

RoHS Compliant
PCI Express Flash Drive
AS2280P4X Product Specifications



Jul. 15, 2022

Version 1.0

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Specifications Overview:

- **PCIe Interface**
 - Compliant with NVMe 1.3
 - Compatible with PCIe Gen3 x4 interface
- **Capacity**
 - 512GB,1TB,2TB
 - **Performance***
 - Seq. Read / Write:
 - 512GB : Up to 2100 / 1500 MB/s
 - 1TB : Up to 2100 / 1700 MB/s
 - 2TB : Up to 2100 / 1700 MB/s
 - (4K) Random Read / Write
 - 512GB : Up to 300K / 420K IOPS
 - 1TB : Up to 530K / 420K IOPS
 - 2TB : Up to 530K / 420K IOPS
- **Flash Management**
 - Global Wear Leveling
 - Bad block management
 - S.M.A.R.T.
 - Power Failure Management
 - TRIM
- **Endurance (in Terabytes Written: TBW)**
 - 512 GB: 200TB
 - 1TB: 350TB
 - 2TB: 480TB
- **Temperature Range**
 - Operating : 0°C to 70°C
 - Storage : -40°C to 85°C
- **Supply Voltage**
 - 3.3 V ± 5%
- **Power Consumption***
 - Active mode: 4000 mW (max.)
 - Power State: 70mW (max.)
- **Connector Type**
 - 75-pin M.2 module pinout
- **NAND Flash Type: 3D NAND**
- **MTBF: 1,500,000 hours**
- **Form Factor**
 - M.2 2280
 - Dimensions:
 - Single side: 80.00 x 22.00 x 2.25, unit: mm
 - Double side : 80.00 x 22.00 x 3.5, unit: mm
 - Net Weight: 6.80 g
- **Shock & Vibration****
 - Shock: 1,500 G
 - Vibration:
 - Frequency/Displacement: 20Hz~80Hz/1.52mm
 - Frequency/Acceleration: 80Hz~2000Hz/20G
- **RoHS Compliant**

*Varies from capacities. The values for performances and power consumptions presented are typical and may vary depending on flash configurations or platform settings.

**Non-operating

1.1 Part Number Listing

Capacity	Bulk P/N	Retail P/N
512GB	AP512GAS2280P4X	AP512GAS2280P4X-1
1TB	AP1TBAS2280P4X	AP1TBAS2280P4X-1
2TB	AP2TBAS2280P4X	AP2TBAS2280P4X-1

1.2 Revision History

Revision	Description	Date
1.0	Preliminary release	7/15/2022