

CP4100 | PCIe NVMe | M.2 2280 SSD

The SMART Modular CP4100 PCIe NVMe M.2 2280 SSDs feature a PCIe Gen4 x4 interface and NVMe 1.4 compliance, ensuring high-speed performance and wide compatibility. Equipped with a DRAM controller and 1 DWPD endurance, CP4100 M.2 SSDs offer exceptional reliability and durability for demanding workloads. They are well-suited for servers, networking, storage accelerators, and data communications, providing dependable solutions for boot, OS, application software, and data storage.

As Self-Encrypting Drives (SED), the CP4100 M.2 SSDs are equipped with AES-256 encryption and TCG Opal 2.01 support. Advanced LDPC error correction (ECC) and end-to-end data path protection enhance data reliability and security, making them a dependable choice for high-performance and secure environments.



Features & Benefits

- With DRAM Controller Design
- PCIe Gen4 x4 NVMe 1.4 Compliant
- LDPC Error Detection / Correction Circuitry for Superior Data Reliability
- Power Loss Notification
- Power Loss Acknowledge
- Sanitize to Support Crypto Erase and Block Erase
- Support Static and Dynamic Wear Leveling
- Garbage Collection & TRIM
- 1 DWPD for Five Years

Applications

- Cloud Computing
- Data Center
- Networking
- Telecom
- Storage Server

Product Family Overview

Form Factor	Capacity	Sequential Performance
M.2 2280 SSD	480GB to 3840GB	Up to 6000MB/s Read; Up to 2050MB/s Write

Specifications

	CP4100 PCIe NVMe M.2 2280 SSD	
NAND Type	eTLC	
Performance		
Host Interface Rate (maximum)	PCIe Gen4 x4	
Capacities	480GB to 3840GB	
Sequential Read (maximum)	Up to 6000MB/s	
Sequential Write (maximum)	Up to 2050MB/s	
Random Read (maximum)	Up to 750K IOPS	
Random Write (maximum)	Up to 600K IOPS	
Reliability		
MTBF	> 2,000,000 hours	
Endurance (JEDEC Enterprise Workload)	480GB: 850 TBW	
	960GB: 1700 TBW	
	1920GB: 3400 TBW	
	3840GB: 6800 TBW	
DWPD	1	
Error Correction	LDPC	
Power		
Input Voltage	VCC: 3.3 V ± 5%	
Environmental		
Shock	1500 g half-sine, 0.5 msec, 1 shock along each axis, X, Y, Z in each direction	
Vibration	3.13G, 5-800Hz	
Operating Temperature	Commercial: 0°C to +70°C	
Storage Temperature	-40°C to +85°C	
Humidity	40°C, Operation: 90% RH, Storage: 93% RH	
Physical		
Length	80.0 mm	
Width	22.0 mm	
Height	3.65 mm	

¹Endurance is directly related to the User Specific Workload.

Ordering Information

Part Number	Density
CP4100 PCIe NVMe M.2 2280 SSD Commercial Operating Temperature (0°C to +70°C)	
FDMP83840FCS11G1	3840GB
FDMP81920FCS11G1	1920GB
FDMP8960GFCS11G1	960GB
FDMP8480GFCS11G1	480GB



For more information, please visit: www.smartm.com

**Product images are for promotional purposes only. Labels may not be representative of the actual product.*

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