



PCIe® Gen4 NVMe E1.S SSD

The Global Leader in Specialized Storage and Memory Solutions



KEY FEATURES

- PCIe Gen4 x4 interface
- E1.S 9.5 mm symmetric enclosure
- Industrial temperature operable
- Thermal Management Solution
- MCU-based Power Loss Protection Design with Level 4 (data-in-flight) protection
- Hot-pluggable/Hot-swappable

Built with 176-layer NAND and boasting an impressive 5,000+ program/erase (P/E) cycle endurance, ATP's E1.S SSDs are designed for optimal performance leveraging cutting-edge PCIe® interface and NVMe protocol technologies.

Engineered for 1U Edge servers, ATP's E1.S SSDs are designed for vertical placement in small-footprint systems, allowing up to 6 to 12 drives in a 1U chassis. They support hot swapping/hot plugging for easy serviceability and replacement of drives while the system is on.

High cross-temperature reliability translates to low bit errors and better transmission accuracy for higher data integrity.

Housed in a 9.5 mm symmetric enclosure, ATP's E1.S SSDs are a result of thermal management solutions. The enclosure features customized hardware and sustained performance firmware tuning, making it an ideal solution to meet the demanding requirements of hyperscale architecture.

Specifications

PCIe® Gen4 NVMe E1.S SSD	
Product Line	Superior
	N651Si
Interface	PCIe G4 x4
Flash Type	3D TLC
Form Factor	E1.S
Operating Temperature	-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~7,680 GB
Performance	
Sequential Read (MB/s) up to	6,100
Sequential Write (MB/s) up to	6,000
Random Reads IOPS up to	870,000
Random Writes IOPS up to	1,200,000
Endurance and Reliability	
Endurance (TBW) ¹ up to	14,000 TB
Reliability MTBF @ 25°C	>2,000,000 hours
Others	
Dimensions (mm)	118.75 x 33.75 x 9.5
Certifications	RoHS/VCCI/CE/FCC/UKCA
Warranty	5 years

1. The endurance calculation is based on JESD219A Enterprise workload.

Technologies & Add-On Services														
Superior	○	○	○	○	○	○	○	○	▲	▲	○	▲	▲	▲

▲: Customization option available on a project basis.

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

v1 022024

© Copyright 2024 ATP Electronics, Inc. All rights reserved.



The Global Leader in Specialized Storage and Memory Solutions

WE BUILD WITH YOU

ATP TAIWAN (HQ)

TEL: +886-2-2659-6368
sales-apac@atpinc.com

ATP USA

TEL: +1-408-732-5000
sales@atpinc.com

ATP EUROPE

TEL: +49-89-374-9999-0
sales-europe@atpinc.com

ATP JAPAN

TEL: +81-3-6260-0797
sales-japan@atpinc.com

ATP CHINA

TEL: +86-21-5080-2220
sales@cn.atpinc.com



Singel 3 | B-2550 Kontich | Belgium | Tel. +32 (0)3 458 30 33 | info@alcom.be | www.alcom.be
Rivium 1e straat 52 | 2909 LE Capelle aan den IJssel | The Netherlands | Tel. +31 (0)10 288 25 00 | info@alcom.nl | www.alcom.nl