MP3000 | PCIe NVMe | M.2 2280 & 22110 SSDs

SMART's MP3000 PCIe NVMe M.2 SSDs incorporate the latest generation 3D NAND-technology to deliver high performance with endurance up to one drive writes per day (1 DWPD) for five years. The MP3000 SSDs offer better cost per bit over previous 64-layer and 96-layer NAND generations without sacrificing performance and reliability.

SMART's MP3000 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 support TCG Opal 2.0 as standard, and are easily integrated into a host system without any BIOS modifications or additional drivers. The MP3000 products incorporate on-board error detection and correction, and static wear-leveling algorithms to provide reliable operation over the product life cycle.

M.2 22110

M.2 2280

Features & Benefits

- Self-Encrypted Drive (SED) with TCG Opal 2.01 Support
- Quality of Service (QoS) with 3 Nines of Latency Consistency
- Secure Boot with PKI-Based Firmware Authenticity Verification
- The Latest Generation 3D NAND Technology
- PCIe Gen4 x4 NVMe 1.4 Compliant
- 1 DWPD For 5 Years, Enterprise Workload
- SEU Mitigation
- Namespace Management (Up to 16 Namespaces)
- 512-Bytes and 4096-Bytes LBA Formats
- SMBus NVMe-MI Support
- SafeDATA™ Power-Loss, Data-Protection Technology
- Redundancy Coding for Enhanced Data Reliability
- End-to-End Data Path Protection with Internal Memory Error Detection and Correction

Applications

- AI
- Data Center
- HPC
- Networking
- Storage
- Telecommunication

Product Family Overview

Form Factor	Capacity	Sequential Performance
M.2 2280 SSD		Up to 3600MB/s Read
M.2 22110 SSD	240GB to 1920GB	Up to 2900MB/s Write
EDSFF E1.S		Up to 3500MB/s Read Up to 2750MB/s Write

Specifications

	M.2 2280 SSD	M.2 22110 SSD
NAND Type	eTLC	
Performance		
Host Interface Rate (maximum)	PCIe Gen4 x4	
Capacities	240GB to 1920GB	
Sequential Read (maximum)	Up to 3600MB/s	
Sequential Write (maximum)	Up to 2900MB/s	
Random Read (maximum)	Up to 410K IOPS	
Random Write (maximum)	Up to 305K IOPS	
Reliability		
MTBF	> 2,000,000 hours	
Endurance (JEDEC Enterprise Workload)[1]	1920GB: 5170 TBW 960GB: 2585 TBW 480GB: 1292 TBW 240GB: 646 TBW	
DWPD	1.4	
SafeDATA	Optional	Standard
Error Correction	LDPC	
Data Security		
Encryption	AES-256, TCG OPAL 2.0	
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 Industrial: -40°C to +85°C	
Storage Temperature	-40°C to +85°C	
Humidity	40°C, Operation: 90% RH, Storage: 93% RH	
Physical		
Length	80.0 mm	110.0 mm
Width	22.0 mm	22.0 mm
Height	3.73 mm	3.73 mm

[1]Endurance is directly related to the User Specific Workload.

Ordering Information

Part Number	Density
**MP3000	PCIe NVMe	M.2 2280 SSD Commercial Operating Temperature (0°C to +70°C)**	
SRMP81920FCN2BC4	1920GB
SRMP8960GFCN2BC4	960GB
SRMP8480GFCN2BC4	480GB
SRMP8240GFCN2BC4	240GB
**MP3000	PCIe NVMe	M.2 2280 SSD Industrial Operating Temperature (-40°C to +85°C)**	
SRMP81920FIN2BC4	1920GB
SRMP8960GFIN2BC4	960GB
SRMP8480GFIN2BC4	480GB
SRMP8240GFIN2BC4	240GB
**MP3000	PCIe NVMe	M.2 2280 SSD (SafeDATA) Commercial Operating Temperature (0°C to +70°C)**	
SRMP81920F1N2AC4	1920GB
SRMP8960GF1N2AC4	960GB
SRMP8480GF1N2AC4	480GB
SRMP8240GF1N2AC4	240GB
**MP3000	PCIe NVMe	M.2 2280 SSD (SafeDATA) Industrial Operating Temperature (-40°C to +85°C)**	
SRMP81920F2N2AC4	1920GB
SRMP8960GF2N2AC4	960GB
SRMP8480GF2N2AC4	480GB
SRMP8240GF2N2AC4	240GB
**MP3000	PCIe NVMe	M.2 22110 SSD (SafeDATA) Commercial Operating Temperature (0°C to +70°C)**	
SRMP11920F1N2AC4	1920GB
SRMP1960GF1N2AC4	960GB
SRMP1480GF1N2AC4	480GB
SRMP1240GF1N2AC4	240GB
**MP3000	PCIe NVMe	M.2 22110 SSD (SafeDATA) Industrial Operating Temperature (-40°C to +85°C)**	
SRMP11920F2N2AC4	1920GB
SRMP1960GF2N2AC4	960GB
SRMP1480GF2N2AC4	480GB
SRMP1240GF2N2AC4	240GB

SMART ®
Modular Technologies
A PENGUIN SOLUTIONS® BRAND

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

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

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