

M.2 2280 SSD

IM2P41F8



The ADATA IM2P41F8 PCIe Gen4x4 industrial-grade SSD is NVMe 2.0 compliant, features 218-layer 3D TLC NAND flash, and delivers excellent read/write performance and high capacities, as well as a 3K P/E cycle rating for exceptional durability. The IM2P41F8 supports Host Memory Buffer for improved random read/write performance. It is equipped with LDPC ECC, RAID Engine, and End-to-End Data Path Protection to ensure data transmission accuracy and integrity. Meanwhile, customers can benefit from ADATA's proprietary A+ IntelliManager software for easy management and real-time monitoring, and the drive also incorporates ADATA A+ Security data protection technology, supporting AES 256-bit encryption and TCG OPAL for comprehensive data security. Furthermore, through ADATA's rigorous SSD verification process, the IM2P41F8 is guaranteed to meet the stringent requirements of industrial applications. With high compatibility and durability, the IM2P41F8 is ideal for a wide range of applications such as edge computing, industrial (micro) computers and embedded systems, robotics, networking, smart healthcare, and compact PCs.

Features

- PCIe Gen4x4 for excellent read and write performance
- Supports NVMe 2.0
- 218-layer 3D TLC NAND flash for higher capacities, efficiency, and durability
- 3K P/E cycle rating for excellent durability
- Supports Host Memory Buffer
- AES 256-bit Data Encryption and TCG OPAL 2.0
- LDPC ECC, RAID Engine, and End-to-End (E2E) Data Path Protection
- Suitable for edge AI computing, industrial (micro) computers, embedded systems, robotics, networking, smart healthcare, and compact PCs

Ordering Information

Operating Temp.	256GB	512GB	1TB	2TB
0°C to 70°C	IM2P41F8-256GCTS8	IM2P41F8-512GCTS8	IM2P41F8-001TCTS8	IM2P41F8-002TCTS8

Model	IM2P41F8
Capacity	256GB – 2TB
Interface	PCIe Gen4x4
Flash Type	218-layer 3D TLC
Form Factor	M.2 2280
Dimensions (L x W x H)	80 x 22 x 2.25mm
Sequential Read (Max.)	7,100MB/s
Sequential Write (Max.)	6,600MB/s
Operating Temperature (Standard)	0°C to 70°C
Operating Voltage	3.3V
Power Consumption (Max.)	5.3W
Shock Resistance	1500G/0.5ms
Operating Humidity	5%-95 RH, non-condensing
Vibration Resistance	20G (20-2000Hz)
Technologies	AES 256-bit Data Encryption, TCG OPAL 2.0, LDPC ECC, RAID Engine, Wear Leveling, SLC Cache, TRIM command, Thermal Throttling, S.M.A.R.T. Monitor, Host Memory Buffer, End-to-end Data Path Protection, ESD Support (IEC/EN 61000-4 level 4)

[illegible]