

Server SSD: DC-Series

DCN-100P: PCIe Gen4 Data Center High-Speed Storage in M.2 and E1.S Form Factors

Key Product Features

- Self-Encrypting Drive option
 - AES-XTS 256-bit Encryption
 - TCG Opal 2.0 Support
 - NVME Sanitize
- End-to-End Data Path Protection
- NVMe 1.4

Key Product Metrics

<i>Sequential Read</i>	Up to 6,800 MB/s
<i>Sequential Write</i>	Up to 2,000 MB/s
<i>Random Read</i>	Up to 900K IOPS
<i>Random Write</i>	Up to 60K IOPS
<i>Interface</i>	PCIe Gen 4 x4 NVMe 1.4
<i>Capacity</i>	Up to 3840 GB
<i>Form Factor</i>	M.2 2280/22110 and E1.S
<i>Drive Write Per Day</i>	1

DCN-100P

M.2 2280					
	Capacity ⁽¹⁾	480GB	960GB	1920GB	-
Performance	Sequential Read	6000 MB/s	6000 MB/s	6000 MB/s	-
	Sequential Write	700 MB/s	1400 MB/s	2000 MB/s	-
	4K Random Read	450K IOPS	750K IOPS	800K IOPS	-
	4K Random Write	25K IOPS	50K IOPS	60K IOPS	-
Power Consumption ⁽⁴⁾	Max	8.5 W	9.5 W	11.0 W	-
	Idle	4 W	4 W	4.2 W	-
Latency	4K Random Read	75 us	75 us	75 us	-
	4K Random Write	40 us	35 us	35 us	-
M.2 22110					
	Capacity ⁽¹⁾	480GB	960GB	1920GB	3840GB
Performance	Sequential Read	6000 MB/s	6000 MB/s	6000 MB/s	4500 MB/s
	Sequential Write	700 MB/s	1400 MB/s	2000 MB/s	1700 MB/s
	4K Random Read	450K IOPS	750K IOPS	800K IOPS	400K IOPS
	4K Random Write	25K IOPS	60K IOPS	60K IOPS	60K IOPS
Power Consumption ⁽⁴⁾ (Est.)	Max	8.5 W	9.5 W	11.0 W	11.55 W
	Idle	4 W	4 W	4.2 W	4.2 W
Latency (Est.)	4K Random Read	75 us	75 us	75 us	80 us
	4K Random Write	40 us	35 us	35 us	15 us
E1.S					
	Capacity ⁽¹⁾	480GB	960GB	1920GB	3840GB
Performance ⁽²⁾	Sequential Read	6500 MB/s	6800 MB/s	6800 MB/s	6800 MB/s
	Sequential Write	700 MB/s	1400 MB/s	2000 MB/s	1700 MB/s
	4K Random Read	450K IOPS	800K IOPS	900K IOPS	650K IOPS
	4K Random Write	25K IOPS	50K IOPS	60K IOPS	70K IOPS
Power Consumption ⁽⁴⁾	Max	9.5 W	10.5 W	13.5 W	12.5 W
	Idle	4 W	4 W	4.2 W	4.2 W
Latency (Est.)	4K Random Read	75 us	75 us	75 us	80 us
	4K Random Write	40 us	30 us	25 us	20 us
Features					
	Interface	PCIe 4.0 x4			
	NAND Flash	3D TLC			
	DWPD ⁽⁵⁾	1			
	UBER	1 in 10 ¹⁷			
	Operating Temperature	0°C - 70°C			
	Non-Operating Temperature	-40°C- 85°C			
Key Features					
	• LDPC		• TCG Opal 2.0 ⁽⁶⁾		
	• NVMe 1.4		• Sanitize ⁽⁶⁾		
	• End-to-End Data Protection		• NVME-MI ⁽⁶⁾		

(1) 1 GB = 1,000,000,000 bytes.

(2) Sequential Performance is based on FIO on Linux, 128K, with QD=32, 1 worker, and test drive set as secondary.

(3) Random Performance is based on FIO on Linux, 4K data size, QD=32, 1 worker, 4K aligned.

(4) FIO with QD32 and worker 1 for 128KB sequential read/write 1min & QD32 and worker 8 for 4KB random read/write 1min test to measure the power of active read/write.

(5) The results of DWPD are obtained in compliance with JESD219A Standards.

(6) Supported by a separate firmware setting. Further information is available upon request.

Product Configurations

For more information on available configurations, please contact us at: inquiries@rpics.com.

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