![DuraFlash™]

SP2800 | PCIe NVMe | M.2 2280 SSD

SMART's DuraFlash SP2800 products are best in-class PCIe NVMe SSDs with the functionality, performance and reliability for mission-critical applications. These drives target server, storage cache/accelerators, networking, and data communications applications requiring reliable internal storage with a small footprint. They are also a natural fit for enterprise applications, including computing, medical, transportation, video surveillance and other industrial applications.

The SP2800 PCIe NVMe M.2 2280 SSDs feature a PCIe Gen3 x4 interface and are compliant to NVMe 1.3 specification. They support TCG Opal 2.0 as standard, and are easily integrated into a host system without any BIOS modifications or additional drivers. The SP2800 products incorporate on-board error detection and correction, and static wear-leveling algorithms to provide reliable operation over the product life cycle.

Features & Benefits

- PCIe Gen3 x4 NVMe 1.3 Compliant
- 1 DWPD Version Available with SP2800 HE
- TCG OPAL 2.0 and AES 256 Encryption for Data Security and Data Sanitize
- End-to-End Data Path Protection
- 3D NAND Technology with High Endurance
- SafeDATA™ Technology as a Standard Feature for SP2800 HE (SafeDATA safeguards the integrity, functionality and data of the SSD in the event of sudden power loss.)

Applications

- Data Center
- Networking
- Storage Server
- Telecom

Product Family Overview

Capacity	Sequential Performance
**SP2800 SE	PCIe NVMe	M.2 2280 SSD**	
240GB to 1920GB	Up to 3300MB/s Read; Up to 2600MB/s Write
**SP2800 HE	PCIe NVMe	M.2 2280 SSD**	
240GB to 1920GB	Up to 3300MB/s Read; Up to 2600MB/s Write

Specifications

	SP2800 SE	SP2800 HE
NAND Type	TLC	eTLC
Performance		
Host Interface Rate (maximum)	PCIe Gen3 x4	
Capacities	240GB to 1920GB	
Sequential Read (maximum)	Up to 3300 MB/s	
Sequential Write (maximum)	Up to 2600 MB/s	
Random Read (maximum)	Up to 300K IOPS	
Random Write (maximum)	Up to 300K IOPS	
Reliability		
MTBF	> 2,000,000 hours	
Endurance (JEDEC Enterprise Workload)[1]	1920GB: 1200 TBW 960GB: 600 TBW 480GB: 300 TBW 240GB: 120 TBW	1920GB: 4000 TBW 960GB: 2000 TBW 480GB: 1000 TBW 240GB: 450 TBW
DWPD	0.3	1
SafaDATA	-	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	
Width	22.0 mm	
Height	3.65 mm	

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

Ordering Information

Part Number	Density
**SP2800 SE	PCIe NVMe	M.2 2280 SSD** **Commercial Operating Temperature (0°C to +70°C)**	
SRMP81920TCS1B71	1920GB
SRMP8960GTCS1B71	960GB
SRMP8480GTCS1B71	480GB
SRMP8240GTCS1B71	240GB
**SP2800 SE	PCIe NVMe	M.2 2280 SSD** **Industrial Operating Temperature (-40°C to +85°C)**	
SRMP81920TIS1B71	1920GB
SRMP8960GTIS1B71	960GB
SRMP8480GTIS1B71	480GB
SRMP8240GTIS1B71	240GB
**SP2800 HE	PCIe NVMe	M.2 2280 SSD** **Commercial Operating Temperature (0°C to +70°C)**	
SRMP81920F1S1B71	1920GB
SRMP8960GF1S1B71	960GB
SRMP8480GF1S1B71	480GB
SRMP8240GF1S1B71	240GB
**SP2800 HE	PCIe NVMe	M.2 2280 SSD** **Industrial Operating Temperature (-40°C to +85°C)**	
SRMP81920F2S1B71	1920GB
SRMP8960GF2S1B71	960GB
SRMP8480GF2S1B71	480GB
SRMP8240GF2S1B71	240GB

DuraFlash Product Grading System

SE Standard Endurance | **TLC**   **HE** High Endurance | **eTLC**   **PE** Premium Endurance | **eTLC (OP 28%)**   **UE** Ultra Endurance | **pSLC**

SMART® Modular Technologies

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