delete 600GB a day, every day, for five years.

Upgrade Your Gaming Experience

FIRECUDA 520 PCIE GEN4 SSD

Seek and Deploy

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

Game and Create Like a Pro

Up to 2TB 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)	0.945in/24mm	6.024in/153mm	40in/1016mm
Width (in/mm)	4.291in/109mm	11.496in/292mm	47.992in/1219mm
Depth (in/mm)	6.102in/155mm	5.512in/140mm	33.15in/842mm
Weight (lb/kg)	0.157lb/0.071kg	2.138lb/0.97kg	390.218lb/177kg

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]	4850	5000	5000
Sequential Write (Max, MB/s), 128KB[1]	4750	4850	3900
Random Read (Max, IOPS), 4KB 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)	1200	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, Nonoperating (°C)	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C
Shock, Nonoperating: 0.5ms (Gs)	1500	1500	1500
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)	80.15mm/3.155in	80.15mm/3.155in	80.15mm/3.155in
Width (mm/in, max)	22.15mm/0.872in	22.15mm/0.872in	22.15mm/0.872in
Height (mm/in, max)	2.23mm/0.088in	2.23mm/0.088in	2.23mm/0.088in
Weight (g/lb)	0.0176lb	0.0176lb	0.0165lb

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