

ATP M.2 SATA

Embedded SSD

Targeted Product Portfolio, Engineered Specifically for Your Mission Critical Applications



ATP's M.2 Serial ATA (SATA) solid state modules are available in types 2242, 2260 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 with PowerProtector 4 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.

Key Features

- Global wear leveling
- TRIM function support
- Static Data Refresh and Idle Clean F/W algorithm
- Firmware live update
- PowerProtector
- MCU-based PowerProtector 4* By project support

Applications

- Networking
- Thin clients
- Enterprise storage systems

| Technologies & Add-On Services | | S.M.A.R.T. | PowerProtector | Advanced Wear Leveling | AutoRefresh | Dynamic Data Refresh | Secure Erase | Industrial Temperature | Anti-Sulfur Resistors | Conformal Coating |
|--------------------------------|----------|------------|----------------|------------------------|-------------|----------------------|--------------|------------------------|-----------------------|-------------------|
| Product Line | 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 | | | | 2260 D2-B-M | | | |
| Product Line | Premium | Superior | | Value | Premium | | Superior | |
| Naming | A800Pi | A600Si | A600Sc | A600Vc | A800Pi | A700Pi | A600Si | A600Sc |
| Flash Type | SLC | iTemp MLC | MLC | TLC | SLC | iTemp SLC mode | iTemp MLC | MLC |
| Density | 8 GB to 64 GB | 16 GB to 256 GB | | 32 GB to 128 GB | 32 GB to 128 GB | 64 GB to 256 GB | 64 GB to 512 GB | |
| Performance Sequential Read up to (MB/s) | 530 | 550 | | 450 | 530 | 550 | 550 | |
| Performance Sequential Write up to (MB/s) | 400 | 350 | | 220 | 430 | 440 | 450 | |
| Performance Random Read IOPS up to | 76,000 | 70,000 | | 61,000 | 76,000 | 73,000 | 70,000 | |
| Interface | SATA III 6 Gb/s | | | | | | | |
| Operating Temperature | -40°C to 85°C | -40°C to 85°C | 0°C to 70°C | 0°C to 70°C | -40°C to 85°C | | -40°C to 85°C | 0°C to 70°C |
| Endurance TBW* (max.) | 5,333 TB | 533 TB | 640 TB | 147.7TB | 10,677 TB | 8,533 TB | 1,067 TB | 1,280 TB |
| Endurance DWPD* (max.) | 77.9 | 2.9 | 3.5 | 1.6 | 77.9 | 46.8 | 2.9 | 3.5 |
| 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 | | 60.0 x 22.0 x 3.5 | | |

| Product Name | M.2 | | | | | |
|---|-------------------|----------------|-------------|--------------------|-------------|-------------------|
| | 2280 D2-B-M | | | | | 2280 S2-B-M |
| Product Line | Premium | Superior | | | Value | |
| Naming | A700Pi | A600Si | A600Sc | A600Si | A600Sc | A600Vc |
| Flash Type | iTemp SLC mode | iTemp MLC | MLC | iTemp 3D TLC | 3D TLC | TLC |
| Density | 64 GB to 512 GB | 128 GB to 1 TB | | 120 GB to 960 GB | | 32 GB to 128 GB |
| Performance Sequential Read up to (MB/s) | 550 | 550 | | 560 | | 450 |
| Performance Sequential Write up to (MB/s) | 440 | 450 | | 440 | | 220 |
| Performance Random Read IOPS up to | 73,000 | 70,000 | | 100,000 | | 61,000 |
| Interface | SATA III 6 Gb/s | | | | | |
| Operating Temperature | -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.) | 17,066 TB | 2,133 TB | 2,560 TB | 2,792 TB | | 147.7TB |
| Endurance DWPD* (max.) | 46.8 | 2.9 | 3.5 | 7.1 | | 1.6 |
| 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 |

* 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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