



ADATA Industrial & Embedded Solutions

M.2 SSD

The ADATA IM2S3168 M.2 2280 solid state drive utilizes 3D NAND flash to provide improved power efficiency and rugged reliability. It sports read/write speeds of up to 550/500MB per second, and with support for LDPC ECC technology, it can safeguard data integrity and maintain high performance. Support for multiple data protection technologies keep data safe, including SM4 algorithm, AES 256-bit encryption, TCG Opal 2.0, and E2E (End-to-End) data protection. ADATA’s SSD validation process ensures quality, compatibility, and reliability with functionality testing and reliability assurance. Furthermore, ADATA SSD Toolbox software provides intuitive SSD management, S.M.A.R.T. monitoring, and system optimization to enhance industrial systems.

Key Features

- P/E cycle upgrade to 3K – improved endurance and reliability
- 3D NAND Flash for higher capacity and durability
- Supports LDPC ECC Technology
- Supports SM4, AES 256-bit encryption, and TCG Opal
- Wide Temperature Support: -40°C to 85°C
- High capacity up to 1TB
- Supports DEVSLP for power efficiency



Target Applications

Server, Data Center, Surveillance, Transportation, Notebooks, Desktops

30μ Golden Finger	Anti-Sulfur Resistor	Conformal Coating	Wide Temperature	EDS & EMI Safe	Shock & Vibration Resistant	Lifetime Monitoring (LTM)	Wear Leveling	Secure Erase	TRIM	Low Power Consumption
●	—	—	●	●	●	●	●	●	●	●

● Supported

Specifications

Model	IM2S3168
Interface	SATA III 6.0Gbps
Form Factor	M.2 2280
Dimensions (L x W x H)	80 x 22 x 3.5mm
Flash Type	3D TLC
Capacity	64GB – 1TB
Sequential Read (Max.)	550MB/s
Sequential Write (Max.)	500MB/s
Operating Temperature (Commercial)	0°C to 70°C
Operating Temperature (Industrial)	-40°C to 85°C
Operating Voltage	3.3V
Operating Humidity	5%-95% RH non-condensing
Power Consumption (Max.)	1.58W
MTBF (Est)	>2,000,000 hours
Shock Resistance	1500G/0.5ms, Half Sine Wave
Vibration Resistance	20G (10-2000Hz)
Technologies	DEVSLP, LDPC ECC, SLC Cache, Data Shaping, E2E Data Protection, AES 256-bit Encryption, TCG Opal

Ordering Information

Capacity	Commercial (0°C to 70°C)	Industrial (-40°C to 85°C)
64GB	IM2S3168-064GD	IM2S3168-064GP
128TB	IM2S3168-128GD	IM2S3168-128GP
256GB	IM2S3168-256GD	IM2S3168-256GP
512GB	IM2S3168-512GD	IM2S3168-512GP
1TB	IM2S3168-001TD	IM2S3168-001TP



Dimensions

