Even as today’s mobile devices become sleeker and lighter, the demands on them continue to grow. Users require more capacity, performance, and reliability for their everyday productivity, creative content creation, and gaming needs. Users often work with large, complex images and videos, data-intensive spreadsheets, and graphics-rich presentations—and a smooth user experience requires higher performance and more storage capacity.

Multitasking mobile users require fast data access and efficient data storage for business and personal productivity. The performance capabilities of the revolutionary Intel® Optane™ memory H10 with solid state storage meet the high demands of professional, creative, gaming, and entertainment use in the office, at home, or on the go.

Fast Performance Plus High Capacity

Increased storage density enables higher capacity in a small footprint. Because Intel Optane memory H10 with solid state storage combines the power of Intel Optane memory media with NAND solid state drives (SSDs), users get the benefits of faster speeds and capacities up to 1 TB. Now, mobile users can have it all.

Intel Optane memory H10 helps ensure that you never have to choose between capacity and performance. This new device combines Intel Optane memory media with an Intel® quad-level cell (QLC) 3D NAND SSD on an M.2 2280 form factor designed to easily fit into modern thin and light mobile devices.
Intel Optane memory H10 takes a unique approach to handling and accelerating access to data using an intelligent caching algorithm that recognizes your most frequently used applications and data. It dynamically and automatically moves data from the NAND storage to the Intel Optane memory media for quick and reliable access.

The reliability of a NAND drive, coupled with the unique caching ability of Intel Optane memory H10, provides a significant performance boost for demanding applications and workloads.

Intel® Optane™ memory H10 with solid state storage is available in a variety of memory/storage capacities to meet different needs:

- 16 GB Intel Optane memory + 256 GB Intel® QLC 3D NAND technology
- 32 GB Intel Optane memory + 512 GB Intel QLC 3D NAND technology
- 32 GB Intel Optane memory + 1 TB Intel QLC 3D NAND technology

Benchmark Tests Show the Intel Optane Memory H10 Advantage

Benchmark testing performed by Prowess Consulting shows the impact of Intel Optane memory H10 for accelerating PC performance in the workplace.¹,² We used PCMark® 10 benchmark tests to compare Intel Optane memory H10 to an Intel SSD 760p triple-level cell (TLC) drive—selected because it is representative of typical mainstream NAND SSDs commonly found in modern devices—and noted performance while opening critical applications. We used PCMark Vantage HDD Suite tests to compare real-world workloads like multitasking and creating data-rich content. The test results are clear: Intel Optane memory H10 boosts performance where consumers need it most: application start-up, Windows® start-up, and while multitasking.

PCMark® 10 Results

The PCMark 10 benchmark suite provides useful insights into storage bandwidth by testing several critical areas, including application start-up, where Intel Optane memory H10 showed higher scores compared to the Intel SSD 760p reference drive.

App start-up time scores up to

6% Higher

than the Intel® SSD 760p on mobile devices¹
PCMark Vantage HDD Suite Results

The PCMark Vantage HDD Suite is a collection of synthetic test sets simulating real-world application usage. This benchmark also includes a specific test focusing on storage performance. Individual tests include simulations of business-related tasks and application loading workloads. Benchmark test results showed remarkable performance for mobile devices using Intel Optane memory H10, compared to the Intel SSD 760p reference drive.

Affordable Performance at High Capacities

By pairing a high-capacity NAND drive with Intel Optane memory, the Intel Optane memory H10 drive offers a unique and effective way to provide high performance where it’s needed most, while maintaining the benefits of high-capacity storage. High performance means mobile users see faster app start-up times and are able to seamlessly multitask.

Mobile users who are used to multitasking and undisrupted productivity expect fast data access. They are uncompromising when it comes to data storage and performance speed. That’s why they can benefit from the high-performance capabilities of Intel Optane memory H10 where and when it counts. Intel Optane memory H10 meets the high demands of professional creativity, everyday productivity, and gaming and entertainment.

Learn More


To learn more about Intel Optane memory H10, visit [www.intel.com/optanememory](http://www.intel.com/optanememory).
Prowess Consulting and commissioned by Intel. The software licenses involved belong to Intel and were used by permission for this testing and analysis.

Results have been simulated and are provided for informational purposes only. Any difference in system hardware or software design of configuration may affect actual performance.

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Software and workloads used in performance tests may have been optimized for performance only on Intel® microprocessors. Performance tests are measured using specific computer systems, components, software, operations, and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.

Performance results are based on testing by Prowess Consulting as of April 2019 and may not reflect all publicly available security updates. See configuration disclosure for details. No product or component can be absolutely secure.

Results have been simulated and are provided for informational purposes only. Any difference in system hardware or software design of configuration may affect actual performance.

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