



DuraFlash

SP2800 | PCIe NVMe | U.2 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. They are also a natural fit for enterprise applications, including computing, medical, transportation, video surveillance and other industrial applications.

The SP2800 PCIe NVMe U.2 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.)

Product Family Overview

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



Applications

- Al
- Data Center
- HPC
- Networking
- Storage
- Telecom

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 30	0K IOPS	
Reliability			
MTBF	> 2,000,0	> 2,000,000 hours	
	1920GB: 1200 TBW	1920GB: 4000 TBW	
Endurance	960GB: 600 TBW	960GB: 2000 TBW	
(JEDEC Enterprise Workload) ¹	480GB: 300 TBW	480GB: 1000 TBW	
	240GB: 120 TBW	240GB: 450 TBW	
DWPD	0.3	1	
SafeDATA	-	Standard	
Error Correction	LDPC		
Data Security			
Encryption	AES-256, TCG OPAL 2.0		
Power			
Input Voltage	12 V ± 8%		
Environmental			
Shock	1500 g half-sine, 0.5 msec, 1 shock along each axis, X, Y, Z in each direction		
Vibration	20G rms 80-2000Hz, 1.52mm 20-80Hz, 3 axis		
	Commercial: 0°C to +70°C		
Operating Temperature	Industrial: -40°C to +85°C		
Storage Temperature	-40°C to +85°C		
Humidity	40°C, Operation: 90% RH, Storage: 93% RH		
Physical			
Length	100 mm		
Width	69.85 mm		
Height	7 mm		

Ordering Information

Part Number	Density	
SP2800 SE PCIe NVMe U.2 SSD Commercial Operating Temperature (0°C to +70°C)		
SRU2P1920TCS1A71	1920GB	
SRU2P960GTCS1A71	960GB	
SRU2P480GTCS1A71	480GB	
SRU2P240GTCS1A71	240GB	
SP2800 SE PCIe NVMe U.2 SSD		
Industrial Operating Temperature (-	40°C to +85°C)	
SRU2P1920TIS1A71	1920GB	
SRU2P960GTIS1A71	960GB	
SRU2P480GTIS1A71	480GB	
SRU2P240GTIS1A71	240GB	
SP2800 HE PCIe NVMe U.2 SSD		
Commercial Operating Temperature (0°C to +70°C)		
SRU2P1920F1S1B71	1920GB	
SRU2P960GF1S1B71	960GB	
SRU2P480GF1S1B71	480GB	
SRU2P240GF1S1B71	240GB	
SP2800 HE PCIe NVMe U.2 SSD Industrial Operating Temperature (-40°C to +85°C)		
SRU2P1920F2S1B71	1920GB	
SRU2P960GF2S1B71	960GB	
SRU2P480GF2S1B71	480GB	
SRU2P240GF2S1B71	240GB	

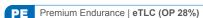
¹Endurance is directly related to the User Specific Workload.



SE Standard Endurance | TLC



HE High Endurance | eTLC



UE Ultra Endurance | pSLC



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