Intel® Optane™ persistent memory

The best of memory and storage in one solution

Intel Optane persistent memory is a unique combination of building blocks that deliver endurance, consistent high performance and low latency.

This technology retains data by storing data “bits” within the molecular structure of the material itself. It also keeps data close to the central processing unit when in use and retains it when powered off.

Intel Optane persistent memory is supported by a large ecosystem of partners, OEMs, OSVs, CSPs and ISVs.

Benefits

- Expands memory capacity at lower costs than DRAM
- Reduces input/output bottlenecks
- Enables faster data analysis
- Enables faster database restarts
- Retains data during power loss
- Bridges the gap between SSDs and DRAM

Fast facts

- Launched in April 2019
- Deployed or in proof of concept in 200 of the Fortune 500 companies
- More than 85% of companies moved from proof of concept to deployment

Workload

- By use case
  - Artificial intelligence
  - Analytics
  - Database
  - High performance computing
  - In-memory database
  - Virtualized infrastructure

- By industry
  - Cloud service provider
  - Comms. service provider
  - Education
  - Enterprise
  - Financial services industry
  - Government
  - Health sciences
  - Manufacturing

Ranking

Intel Optane persistent memory, in combination with Intel’s open-source distributed asynchronous object storage solution, defeated today’s best supercomputers and ranked No. 1 for file system performance worldwide.

For more information about the Intel Optane technology go to: intel.com/optane