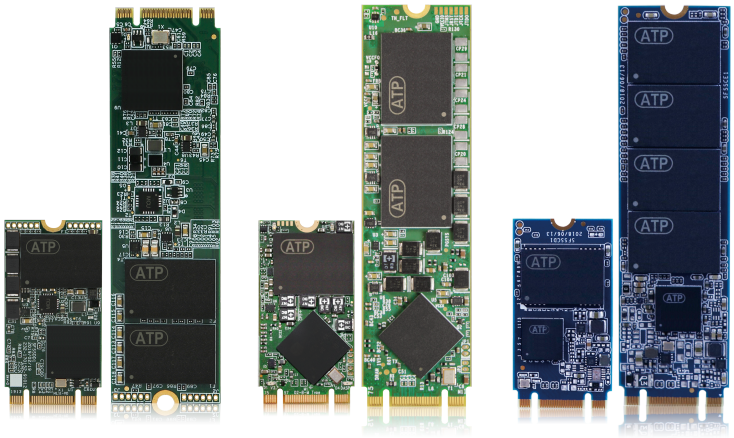
ATP M.2 SATA Industrial Grade

Targeted Product Portfolio, Engineered Specifically for Your Mission Critical Applications



Key Features

- MCU-based Power Loss Protection Design*
- LDPC & RAID Data Recovery
- End-to-End Data Protection
- TRIM / Global Wear Leveling support

* Customization available on a project basis

Applications

- Networking
- Thin clients
- Enterprise storage systems

ATP's M.2 Serial ATA (SATA) solid state modules are available in types 2242 and 2280. These lean modules provide higher performance and capacity while minimizing the overall module footprint, making them perfect choices for small systems installed in limited spaces.

Adopting the double-sided M.2 configuration, M.2 SATA SSDs are packed with high densities and can withstand severe temperature shifts common in industrial environments, thanks to wide operating temperature ratings of -40°C to 85°C.

ATP M.2 modules are suitable for networking and thin storage systems, point-of-sale systems (POS), and industrial computer applications. Select M.2 SATA SSDs feature a microcontroller unit (MCU) design for enhanced power loss protection (PLP) in various temperatures, power glitches and charge states, thus safeguarding data and storage device for higher levels of integrity and reliability.

Technologies & Add-On Services	S.M.A.R.T.	Hardware-based Power Loss Protection	Advanced Wear Leveling	AutoRefresh	Dynamic Data Refresh	Secure Erase	Industrial Temperature	Anti-Sulfur Resistors	Conformal Coating
Premium	●	●	●	●	●	●	●	Δ	Δ
Superior	●	●	●	●	●	●	Δ	Δ	Δ
Value	●		●	●	●				

Δ: Customization option available on a project basis.

Specifications

Product Name	M.2 2242 D2-B-M						
Product Line	Premium		Superior				Value
Naming	A800Pi	A700Pi	A600Si	A600Sc	A600Si	A600Sc	A600Vc
Flash Type	SLC	Pseudo SLC	MLC	MLC	TLC	TLC	TLC
Density	8 GB to 64 GB	80 GB to 160 GB	16 GB to 64 GB	16 GB to 64 GB	120 GB to 480 GB	120 GB to 480 GB	32 GB to 128 GB
Performance Sequential Read up to (MB/s)	530	560	440	440	560	560	560
Performance Sequential Write up to (MB/s)	400	520	80	80	440	440	420
Performance Random Read IOPS up to	76,000	84,500	38,400	38,400	100,000	100,000	68,000
Interface	SATA III 6 Gb/s						
Operating Temperature (Tcase)*	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	0°C to 70°C	-40°C to 85°C	0°C to 70°C	0°C to 70°C
Endurance TBW** (max.)	5,333 TB	6,400 TB	145.5 TB	174.6 TB	1,396 TB	1,396 TB	147.7 TB
Reliability MTBF @ 25°C	>2,000,000 hours						
Dimensions: L x W x H (mm)	42.0 x 22.0 x 3.5						42.0 x 22.0 x 3.2

Product Name	M.2 SATA			
	2280 D2-B-M			2280 S2-B-M
Product Line	Premium	Superior		Value
Naming	A700Pi	A600Si	A600Sc	A600Vc
Flash Type	Pseudo SLC	TLC	TLC	TLC
Density	80 GB to 320 GB	120 GB to 960 GB	120 GB to 960 GB	32 GB to 512 GB
Performance Sequential Read up to (MB/s)	560	560		560
Performance Sequential Write up to (MB/s)	520	440		440
Performance Random Read IOPS up to	94,000	100,000		72,000
Interface	SATA III 6 Gb/s			
Operating Temperature (Tcase)*	-40°C to 85°C	-40°C to 85°C	0°C to 70°C	0°C to 70°C
Endurance TBW** (max.)	12,800 TB	2,792 TB	2,792 TB	590.8 TB
Reliability MTBF @ 25°C	>2,000,000 hours			
Dimensions: L x W x H (mm)	80.0 x 22.0 x 3.5	80.0 x 22.0 x 3.35		80.0 x 22.0 x 2.2

* Case Temperature, the composite temperature as indicated by SMART temperature attributes.
** Under highest Sequential write value. May vary by density, configuration and applications.

To learn more about this product, contact your ATP Representative.

ATP Global Footprint

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