





FireCuda 520 PCle 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.

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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/1,016mm |
| Width (in/mm) | 4.291in/109mm | 11.496in/292mm | 47.992in/1,219mm |
| 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

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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 |

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| 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), 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) | 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) | 80.15mm/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) | 8g/0.0176lb | 8g/0.0176lb | 7.5g/0.0165lb |

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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.