Optimized PCIe 4.0 NVMe performance for servers

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DC2000B SSD

* [Intro](https://www.kingston.com/en/ssd/DC2000B-data-center-solid-state-drive#product-features)
* [Key Features](https://www.kingston.com/en/ssd/DC2000B-data-center-solid-state-drive#key-feature)
* [Specifications](https://www.kingston.com/en/ssd/DC2000B-data-center-solid-state-drive#specifications)
* [Resources](https://www.kingston.com/en/ssd/DC2000B-data-center-solid-state-drive#links)
* [Datasheet](https://www.kingston.com/datasheets/SEDC2000B_us.pdf)

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DC2000B PCIe 4.0 NVMe M.2 SSDEnterprise Class for Server Applications

Kingston DC2000B is a high-performance PCIe 4.0 NVMe M.2 SSD using the latest Gen 4x4 PCIe interface with 112-layer 3D TLC NAND. Ideally suited for use in high-volume rack-mount servers as an internal boot drive(s) to preserve valuable front-loading drive bays, as well as for use in purpose-built systems where a high-performance M.2 SSD is needed that includes hardware-based on-board power loss protection (PLP). New for DC2000B is an integrated aluminum heatsink that offers broader thermal compatibility for a wide range of systems. DC2000B delivers low latency and excellent IO consistency to handle various workloads from boot drive applications to high-speed application caching. DC2000B is rated at 0.4 DWPD write endurance and carries a 5-year warranty.

* PCIe 4.0 NVMe Gen 4x4 performance
* Hardware-based power loss protection
* Latency and IOPS consistency
* Designed for data center environments



**Ask a Server SSD Expert**

Planning the right solution requires an understanding of your project’s security goals. Let Kingston’s experts guide you.

[**Ask an Expert**](https://www.kingston.com/en/ssd/server/ask-an-expert)

Key Features



PCIe 4.0 NVMe Performance

Utilizes PCIe Gen 4x4 lanes for high-performance speeds.



On-board Power Loss Protection (PLP)

Reduce the possibility of data loss and/or corruption due to unexpected power-off.



Low latency and IOPS consistency

Firmware optimized to deliver low latency and IO consistency for high duty cycle workloads.



Designed for data center environments

Optimized to meet the demands of Server boot applications with low latency and IO consistency as the key design criteria.



* [Data Center DC2000B SSD](javascript:void(0))
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Capacity

 240GB

 480GB

 960GB

* Part Number: SEDC2000BM8/240G
* Data Center Class SSD for Enterprise applications
* PCIe 4.0 NVMe M.2 SSD
* 4500 MB/s Read, 400 MB/s Write

[**Where to Buy**](https://www.kingston.com/en/wheretobuy)

Specifications

|  |  |
| --- | --- |
| Form Factor | M.2 2280 |
| Interface | PCIe 4.0 x4 NVMe |
| Capacities1 | 240GB, 480GB, 960GB |
| NAND | 3D TLC |
| Sequential Read/Write | 240GB – 4500/400 MBs 480GB – 7000/800 MBs 960GB – 7000/1300 MBs |
| Steady-State 4k Read/Write2 | 240GB – 260000/18000 IOPS 480GB – 530000/32000 IOPS 960GB – 540000/47000 IOPS |
| Total Bytes Written (TBW)3 | 240GB – 175 TBW 480GB – 350 TBW 960GB – 700 TBW |
| Latency Read (Avg) | 240GB-960GB: 70µs |
| Latency Write (Avg) | 240GB – 53µs 480GB – 29µs 960GB – 20µs |
| Power Loss Protection (Power Caps) | Yes |
| Enterprise SMART tools | Reliability tracking, usage statistics, SSD life remaining, wear leveling, temperature |
| Endurance | 240GB — (0.4 DWPD/5yrs)4 480GB — (0.4 DWPD/5yrs)4 960GB — (0.4 DWPD/5yrs)4 |
| Power Consumption | 240GB: Average Read: 2.97W Average Write: 4.02W Max Read: 3.01W Max Write: 4.09W 480GB: Average Read: 3.22W Average Write: 5.60W Max Read: 3.29W Max Write: 5.77W 960GB: Average Read: 3.26W Average Write: 7.36W Max Read: 3.36W Max Write: 7.80W |
| Storage temperature | -40°C ~ 85°C |
| Operating temperature | 0°C ~ 70°C |
| Dimensions | 80mm x 22mm x 8.3mm |
| Weight | 240GB – 9g 480GB – 10g 960GB – 11g |
| Vibration non-operating | 20G Peak (10–2000Hz) |
| MTBF | 2 million hours |
| Warranty/support5 | Limited 5-year warranty with free technical support |