PCIe® Gen4 NVMe U.2 SSD

The Global Leader in Specialized Storage and Memory Solutions

KEY FEATURES

- Endurance: 1 DWPD (5 years Enterprise workload)
- Sustained Write Performance: Up to 3,000 MB/s
- Data Retention: Up to 10 years at 55°C (pSLC)*
- Power Loss Protection: MCU-based* with data-at-rest and in-flight protection
- PLP Diag*(Self-Diagnosing Capacitor Check)

- Security: Self-Encrypting Drive (SED) with AES 256-bit Encryption, TCG Opal 2.0*
- End-to-End Data Path Protection
- 15 mm integrated fin-type heatsink enclosure

* May vary by product and project support

ATP U.2 SSDs support the NVMe™ protocol on the high-speed PCI Express® (PCIe®) Gen4 x4 interface. Capacities range from 320 GB to 7.68 TB and can either be I-Temp (-40°C to 85°C: N751Pi/N651Si) or C-Temp (0°C to 70°C: N651Sc) operable to meet the varied usage requirements of embedded/ industrial PCs, networking systems, and other function-critical segments.

The high-speed PCIe Gen 4 x4 interface offers twice the bandwidth of the previous generation, enabling the N751Pi/N651Si/N651Sc U.2 SSDs to transfer data faster. ATP's PCIe Gen 4 SSDs use x4 lanes for a maximum bandwidth of 8 GB/s.

The 15 mm fin-type heatsink design offers effective heat dissipation to ensure optimal sustained performance.

Specifications

Product Line	Premium	Superior
	N751Pi	N651Si / N651Sc
Interface	PCIe G4 x4	
Flash Type	3D TLC (pSLC mode)	3D TLC
Form Factor	U.2	
Operating Temperature	-40°C to 85°C	-40°C to 85°C / 0°C to 70°C
Power Loss Protection Options	Hardware + Firmware Based	
Optional SED Features	AES 256-bit Encryption, TCG Opal 2.0	
Capacity	320 GB to 2.56 TB	960 GB to 7.68 TB
Performance		
Sequential Read (MB/s) up to	6,100	6,000
Sequential Write (MB/s) up to	6,000	6,000
Random Reads IOPS up to	870,000	
Random Writes IOPS up to	1,250,000	1,230,000
Endurance and Reliability		
Endurance (TBW)[1] up to	486,000 TB	76,000 TB
Reliability MTBF @ 25°C	>3,000,000 hours	
Others		
Dimensions (mm)	100 x 69.85 x 15	
Certifications	RoHS, VCCI, CE, FCC, UKCA	CE, FCC, UKCA, VCCI, RoHS, REACH
Warranty	5 years	3 years

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

Technologies		S.M.A.R.T/ Life Monitor	PLP Diag	Industrial Temperature	Firmware-Based Power Loss Protection	Hardware-Based Power Loss Protection	Advanced Wear Leveling	AutoRefresh	Dynamic Data Refresh	Auto-Read Calibration	ETEDP	SED	Software Secure Erase
Premium	N751Pi	O	O	O	O	O	O	O	O	O	O	O	O
Superior	N651Si	O	O	O	O	O	O	O	O	O	O	O	O