

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
Endurance	TBW* (max.)	1,280 TB	1,536 TB
	DWPD* (max.)	1.75	2.1
Reliability 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.

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
Product Line	Superior	●	Δ	●	●	●	Δ	●	Δ	Δ

Δ: Customization option available on a project basis.

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

ATP Global Footprint

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