

# AI100E M.2 SOLID STATE DRIVE

PRODUCT BROCHURE

PNY | PHISON

aiDAPTIV+

## Scaling Boundaries, Not Budgets



### EASE OF USE

aiDAPTIV+ allows you to spend more time training your data, not your team of engineers.



### COST AND ACCESSIBILITY

aiDAPTIV+ leverages cost-effective NAND flash to increase access to large-language model (LLM) training with commodity workstation hardware.



### PRIVACY

aiDAPTIV+ workstations allows you to retain control of your data and keep it on premises.

## HYBRID SOLUTION BOOSTS LLM TRAINING EFFICIENCY

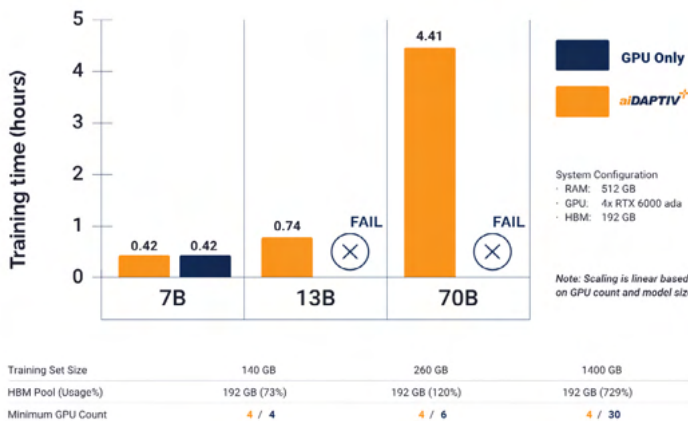
aiDAPTIV+ is a hybrid software / hardware solution for today's biggest challenges in LLM training. A single local workstation or server from one of our partners provides a cost-effective approach to LLM training, up to Llama-3 70B and Falcon 180B.

## DROP-IN SOLUTION FOR PYTORCH

Experience seamless integration with the benefits offered by this system. It features a transparent drop-in function that eliminates the need to modify your AI application. You can effortlessly reuse existing hardware or add nodes as needed. System integrators have access to AI100E SSD, middleware library licenses, and full support to facilitate smooth system integration.

## SEAMLESS INTEGRATION WITH GPU MEMORY

The optimized middleware extends GPU memory capacity by utilizing 2x 2TB aiDAPTIVCache to support a 70B model with low latency. Additionally, the high endurance feature offers an industry-leading 100 DWPD over 3 years, utilizing SLC NAND with an advanced NAND correction algorithm.



## UNLOCK LARGE MODEL TRAINING

Until aiDAPTIV+, small and medium-sized businesses have been limited to small, imprecise training models with the ability to scale beyond Llama-2 7b. aiDAPTIV+ solution enables significantly larger training models, giving you the opportunity to run workloads previously reserved for data-centers.

## PRODUCT INFORMATION

<b>PNY Part Number</b> (Drives sold in pairs*)	1TB: <b>M280AI3140-1TB-PB</b> 2TB: <b>M280AI3140-2TB-PB</b>
<b>Service &amp; Support</b>	3-Year Limited Warranty
<b>Usable Capacities (IDEMA)</b>	1TB, 2TB
<b>UPC</b>	1TB: 751492792002 2TB: 751492792019
<b>Box Dimensions</b>	5.67" x 2.03" x 0.50"
<b>Dimensions (L x W x H)</b>	22 x 80 x 4 mm (Max)
<b>Weight</b>	6.6g

## PRODUCT SPECIFICATIONS

<b>NAND Components</b>	3D Flash Memory
<b>Interface</b>	PCIe Gen 4 x4
<b>Form Factor</b>	M.2 2280

## PERFORMANCE (MAX SEQUENTIAL READ/WRITE)

1TB	7,200 MB/s (Read), 6,500 MB/s (Write)
2TB	7,000 MB/s (Read), 5,900 MB/s (Write)

## POWER

<b>PCIe Power Management</b>	APST, ASPM, L1.2
------------------------------	------------------

## ENVIRONMENTAL

<b>Operating Temperature</b>	0°C ~ 70°C
<b>Storage Temperature</b>	-40°C ~ 85°C

## RELIABILITY/SECURITY

<b>Mean Time Between Failures (MTBF)</b>	1,600,000 Hours
<b>Error Correction Code</b>	LDPC (Low Density Parity Check) ECC Algorithm
<b>Product Health Monitoring</b>	Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T)
<b>Full End-to-End Data path protection</b>	Supported
<b>Encryption</b>	TCG Pyrite

## COMPATIBILITY

<b>RAID 0</b>	Supported
<b>NVMe</b>	NVMe 1.4
<b>Performance Optimization</b>	TRIM (requires OS support)

FOR MORE INFORMATION:

Contact your PNY Account Manager or email [GOPNY@PNY.COM](mailto:GOPNY@PNY.COM) for more information.

\* Must be installed and operated in pairs in RAID 0.

PNY Technologies, Inc. 100 Jefferson Road, Parsippany, NJ 07054 | Tel 973-515-9700 | Fax 973-560-5590 | [WWW.PNY.COM/PNYPRO](http://WWW.PNY.COM/PNYPRO)

Features and specifications subject to change without notice. The PNY logo is a registered trademark of PNY Technologies, Inc. All other trademarks are the property of their respective owners. © 2024 PNY Technologies, Inc. All rights reserved.



ver. 07-26-24