# CP3000 │ PCIe NVMe │ M.2 2280 SSD

The CP3000 PCIe NVMe M.2 2280 SSDs feature a PCIe Gen4 x4 interface and are compliant to NVMe 1.4 specification. The increased bandwidth offered by PCIe 4.0 improves the efficiency of performing workloads. They are designed to meet the demand for a cost-effective solution in general-purpose industrial applications, such as POS/Kiosk, embedded automation and edge computing, with advanced features that ensure the high level of operational stability and reliability over the lifetime of the SSDs.

Incorporating the 3D NAND technology, the CP3000 PCIe NVMe M.2 2280 SSDs utilize an advanced DRAM cache controller design for the best balance in performance and cost. Advanced error detection and correction and thermal management ensure exceptional data integrity and reliability under variable operating environments.
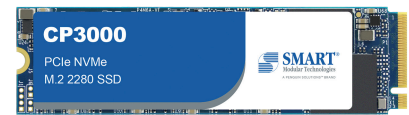
Features & Benefits

- PCIe Gen4 x4 NVMe 1.4 Compliant
- With DRAM Controller Design
- 3D NAND Technology with High Endurance
- Thermal Throttling Management
- LDPC Error Detection / Correction Circuitry for Superior Data Reliability
- 1 DWPD / 3 DWPD for Five Years

Applications

- Data Center
- Networking
- Storage Server
- Telecom

Product Family Overview

Form Factor	Capacity	Sequential Performance
M.2 2280 (eTLC)	960GB to 3840GB	Up to 3300MB/s Read
M.2 2280 (eTLC OP 28%)	1600GB to 3200GB	Up to 2900MB/s Write

Specifications

	CP3000 | PCIe NVMe | M.2 2280 SSD	
NAND Type	eTLC	eTLC (OP 28%)
Performance		
Host Interface Rate (maximum)	PCIe Gen4 x4	
Capacities	960GB to 3840GB	1600GB to 3200GB
Sequential Read (maximum)	Up to 3300MB/s	
Sequential Write (maximum)	Up to 2900MB/s	
Random Read (maximum)	Up to 380K IPOS	
Random Write (maximum)	Up to 50K IOPS	Up to 110K IOPS
Reliability		
MTBF	> 2,000,000 hours	
Endurance (JEDEC Enterprise Workload)	3840GB: 7000TBW 1920GB: 3500 TBW 960GB: 1700 TBW	3200GB: 17200TBW 1600GB: 8600 TBW
DWPD	1	3
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	20G 80-2000Hz, 1.52mm 20-80Hz, 3 axis	
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	3.6 mm	

Ordering Information

Part Number	Density
CP3000 eTLC | PCIe NVMe | M.2 2280 SSD **Commercial Operating Temperature (0°C to +70°C)**	
FDMP83840FCF11C2	3840GB
FDMP81920FCF11C2	1920GB
FDMP8960GFCF11C2	960GB
CP3000 eTLC OP 28% | PCIe NVMe | M.2 2280 SSD **Commercial Operating Temperature (0°C to +70°C)**	
FDMP83200FCF11C2	3200GB
FDMP81600FCF11C2	1600GB

SMART® Modular Technologies
A PENGUIN SOLUTIONS™ BRAND

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

Headquarters/North America:
T: (+1) 800-956-7627 • T: (+1) 510-623-1231
F: (+1) 510-623-1434 • E: info@smartm.com

Latin America:
T: (+55) 11 4417-7200 • E: sales.br@smartm.com

Asia/Pacific:
T: (+65) 6678-7670 • E: sales.asia@smartm.com

EMEA:
T: (+44) 0 7826-064-745 • E: sales.euro@smartm.com

Customer Service:
T: (+1) 510-623-1231 • E: customers@smartm.com