

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 without compromising performance.

Adopting NVMe 1.2 specifications and integrating 3D NAND MLC technology, ATP's M.2 2280 NVMe modules offer up to 1TB of memory capacity and deliver boosted performance with sequential read up to 2,540 MB/s, sequential write up to 1,100 MB/s, and random IOPS up to 100,000.

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
- Dynamic Thermal Throttling
- PCIe Gen3 Interface, x4 Lanes
- Global wear leveling
- TRIM function support

Applications

- Networking
- Thin Clients
- Enterprise Storage Systems



Specifications

| Product Name | | M.2 NVMe | |
|----------------------------|-------------------------------|-------------------------------|-------------|
| | | 2280-D2-M | |
| Product Line | | Superior | |
| Naming | | N600Si | N600Sc |
| Flash Type | | iTemp MLC | MLC |
| Density | | 128 GB to 1 TB | |
| Performance | Sequential Read up to (MB/s) | 2,540 | |
| | Sequential Write up to (MB/s) | 1,100 | |
| | Random Read IOPS (4K, QD32) | Up to 100,000 | |
| Interface | | PCIe Gen3 Interface, x4 Lanes | |
| Operating Temperature | | -40°C to 85°C | 0°C to 70°C |
| Reliability | TBW* (max.) | 1,280 TB | 1,536 TB |
| | DWPD* (max.) | 1.75 | 2.1 |
| | MTBF @ 25°C | >2,000,000 hours | |
| Dimensions: L x W x H (mm) | | 80.0 x 22.0 x 3.5 | |

* 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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