

RoHS Compliant

AS2280P2 M.2 PCIe SSD

Specification Sheet

January, 2018

Version 0.1

TABLE OF CONTENTS

1.0 Features	3
2.0 PRODUCT DESCRIPTION	4
2.1 GENERAL DESCRIPTION	4
2.1.1 SRAM BUFFER	4
2.1.2 ERROR CORRECTION CODE (ECC)	4
3.0 SPECIFICATIONS	4
3.1 ELECTRICAL SPECIFICATION	4
4.0 PHYSICAL DIMENSION	5
5.0 REVISION HISTORY	5

FEATURES:

- **Interface**
 - PCIe Gen3x2
 - Compliant with NVMe Express v1.2
- **Capacity**
 - 120GB / 240GB / 480GB
- **Advanced Flash Management**
 - Bad Block Management
 - TRIM
 - SMART
 - SATA Power Management
 - NCQ Command
 - Power failure Management
- **Shock**
 - 1500G
- **TBW**
 - 120GB – 60T
 - 240GB – 120T
 - 480GB – 240T
- **Part Number**
- **Temperature ranges**
 - 0°C to 70°C for operation
 - -40°C to 85°C for non-operating
 -
- **Physical Dimensions**
 - (L) 80 x (W) 22 x (H) 2.25 mm
- **RoHS Compliant**
- **MTBF**
 - 1500K hours
- **Shock**
 - 1500G
- **Weight**
 - 8g (Max)
- **IOPS**
 - Random Read / Write > 85000 IOPS

Capacity	P/N	
	Retail	Bulk
120G	AP120GAS2280P2-1	AP120GAS2280P2
240G	AP240GAS2280P2-1	AP240GAS2280P2
480G	AP480GAS2280P2-1	AP480GAS2280P2

- **Performance**

Capacity	Read / Write
120G	1350 / 480 MB/s
240G	1580 / 880 MB/s
480G	1580 / 950 MB/s

2.0 PRODUCT DESCRIPTION

The super slim AS2280P2 M.2 PCIe SSD features compact size, excellent reliability, and efficient transmission which is perfectly ideal for mini PCs and laptops.

2.1 GENERAL DESCRIPTION

AS2280P2 M.2 PCIe SSD contains a controller, embedded firmware, and Flash Media with standard M.2 PCIe SSD interfaces with the host system allowing data to be written to and read from the SSD.

2.1.1 SRAM Buffer

A key contributor to the AS2280P2 M.2 PCIe SSD controller performance is the SRAM buffer. The buffer optimizes the data writes to Flash.

2.1.2 Error Correction Code (ECC)

AS2280P2 M.2 PCIe SSD applies the ECC algorithm, which can detect and correct errors occur during read process, ensure data been read correctly, as well as protect data from corruption.

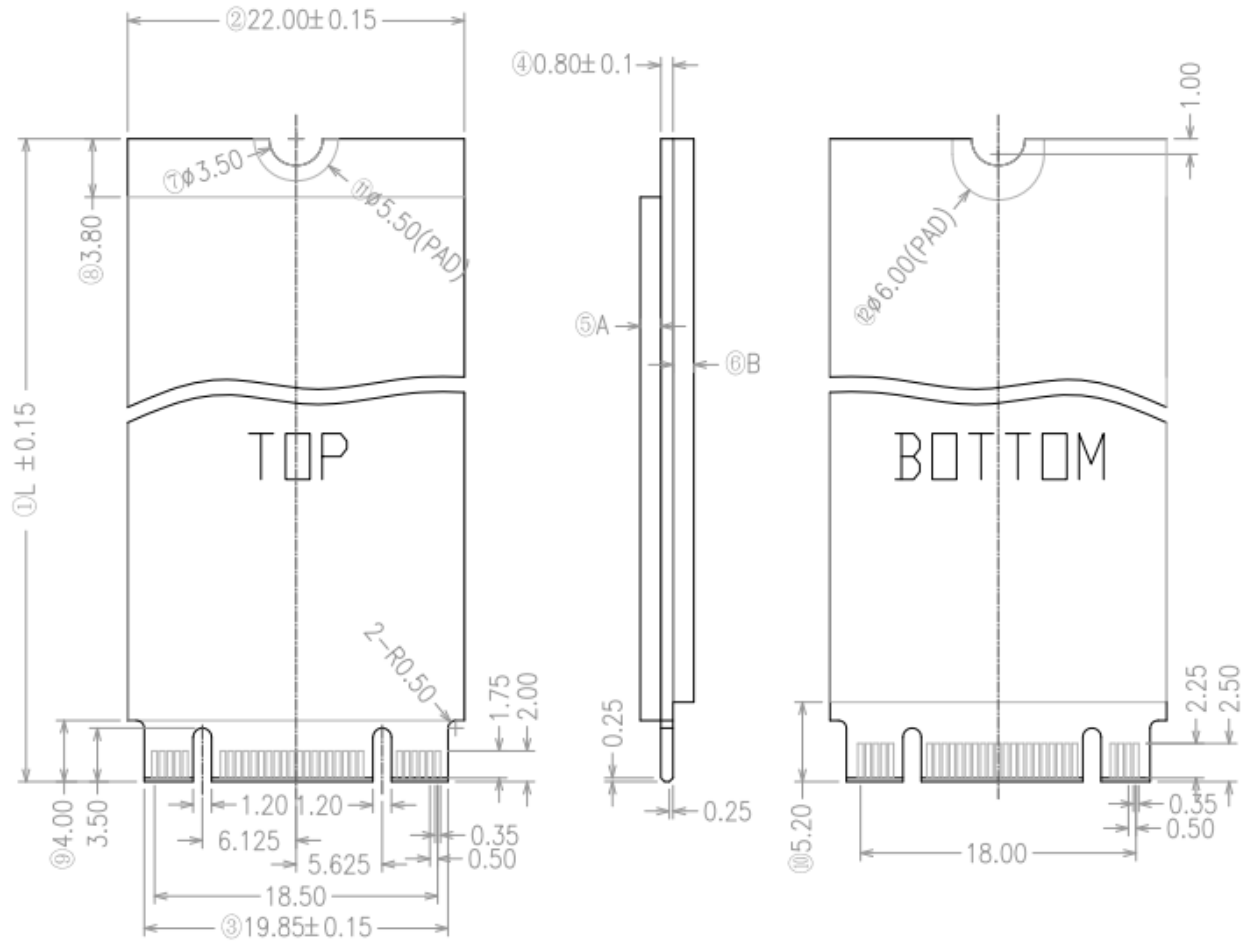
3.0 Specifications

Interface	PCIe Gen3x2
Power consumption	Active mode: Idle mode: 1010 / 1020 (mW)
Capacity	120GB / 240GB / 480GB
Temperature	0°C to 70°C (Operating) -40°C to 85°C (Storage)
Dimension	(L) 80 x (W) 22 x (H) 3.8mm

3.1 Electrical Specification

Absolute Maximum Stress Ratings (Applied conditions greater than those listed under “Absolute Maximum Stress Ratings” may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these conditions or conditions greater than those defined in the operational sections of this data sheet is not implied. Exposure to absolute maximum stress rating conditions may affect device reliability.)

4.0 PHYSICAL DIMENSION



5.0 Revision History

Revision No	History	Date	Remarks
0.1	Official Release	January, 2018	
0.2	Add 480GB model	February, 2018	