



# HPE Synergy 480 Gen10 Compute Module

## Synergy Compute



---

### What's new

- The most secure server with exclusive HPE Silicon Root of Trust. Protect your applications and assets against downtime associated with hacks and viruses.
- More customer choice 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

### Overview

Are your data centers struggling to find the right balance of performance, flexibility, and density for traditional workloads.

Delivering an agile and efficient IT infrastructure requires the transformation of traditionally rigid physical systems into intelligent flexible physical or virtual resource pools. HPE Synergy Composable Compute resources creates a pool of flexible compute capacity that can be configured almost instantly to rapidly provision infrastructure for a broad range of applications.

improve processor throughput/overall performance up to 8% over previous generation.

- Max memory 3TB (with 128GB DIMMs available 2H17) for larger in-memory database and analytic applications.
- New hybrid Smart Array for both RAID and HBA zoning in a single controller; internal M.2 storage options that add boot 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.

The HPE Synergy 480 Gen10 Compute Module delivers an efficient and flexibility two-socket workhorse to support most demanding workloads. Powered by Intel® Xeon® Scalable Family of processors, up to 3TB DDR4, more storage capacity and controllers 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.

## Features

### Composable and Software Defined

The HPE Synergy 480 Gen10 Compute Module delivers more choice for performance, capacity, efficiency, and flexibility to power most workloads with support for the full range of Intel® Xeon® Scalable Family processors in a 1S or 2S form factor.

Composable compute resource that is intelligently auto-discovered, provisioned easily and managed seamlessly. Synergy Composability simplifies IT operations and reduces overprovisioning costs.

RESTful API and integration with an ecosystem of composable infrastructure partners provides broad options for 3rd party integration, protecting key existing investments.

### Ideal Performance for General Purpose Workloads

The HPE Synergy Gen10 Compute Module provides a 25% performance increase over previous generation with 1 or 2 processors (up to 205W).

11% increase in memory speeds with a wide range of memory sizes for Registered and Load Reduced DDR4 DIMMs.

2.5x increase in compute and network connectivity speed gets your data where it's needed faster.

Up to 50% performance improvement in random read IOPs in storage controllers.

Up to 768 concurrent knowledge workers in a 10U space with HPE Graphic Acceleration options and expansion modules to drive larger scale VDI workloads.

### Flexible and Secure

HPE Synergy 480 Gen10 Compute Module provides flexible enterprise solutions that allow IT to quickly and confidently implement changes through intelligent template-based operations, reducing downtime and errors from manual operations.

Unmatched threat protection with Hardware Root of Trust and unique chain of trust architecture to protect, detect and recover firmware.

Intelligent System Tuning to smooth performance and match customer workloads

Up to 3 mezzanine options with I/O flexibility for redundancy in high availability use case requirements.

Up to 200 zoned drives per storage controller and Hybrid RAID/HBA Smart Array to make your controller investment more effective.

## Technical specifications

## HPE Synergy 480 Gen10 Compute Module

<b>Processor number</b>	1 or 2
<b>Processor core available</b>	28 or 24 or 18 or 16 or 14 or 12 or 10 or 8 or 6 or 4
<b>Processor cache</b>	8.50 MB L3 11.00 MB L3 13.75 MB L3 16.50 MB L3
<b>Processor speed</b>	3.6 GHz
<b>Form factor chassis</b>	Compute module
<b>Power supply type</b>	6, frame-based
<b>Expansion slots</b>	3, for detail descriptions reference the QuickSpecs
<b>Maximum memory</b>	1.5 TB
<b>Memory slots</b>	24 DIMM slots
<b>Memory type</b>	HPE DDR4 SmartMemory
<b>Memory protection features</b>	Advanced ECC Memory Mirroring Mode Memory Online Spare Mode
<b>Drive description</b>	2 SFF SAS/SATA or 2 SFF NVMe (optional) or 2 M.2 SATA and 2 Dual uFF, hot-plug, depending on model
<b>System fan features</b>	Frame-based
<b>Network controller</b>	Synergy 6810C 25/50Gb Converged Network Adapter 2 Ports per controller or Synergy 3820C 10/20Gb Converged Network Adapter or Synergy 2820C 10Gb Converged Network Adapter There are more options. For all controller options, please see the QuickSpecs
<b>Warranty</b>	3/3/3 Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage. Additional information regarding worldwide limited warranty and technical support is available at: <a href="http://www.hpe.com/services/support">www.hpe.com/services/support</a> . Additional Hewlett Packard Enterprise support and service coverage for your product can be purchased locally. For information on availability of service upgrades and the cost for these service upgrades, refer to <a href="http://www.hpe.com/services/support">www.hpe.com/services/support</a> .
<b>Infrastructure management</b>	HPE Synergy Composer powered by HPE OneView, HPE iLO
<b>Processor</b>	Intel
<b>Processor family</b>	Intel® Xeon® Scalable 6100 series Intel® Xeon® Scalable 5100 series Intel® Xeon® Scalable 3100 series
<b>Form factor (fully configured)</b>	5U

---

**Additional resources**

**QuickSpecs**

[hpe.com/h20195/v2/GetDocument.aspx?](http://hpe.com/h20195/v2/GetDocument.aspx?docname=a00008520enw)

[docname=a00008520enw](http://hpe.com/h20195/v2/GetDocument.aspx?docname=a00008520enw)

## HPE Pointnext

**HPE Pointnext** leverages our breadth and depth of technical expertise and innovation to help to accelerate digital transformation. A comprehensive portfolio that includes—Advisory, Professional, and Operational Services is designed to help evolve and grow today and into the future.

### Operational Services

- **HPE Datacenter Care** offers a tailored operational support solution built on core deliverables. It includes hardware and software support, a team of experts to help personalize deliverables and share best practices, as well as optional building blocks to address specific IT and business needs.
- **HPE Flexible Capacity** is a new consumption model to manage on-demand capacity, combining the agility and economics of public cloud with the security and performance of on-premises IT.
- **HPE Foundation Care** helps when there is a hardware or software problem offering several response levels dependent on IT and business requirements.
- **HPE Proactive Care** is an integrated set of hardware and software support including an enhanced call experience with start to finish case management helping resolve incidents quickly and keeping IT reliable and stable.

**Advisory Services** includes design, strategy, road map, and other services to help enable the digital transformation journey, tuned to IT and business needs. Advisory Services helps customers on their journey to Hybrid IT, Big Data, and the Intelligent Edge.

**Professional Services** helps integrate the new solution with project management, installation and startup, relocation services, and more. We help mitigate risk to the business so there is no interruption when new technology is being integrated in the existing IT environment.

Call for availability:

[www8.hp.com/us/en/hpe/contact/sales.h](http://www8.hp.com/us/en/hpe/contact/sales.html)

[tml](http://www8.hp.com/us/en/hpe/contact/sales.html)



**Sign up for updates**

---

---

**Hewlett Packard  
Enterprise**

---

© Copyright 2017 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Intel® is a trademark of Intel Corporation in the U.S. and other countries.  
Xeon® is a trademark of Intel Corporation in the U.S. and other countries.

Image may differ from actual product  
PSN1010025863USEN, July 13, 2017.