

# DCP1000 SSD

[kingston.com/ssd](http://kingston.com/ssd)

## Extreme performance for data centers.

Kingston's DCP1000 solid-state drive delivers up to 1.25 million IOPS from a single device, with ultra-low transactional latency and high throughput, making it ideal for data centers requiring extreme performance. It features ultra-fast NVMe PCIe Gen 3.0 x8, speeds of up to 7GB/s and hardware-based pFail. DCP1000 has flexible drive topology and supports flexible software RAID capability to save on redundant hardware costs. It supports 800GB to 3.2TB<sup>1</sup> from a single HHHL card and can be optimized for performance or redundancy, and a single card can be configured for RAID via the host software.

It's fast and economical to deploy, using native in-box NVMe drivers specifically built for PCIe-attached SSDs, and it's plug-and-play with all major operating systems. It has UEFI boot support and low overhead architecture.

In addition to its standard electrolytic capacitor pFail design, DCP1000's enterprise-class features include next-gen ECC data protection and end-to-end data path protection.

- 
- › Extreme performance for data centers
  - › Flexible drive topology
  - › Fast and economical to deploy
  - › Enterprise-class SSD features



Features/specs on reverse >>

# DCP1000 SSD

## FEATURES/ BENEFITS

- > **Extreme data center SSD performance** — DCP1000 features ultra-fast PCIe Gen 3.0 x8, making it ideal for data centers requiring extreme performance.
- > **Outperforms legacy architectures** — DCP1000 delivers impressive performance with an ultra-low transactional latency.
- > **High capacity** — With up to 3.2TB<sup>1</sup>, DCP1000 is a high-capacity NVMe solid-state drive.
- > **Power failure protection** — DCP1000 offers enterprise-class power failure protection to maximize uptime.

## SPECIFICATIONS

- > **Form factor** Half-Height Half-Length PCIe (AIC)
- > **Interface** Non-Volatile Memory Express (NVMe™) PCIe Gen3 x 8 Lanes
- > **Capacities**<sup>1</sup> 800GB, 1.6TB, 3.2TB
- > **Sequential Read/Write**<sup>2</sup>
  - 800GB – 6,800 / 5,000MB/s
  - 1.6TB – 6,800 / 6,000MB/s
  - 3.2TB – 6,800 / 6,000MB/s
- > **Steady-State Random 4k Read/Write**<sup>2</sup>
  - 800GB – 900,000 / 145,000 IOPS
  - 1.6TB – 1,100,000 / 200,000 IOPS
  - 3.2TB – 1,000,000 / 180,000 IOPS
- > **Latency** (Typical) Read/Write 100us / 30us<sup>3</sup>
- > **Endurance: Terabytes Written (Whole Drive)**<sup>4</sup>
  - 800GB – 884TB<sup>5</sup>
  - 1.6TB – 1820TB<sup>5</sup>
  - 3.2TB – 3332TB<sup>5</sup>
- > **Endurance: Terabytes Written**
  - 200GB – 187TB<sup>5</sup>
  - 400GB – 375TB<sup>5</sup>
  - 800GB – 697TB<sup>5</sup>
- > **Enterprise SMART tools** reliability tracking, usage statistics, life remaining, wear leveling, temperature
- > **Power Consumption** 35W (Active)
- > **Storage temperature** -40°C~85°C
- > **Operating temperature** 0°C~70°C
- > **Recommend Airflow** 35°C at 500LFM or 40°C at 600LFM
- > **Dimensions** 168mm x 69mm x 18mm (exclude mounting bracket)
- > **Weight** 209g
- > **Vibration operating** 2.17G Peak (7–800Hz)
- > **Vibration non-operating** 20G Peak (10–2000Hz)
- > **Power Loss Protection** Yes
- > **MTBF** 2 million hours
- > **Warranty/support**<sup>6</sup> Limited 5-year warranty with free technical support
- > **Operational Environments**  
Windows 8.1, Windows 10, Windows Server 2012 R2, Windows 7 and Windows Server 2008 R2 via updates or Hotfix driver download, Linux Kernel 3.3 and higher, FreeBSD 10.x/11, VMware vSphere 6.0 (vSphere 5.5 as download driver)



## PART NUMBERS

SEDC1000H/800G	800GB
SEDC1000H/1600G	1.6TB
SEDC1000H/3200G	3.2TB

<sup>1</sup> Some of the listed capacity on a Flash storage device is used for formatting and other functions and thus is not available for data storage. As such, the actual available capacity for data storage is less than what is listed on the products. For more information, go to Kingston's Flash Memory Guide at [kingston.com/flashguide](http://kingston.com/flashguide).

<sup>2</sup> Performance varies by capacity. Combined performance measured across (4) physical drives. Based on Kingston internal testing using SNIA Solid State Storage Test Specification Enterprise v1.1.

<sup>3</sup> Average latency measured using FIO v2.15, 4KB random I/O at queue depth 1.

<sup>4</sup> The total endurance of (4) physical drives.

<sup>5</sup> Total Bytes Written (TBW) is derived from the JEDEC Enterprise Workload (JESD219A).

<sup>6</sup> Limited warranty based on 5 years or SSD "Life Remaining" which can be found using the Kingston SSD Manager ([kingston.com/SSDManager](http://kingston.com/SSDManager)). A new, unused product will show a wear indicator value of one hundred (100), whereas a product that has reached its endurance limit of program erase cycles will show a wear indicator value of one (1). If the usage of one or more of the four (4) individual M.2 SSDs that make up the DCP1000 shows a wear indicator value of one (1) the product is no longer covered under warranty. 1). See [kingston.com/wa](http://kingston.com/wa) for details

