ADATA®
INDUSTRIAL

Datasheet

M.2 2242 SSD

IM2P32A4



The ADATA M2P32A4 PCIe Gen3x4 industrial-grade SSD is NVMe 1.4 compliant, features 112-layer 3D TLC NAND flash, provides excellent read and write performance and high capacities as well as a 3K P/E cycle rating for excellent durability. What's more, the M2P32A4 supports Host Memory Buffer for improved random read and write performance, LDPC ECC (error correction code), RAID Engine, and End-to-End Data Path Protection technology for ideal data integrity. Furthermore, through ADATA's rigorous SSD verification process, the IM2P32A4 is guaranteed to meet the stringent requirements of industrial applications. With high compatibility and durability, the IM2P32A4 is ideal for a wide range of industrial applications such as automation, servers, data centers, networking, surveillance, and transportation.

Features

- PCIe Gen3x4 for excellent read and write performance
- Supports NVMe 1.4 and PCIe 3.1
- 112-layer 3D TLC NAND flash for higher capacities, efficiency, and durability
- 3K P/E cycle rating for excellent durability
- Supports Host Memory Buffer
- LDPC ECC, RAID Engine, and End-to-End (E2E) Data Path Protection
- Complies with ESD (Electrostatic Discharge) IEC/EN 61000-4-2 level 4 standard
- Suitable for automation, servers, data centers, networking, surveillance, and transportation

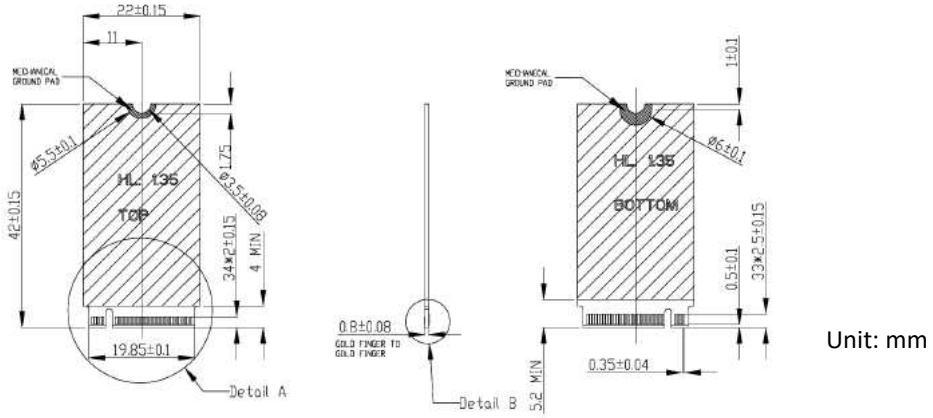
Ordering Information

Operating Temp.	128GB	256GB	512GB	1TB
0°C to 70°C	IM2P32A4-128GCTB5	IM2P32A4-256GCTB5	IM2P32A4-512GCTB5	IM2P32A4-001TCTB5

Specifications

Model	IM2P32A4
Form Factor	M.2 2242
Capacity	128GB – 1TB
Interface	PCIe Gen3x4
Flash Type	112L 3D TLC
Dimensions (L x W x H)	42 x 22 x 3.6mm
Sequential Read (Max)	3100MB/s
Sequential Write (Max)	1700MB/s
Operating Temperature (Standard)	0ºC to 70ºC
Operating Temperature (Industrial)	-40ºC to 85ºC
Operating Voltage	3.3V
Power Consumption (Max)	2.79W
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, TRIM command, Thermal Throttling, S.M.A.R.T. Monitor, End-to-end Data Path Protection, Host Memory Buffer, ESD Support (IEC/EN 61000-4-2 level 4)

Diagram



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