

## RoHS Compliant PCI Express Flash Drive

### AS2280P4U PRO Product Specifications



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**Version 1.0**

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## Specifications Overview:

- **PCIe Interface**
  - Compliant with NVMe 1.3
  - Compatible with PCIe Gen3 x4 interface
- **Capacity**
  - 256GB, 512GB, 1TB, 2TB
  - **Performance\***
  - Seq. Read / Write:
    - 256GB : Up to 3500 / 1200 MB/s
    - 512GB : Up to 3500 / 2300 MB/s
    - 1TB : Up to 3500 / 3000 MB/s
    - 2TB : Up to 3500 / 3000 MB/s
  - (4K) Random Read / Write
    - 256GB: Up to 210K / 315K IOPS
    - 512GB : Up to 400K / 600K IOPS
    - 1TB : Up to 670K / 670K IOPS
    - 2TB : Up to 700K / 680K IOPS
- **Flash Management**
  - Global Wear Leveling
  - Bad block management
  - S.M.A.R.T.
  - Power Failure Management
  - TRIM
- **Endurance (in Terabytes Written: TBW)**
  - 256 GB: 170TB
  - 512 GB: 350TB
  - 1TB: 760TB
  - 2TB: 1300TB
- **Temperature Range**
  - Operating : 0°C to 70°C
  - Storage : -40°C to 85°C
- **Supply Voltage**
  - 3.3 V  $\pm$  5%
- **Power Consumption\***
  - Active mode: 4118 mW (max.)
  - Power State: 70mW (max.)
- **Connector Type**
  - 75-pin M.2 module pinout
- **NAND Flash Type: 3D NAND**
- **MTBF: 1,800,000 hours**
- **Form Factor**
  - M.2 2280
  - Dimensions:
    - Single side : 80.00 x 22.00 x 3.75 unit: mm
    - Double side : 80.00 x 22.00 x 5.0, unit: mm
  - Net Weight: 10.3 g
- **Shock\*\***
  - Shock: 1,500 G/0.5msec
- **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
256GB	AP256GAS2280P4UPRO	AP256GAS2280P4UPRO-1
512GB	AP512GAS2280P4UPRO	AP512GAS2280P4UPRO-1
1TB	AP1TBAS2280P4UPRO	AP1TBAS2280P4UPRO-1
2TB	AP2TBAS2280P4UPRO	AP2TBAS2280P4UPRO-1

## 1.2 Revision History

Revision	Description	Date
1.0	Preliminary release	04/10/2021