



# RP1700 | PCIe NVMe | M.2 2280 SSD

SMART's RP1700 PCIe NVMe M.2 2280 embedded SSDs target servers, storage cache/accelerators, networking, and data communications applications requiring reliable internal storage with a small footprint. They are also an ideal fit for mobile and embedded computing, medical, automotive, and industrial applications.

The RP1700 products feature a PCIe Gen3 x4 interface and are compliant to NVMe 1.3 specification. The RP1700 PCIe NVMe M.2 2280 SSDs support TCG Opal 2.0 as standard, and are easily integrated into a host system without any BIOS modifications or additional drivers. They incorporate on-board error detection and correction, and static wear-leveling algorithms to provide reliable operation over the product life cycle.



## Features & Benefits

- The Latest Generation 3D NAND Technology
- PCIe Gen3 x4 NVMe 1.3 Compliant
- TCG OPAL 2.0 and AES 256 Encryption
- End-to-End Data Path Protection
- Thermal Throttling
- Support HMB
- M.2 Single Sided Design

## Applications

- Data Communications
- Industrial, Embedded Applications
- Networking
- Single-Board Computers

## Product Family Overview

Form Factor	Capacity	Sequential Performance
M.2 2242 SSD	120GB to 960GB	Up to 2450MB/s Read
M.2 2280 SSD	240GB to 1920GB	Up to 1900MB/s Write

## Specifications

RP1700   PCIe NVMe   M.2 2280 SSD	
NAND Type	TLC
<b>Performance</b>	
Host Interface Rate (maximum)	PCIe Gen3 x4
Capacities	240GB to 1920GB
Sequential Read (maximum)	Up to 2450 MB/s
Sequential Write (maximum)	Up to 1900 MB/s
Random Read (maximum)	Up to 270K IOPS
Random Write (maximum)	Up to 420K IOPS
<b>Reliability</b>	
MTBF	> 2,000,000 hours
Endurance (JEDEC Client Workload) <sup>1</sup>	1920GB: 2400 TBW 960GB: 1120 TBW 240GB: 240 TBW
DWPD	0.15
SafeDATA	-
Error Correction	LDPC
<b>Data Security</b>	
Encryption	AES-256, TCG OPAL 2.0 (Optional)
<b>Power</b>	
Input Voltage	VCC: 3.3 V ± 5%
<b>Power</b>	
Shock	1500G 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
<b>Physical</b>	
Length	80.0 mm
Width	22.0 mm
Height	2.15 mm

<sup>1</sup>Endurance is directly related to the User Specific Workload.

## Ordering Information

Part Number	Density
<b>RP1700   PCIe NVMe   M.2 2280 SSD</b>	
<b>Commercial Operating Temperature (0°C to +70°C)</b>	
SVM2PHB960GWTD1	960GB
SVM2PHB240GWTD1	240GB
<b>RP1700   PCIe NVMe   M.2 2280 SSD</b>	
<b>Industrial Operating Temperature (-40°C to +85°C)</b>	
SVM2PHB1920WTID1	1920GB
SVM2PHB240GWTID1	240GB



For more information, please visit: [www.smartm.com](http://www.smartm.com)

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

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