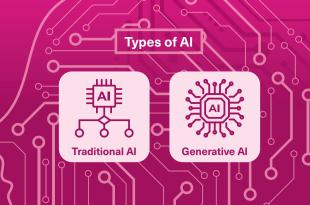
What is AI?

Al is technology that enables computer systems, using vast volumes of data, to perform tasks traditionally associated with human intelligence. Two prominent types are Traditional AI (respond to a set of inputs) and Generative AI (ability to create new data).



Al is compute and data intensive, and is poised to reshape our world and significantly benefit many industries and the environment.



Phases of Al and Storage Workload Requirements



In an Al system, there are phases that perform different Al functions, and have specific data workloads. These workloads put demands on core areas of the system, such as GPU, CPU, host memory and data storage. Data storage, typically SSDs and HDDs, must fulfill varied workload requirements.





Ingest

Importing vast

amounts of raw data



Preparing data into proper

formats for analysis, cleaning and validating



Training/Tuning

Processing through AI algorithms, evaluate results and refine for accuracy



Inference Model recognizes new

patterns and extrapolates conclusions



High capacity Low power

- Random reads
- · High sequential
- write throughput

High burst throughput

- Random reads Occasional large sequential
- writes during checkpoints Low latency
- Higher GPU utilization **Storage Requirements**

Mix of random reads and writes

- Quickly feed compute resources
- Reduce idleness

KIOXIA SSD Solutions for AI











Key Features / Specifications

PCle[®] 5.0, NVMe[™] 2.0 E1.S form factor

- 1 DWPD endurance Capacities up to 7.68 TB
- 2.5-inch form factor • 1, 3 DWPD endurances
 - · Capacities up to 15.36 TB

PCIe 4.0, NVMe 1.4

• 1, 3 DWPD endurances · Capacities up to

• PCle 5.0, NVMe 2.0

• E3.S, 2.5-inch form

30.72 TB

CM7 Series

- PCIe 5.0, NVMe 2.0
- Dual port • E3.S, 2.5-inch form
- 1, 3 DWPD endurances Capacities up to
- PCIe 5.0, NVMe 2.0 **Dual port** • 2.5-inch form factor

122.88 TB

0.3 DWPD endurance

Capacities up to

See what KIOXIA SSD solutions are available for your application at KIOXIA.com

Definition of capacity: KIOXIA Corporation defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = 2³⁰ bytes = 1,073,741,824 bytes and 1TB = 2⁴⁰ bytes = 1,099,511,627,776 bytes and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system, and/or pre-installed software applications, or media content. Actual formatted capacity may TRADEMARKS:

NOTES:

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