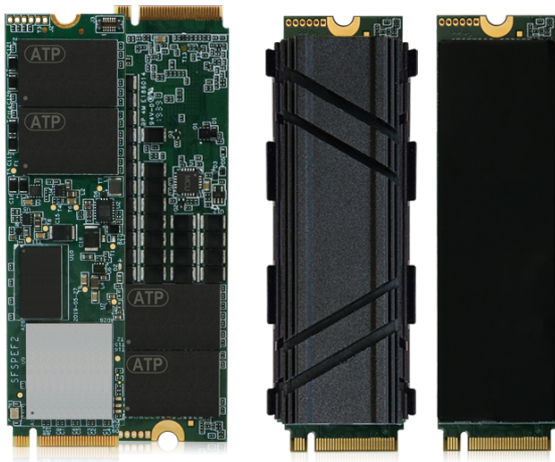




# ATP M.2 NVMe Embedded SSD

Targeted Product Portfolio, Engineered Specifically for Your  
Mission Critical Applications



M.2 solid state modules based on the NVMe™ protocol leverage the blazing-fast PCI Express® (PCIe®) interface to deliver dramatic improvements in speed and performance to fulfill the increasing demand for responsiveness in enterprise storage systems and to support the growing data-hungry needs of today's enterprise. Delivering 32 Gb/s bandwidth on a PCIe 3.0 x4 slot (8 Gb/s per lane), ATP NVMe SSDs outperform Serial ATA 6 Gb/s SSDs with 4-6X faster access, over 3X lower latency, and higher Input/Output per Second (IOPS). ATP NVMe SSDs with industrial operating temperature rating deliver stable performance even in extreme temperatures ranging from -40°C to 85°C, while Dynamic Thermal Throttling automatically adjusts the speed to maintain cooler operation under intense and heavy workloads.

Adopting NVMe 1.3 specifications and integrating 3D NAND TLC technology, ATP's M.2 2280 NVMe modules offer up to 1.92TB of memory capacity and deliver boosted performance with sequential read up to 3,280 MB/s, sequential write up to 3,050 MB/s, and random IOPS up to 211,200.

Designed to move past the limitations of mechanical drives, NVMe was specifically built from the ground up for faster, more efficient access to storage devices with non-volatile memory such as current NAND flash solutions and future non-volatile memory technologies. These SSDs can deliver fast, reliable and durable performance for any demanding application.

## Key Features

- Superior Read/Write performance
- LDPC & RAID Data Recovery for error correction
- Thermal Management Solutions\*
- Global wear leveling
- TRIM function support
- End-to End Data Protection
- MCU-based Power Loss Protection Design (May vary by product and project support.)

\* Customization available on a project basis

## Applications

- Networking
- Thin Clients
- Enterprise Storage Systems














## Specifications

| Product Name                   |                               | M.2 NVMe                      |               |
|--------------------------------|-------------------------------|-------------------------------|---------------|
|                                |                               | 2280-D2-M                     |               |
| Product Line                   |                               | Superior                      |               |
| Naming                         |                               | N600Si                        | N600Sc        |
| Flash Type                     |                               | TLC                           |               |
| Density                        |                               | 120 GB to 1920 GB             |               |
| Performance                    | Sequential Read up to (MB/s)  | 3,420                         |               |
|                                | Sequential Write up to (MB/s) | 3,050                         |               |
|                                | Random Read IOPS (4K, QD32)   | 225,200                       |               |
| Interface                      |                               | PCIe Gen3 Interface, x4 Lanes |               |
| Operating Temperature (Tcase)* |                               | -40 °C to 85 °C               | 0 °C to 70 °C |
| Endurance TBW** (max.)         |                               | 5,585 TB                      |               |
| Reliability MTBF @ 25 °C       |                               | >2,000,000 hours              |               |
| Dimensions: L x W x H (mm)     |                               | 80.0 x 22.0 x 3.5             |               |

\* Case Temperature, the composite temperature as indicated by SMART temperature attributes.

\*\* Under highest Sequential write value. May vary by density, configuration and applications.

| Technologies & Add-On Services |  S.M.A.R.T. |  TCG Opal 2.0 |  Advanced Wear Leveling |  AutoRefresh |  Dynamic Data Refresh |  Secure Erase |  Industrial Temperature |  Anti-Sulfur Resistors |  Conformal Coating |  End-to-End Data Protection |  Hardware-based Power Loss Protection |
|--------------------------------|--|--|--|---|--|--|--|---|---|--|--|
| Superior                       | ●  | Δ  | ●  | ●   | ●  | Δ  | ●  | Δ   | Δ   | ●  | ●  |

Δ: Customization option available on a project basis.

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

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Authorized Distributor

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