

## M.2 2280 SSD



### IM2P41B8

The ADATA IM2P41B8 PCIe Gen4x4 industrial-grade SSD employs 112-layer 3D TLC (BiCS5) NAND flash for high capacities and PCIe Gen4x4 interface for excellent performance. Its 3K P/E cycle rating ensures long-lasting durability while a DRAM Buffer offers improved IOPS and read/write speeds. What's more, with LDPC ECC error correction and RAID Engine, the IM2P41B8 ensures data accuracy and integrity. The SSD comes in a range of capacities for different requirements. Customers can also benefit from ADATA's proprietary A+ SSDTOOL software for easy management and real-time monitoring of ADATA SSDs. In addition, it supports AES 256-bit data encryption and TCG OPAL for improved data security. The IM2P41B8 is ideal for servers, data centers, networking, surveillance, and IoT-related applications.

### Features

- PCIe Gen4x4 interface/ NVMe 1.4 compliant
- 112-layer 3D TLC (BiCS5) NAND flash for higher capacities and endurance
- 3K P/E cycle rating for great durability and reliability
- Comes in capacities up to 4TB
- DRAM Buffer
- AES 256-bit Data Encryption and TCG OPAL 2.0
- LDPC ECC error correction, RAID Engine, and End-to-End Data Path Protection
- Suitable for server, data center, networking, surveillance, and IoT related applications

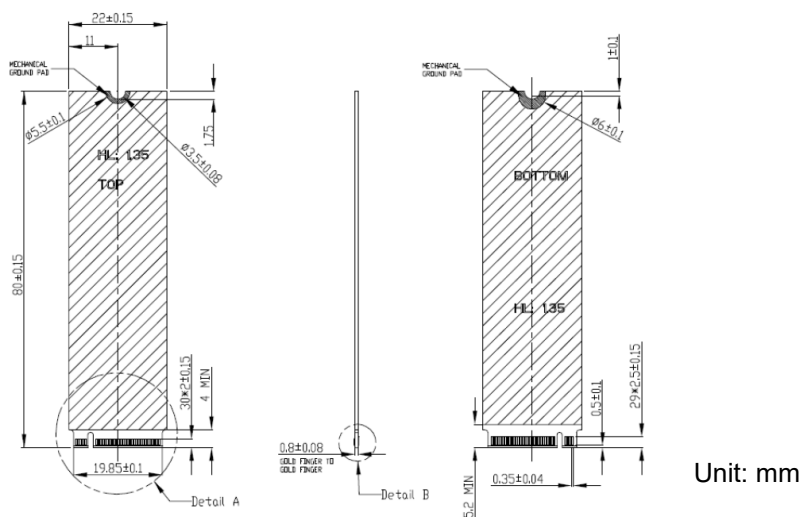
### Ordering Information

Operating Temp.	512GB	1TB	2TB	4TB
0°C to 70°C	IM2P41B8-512GCTB5	IM2P41B8-001TCTB5	IM2P41B8-002TCTB5	IM2P41B8-004TCTB5
-40°C to 85°C	IM2P41B8-512GITB5	IM2P41B8-001TITB5	IM2P41B8-002TITB5	IM2P41B8-004TITB5

**Specifications**

Model	IM2P41B8
Form Factor	M.2 2280
Capacity	512GB – 4TB
Interface	PCIe Gen4x4
Flash Type	112L 3D TLC
Dimensions (L x W x H)	80 x 22 x 3.6mm
Sequential Read (Max.)	7000MB/s
Sequential Write (Max.)	6500MB/s
Operating Temperature (Standard)	0°C to 70°C
Operating Temperature (Industrial)	-40°C to 85°C (*coming soon)
Operating Voltage	3.3V
Power Consumption (Max)	6.8W
Shock Resistance	1500G/0.5ms, Half Sine Wave
Operating Humidity	5%-95% RH, non-condensing
Vibration Resistance	20G (20-2000Hz)
Technologies	LDPC ECC, RAID Engine, Wear Leveling, SLC Cache, DRAM Buffer, TRIM command, Thermal Throttling, S.M.A.R.T. Monitor, AES 256-bit Data Encryption, TCG OPAL 2.0, End-to-End Data Path Protection, ESD Support (IEC/EN 61000-4-2 level 4)

**Diagram**



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