HPE Synergy 480 Gen10 is the FIRST and #1 Composable Infrastructure Solution on the VMmark 3.0 Benchmark

Outstanding virtualization performance with 2-node configuration

Executive summary

With its outstanding score of 7.93 @ 8 tiles, the HPE Synergy 480 Gen10 Compute Module leads as the first and #1 Composable Infrastructure platform on the VMmark 3.0 benchmark. The system configuration included two servers with a total of four Intel® Xeon® Platinum processors (2P/2-node) running VMware® ESXi® 6.5 U2. This result is yet another proof point of the excellent virtual performance prowess of the HPE Synergy 480 Gen10.

Composable compute provides the greatest customer value

HPE Synergy Composable Compute resources create a pool of flexible compute capacity that can be configured almost instantly to rapidly provision infrastructure for a broad range of applications. The HPE Synergy 480 Gen10 Compute Module delivers an efficient and flexible two-socket workhorse to support most demanding workloads. The server offers up to 3 TB DDR4 memory, more storage capacity and controllers than its predecessor, and a variety of GPU options within a composable architecture. HPE Synergy 480 Gen10 Compute Module is the ideal platform for general-purpose enterprise workload performance now and in the future.

Secure server. HPE provides the most secure server with exclusive HPE Silicon Root of Trust. Customers can protect applications and assets against downtime associated with hacks and viruses.

Simplifies operations. The HPE Synergy 480 Gen10 Compute Module provides a composable compute resource that is intelligently discovered, provisioned easily, and managed seamlessly.

Composable. The Synergy 480 Gen10 Compute Module delivers more choices than the Gen9 Compute Module for performance, capacity, efficiency, and flexibility to power most workloads with support for the full range of Intel Xeon Scalable Family processors in a one-socket or two-socket form factor.

Adds flexibility. The flexible design supports stateless configuration or up to two local Small Form Factor (SFF) SATA/SAS or NVMe drives, two M.2 drives, or four uFF drives. The design includes NVMe PCIe workload acceleration, direct-attach composable storage to match requirements for demanding workloads, data protection, and data security.

Increases agility. With the HPE Synergy Composable Infrastructure, changes such as updating firmware, adding storage, or modifying network connectivity are implemented automatically through software-defined intelligence to reduce downtime, manual operations, and errors.

About VMmark 3.0

VMmark provides application-centric benchmarking of real-world workloads that represent highly scalable and complex applications commonly found in the data center. VMmark 3.0 generates a realistic measure of platform performance by incorporating a variety of platform-level workloads, such as shared nothing migration, virtual machine migration, clone and deploy, snapshotting, and storage migration operations, in addition to traditional application-level workloads.

Bottom line

With HPE engineering expertise and the HPE Synergy 480 Compute Module, an excellent virtualization performance result on the VMmark 3.0 benchmark is another proof point of merit for HPE Composable Infrastructure.

Key takeaways

- HPE Synergy 480 Gen10 Compute Module claims world record with the #1 Composable Infrastructure result on the VMmark 3.0 benchmark
- First Composable Infrastructure solution on the VMmark 3.0 benchmark

Server configurations:

- HPE Synergy 480 Gen10
  - Intel Xeon Platinum 8180 2.5 GHz processors, 2 processors, 2 sockets, 24 x 32 GB 2Rx4 DDR4 RDIMMs at 2666 MHz
  - Score: 7.93 @ 8 tiles

What’s new with the Synergy 480 Gen10 Compute Module:

- More customer choices for greater performance and flexibility with Intel Xeon Scalable Family of processors on the Synergy 480 Gen10 architecture
- Intelligent System Tuning with processor smoothing and workloads matching to improve processor throughput/overall performance up to 8% over previous generation
- Max memory 3 TB for larger in-memory database and analytical applications
- New hybrid Smart Array for both RAID and HBA zoning in a single controller and internal M.2 storage options that add boost flexibility and additional local storage capacity
- Improve the user experience in engineering and analytical applications with GPU expansion, supporting up to 768 concurrent knowledge worker density in a 10U rack space.

For more information:

HPE Synergy 480 Gen10:
  hpe.com/go/synergy
HPE Servers performance:
  hpe.com/servers/benchmarks

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1 Based on new silicon root of trust technology and other comprehensive security features, verified by InfusionPoints.

2 VMware® VMmark® is a product of VMware, Inc. The competitive benchmark claims are based on having the first and #1 Composable Infrastructure solution result with the HPE Synergy 480 Gen10 Compute Module on the VMmark 3.0 benchmark. Results published as of 08-16-2018. All VMmark disclosures available at vmware.com/products/vmmark/results3x.html.

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