



## Product Brochure

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## Intel® Optane™ Persistent Memory: Reimagine Your Data Center \*\*Unlock Unprecedented Performance and Efficiency with Intel® Optane™ Persistent Memory\*\* Tired of the performance bottlenecks caused by traditional DRAM limitations? Intel® Optane™ Persistent Memory (PMem) represents a revolutionary advancement in memory technology, bridging the gap between DRAM and storage to deliver groundbreaking speed and capacity for modern data-intensive workloads. \*\*Unleash the Power of Data-Centric Computing\*\* Intel® Optane™ PMem offers a unique combination of near-DRAM performance and the persistence of storage. Unlike DRAM, data remains intact even after power loss, eliminating the need for costly and time-consuming data reloading. This persistent memory provides unparalleled benefits for:

- \* \*\*In-Memory Databases:\*\* Dramatically accelerate database operations with significantly larger in-memory datasets, enabling real-time analytics and faster transaction processing. Ideal for financial services, e-commerce, and large enterprise applications.
- \* \*\*High-Performance Computing (HPC):\*\* Handle massive datasets in scientific simulations and research, reducing bottlenecks and accelerating discovery.
- \* \*\*Virtualization and Cloud Computing:\*\* Improve VM density and reduce application latency with optimized memory pooling and faster virtual machine restarts.
- \* \*\*Software-Defined Infrastructure (SDI):\*\* Enable intelligent data placement and management with persistent memory tiers, optimizing storage utilization and performance.

\*\*Key Features & Benefits:\*\*

- \* \*\*High Capacity:\*\* Available in modules up to 512GB, significantly expanding system memory capacity compared to traditional DRAM.
- \* \*\*Near-DRAM Performance:\*\* Delivers performance comparable to DRAM for many workloads, minimizing latency and maximizing throughput.
- \* \*\*Data Persistence:\*\* Ensures data integrity even during unexpected power outages, reducing recovery times and improving data availability.
- \* \*\*App Direct Mode:\*\* Allows applications to directly access and manage persistent memory, unlocking its full potential.
- \* \*\*Memory Mode:\*\* Expands the memory footprint of your system, utilizing DRAM as a cache for Optane™ PMem, enabling cost-effective scaling.

\*\*Competitive Advantage:\*\* Intel® Optane™ PMem offers a unique combination of performance, capacity, and persistence unmatched by traditional memory and storage solutions. Its ability to accelerate data-intensive workloads, reduce infrastructure costs, and improve data resilience makes it a

game-changer for businesses looking to gain a competitive edge in the data-driven era.  
\*\*Transform your data center with Intel® Optane™ Persistent Memory. Contact your Intel representative today to learn more.\*\*