

PCIe[®] Gen3 NVMe U.2 SSD

The Global Leader in Specialized Storage and Memory Solutions



Key Features

Thermal Management Solutions*

* Customization available on a project basis

- High-Capacity NVMe Drive
- LDPC & RAID Data Recovery
- End-to-End Data Path Protection
- S.M.A.R.T / TRIM / Global Wear Leveling
- Hot-swappable

ATP U.2 NVMe solid state drives (SSDs) support the NVMe[™] protocol on the high-speed PCI Express[®] (PCIe[®]) Gen3 x4 interface, with maximum capacity reaching 7.68 TB. The massive storage space is encased in a very lean footprint, making U.2 SSDs ideal for space-restricted systems, such as embedded industrial PCs, point-of-sale (POS), and networking systems.

When installed in enclosures with little or no airflow and constantly subjected to intense workloads under harsh conditions, these SSDs face overheating challenges. Multiple die stacking per integrated circuit (IC) and intensive components in the limited printed circuit board (PCB) space, especially for double-sided designs, also contribute to the overheating issue.

Available with ATP's Customizable Thermal Management Solution, these high-density thermal U.2 NVMe drives adopt both advanced firmware and hardware options, which include a thermal pad on the controller to effectively transfer heat from the device to the U.2 aluminum housing. This keeps the device cool and ensures sustained performance

Specifications

PCIe [®] Gen3 NVMe U.2 SSD									
Due due table e	Superior								
Product Line	N600Si								
Interface	PCIe G3 x4								
Flash Type	3D TLC								
Form Factor	2.5"								
Operating Temperature (Tcase) ¹	-40°C to 85°C								
Power Loss Protection Options	Hardware + Firmware Based								
Optional SED Features	AES 256-bit Encryption, TCG Opal 2.0								
Capacity	960 GB to 7.68 TB								
	Performance								
Sequential Read (MB/s) up to	3,100								
Sequential Write (MB/s) up to	1,400								
Random Reads IOPS up to	190,000								
Random Writes IOPS up to	168,000								
	Endurance and Reliability								
Endurance (TBW) ² up to	21,000 TB								
Reliability MTBF @ 25°C	>2,000,000 hours								
	Others								
Dimensions (mm)	100.0 x 69.85 x 7.0								
Certifications	RoHS, VCCI, CE, FCC								
Warranty	2 years								

Technologies & Add-On Services	S.M.A.R.T.	Firmware-based Power Loss Protection	Hardware-based Power Loss Protection	AutoRefresh	Advanced Wear Leveling	Dynamic Data Refresh	End-to-End Data Path Protection	ہ اِ-ْہٰ- اِجْ-ٰہٰ- Auto-Read Calibration	Secure Erase	C P TCG Opal 2.0	Dynamic Thermal Throttling	Industrial Temperature	Conformal Coating	Joint Validation
Superior	0	0	0	0	0	0	0	0	0	0	0	0		

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

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

▲: Customization option available on a project basis.

Product spec and its related information are subject to change without advance notice. Please refer to <u>www.atpinc.com</u> for latest information

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