

# HPE Synergy 480 Gen11 Compute Module



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## What's new

- It is powered by the 5th Generation Intel Xeon Scalable processors with modern technology that support up to 64 cores at 350W and 16 DIMMs for DDR5 memory at speeds up to 5600 MHz.
- Supports hot-pluggable, high-availability RAID M.2 boot options configured with two 480 GB NVMe drives built in that can reside with additional front storage options.
- Availability of multiple front storage drive options that are selectable at purchase, as well as field upgradable after the sale, including the 8 EDSFF NVMe E3.S Direct Connect Drive Cage Option.
- Support for PCIe Gen5, resulting in improved bandwidth, advanced data

## Overview

Are your data centers struggling to consolidate large workloads without compromising performance?

The HPE Synergy 480 Gen11 Compute module with 4th Generation Intel® Xeon® Scalable processors and 5th Generation Intel Xeon Scalable processors delivers exceptional performance, efficiency, and flexibility in a two-socket, half-height form factor to power demanding workloads. The compute module delivers more of everything with up to 64 cores, faster DDR5 memory, flexible storage controller options, and multiple I/O connectors. Designed to create a pool of flexible compute capacity within a composable infrastructure, the HPE Synergy 480 Gen11 Compute module is an ideal platform for enterprise workloads now and in the future.

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transfer rates, and higher network speeds from the PCIe Gen5 serial expansion bus.

- Includes HPE iLO 6 server management software that enables you to securely configure, monitor, and update your HPE Synergy 480 Gen11 Compute modules.

## Features

### **Intuitive Cloud Operating Experience: Simple, Self-Service, and Automated**

The HPE Synergy 480 Gen11 Compute module simplifies the way you control compute from edge to cloud with a cloud operating experience. Transform business operations and pivot your team from reactive to proactive with global visibility and insight through a unified console.

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

The module is a software-defined infrastructure with integrated HPE OneView for simplifying operations and management. RESTful API with an ecosystem of composable infrastructure provides broad options for third-party integration, protecting key existing investments.

The HPE Synergy 480 Gen11 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.

### **Customized Performance for your Workloads: Accelerated, Open, and Efficient**

The HPE Synergy 480 Gen11 Compute module provides a performance increase over previous generations with support for the 4th Generation of Intel Xeon Scalable processors and 5th Generation of Intel Xeon Scalable processors.

Increase memory speeds with a wide range of memory sizes for registered HPE DDR5 Smart Memory DIMMs.

PCIe 5.0 for improved compute-to-network connectivity speed gets your data where it's needed faster.

System tuning to select cores, smooth performance, and match customer workloads.

### **Trusted Security by Design: Uncompromising, Fundamental, and Protected**

The HPE Synergy 480 Gen11 Compute module utilizes the silicon root of trust from HPE, our fundamental approach to security that provides zero-trust architecture at the silicon level and helps ensure all server essential firmware is free from malware or compromised code.

This server, powered by Intel Xeon Scalable processors, adds hardware- and software-assisted security features, including Intel Software Guard Extensions and Intel Boot Guard, which secure the server hardware foundation on which critical apps run and better protect data in memory.

Continuously protect healthy servers by providing rapid detection of security-compromised servers, even to the point of not allowing them to boot if it identifies and contains malicious code, and secure servers at the edge with IDevID certificates installed by default.

The module provides automated recovery from a security event, including restoration of validated firmware, facilitating recovery of the operating system, application, and data connections, enabling a speedy path to bring a server back online and into normal operations.

From silicon to software, from factory to cloud, and from generation to generation, this module is engineered with a fundamental security approach to defend against increasingly complex threats through an uncompromising commitment to constant security advancements that are built into our DNA.



## Technical specifications

## HPE Synergy 480 Gen11 Compute Module

<b>Processor type</b>	Intel
<b>Processor number</b>	Up to 2 with Intel processor choice
<b>Processor core available</b>	up to 64 core solutions available
<b>Processor cache</b>	Up to 300 MB
<b>Processor speed</b>	Up to 3.7 GHz Frequency
<b>Form factor (fully configured)</b>	Frame 12000 - 10U, holds up to 12 half-height HPE Synergy 480 Compute modules
<b>Power supply type</b>	Up to 12, frame-based
<b>Expansion slots</b>	3 PCIe 5 mezzanine slots for multiple storage and networking solutions.
<b>Maximum memory</b>	Support for up to 8 TB of DDR5 memory (processor dependent)
<b>Memory slots</b>	32 DIMM slots (16 per processor)
<b>Memory type</b>	HPE DDR5 Smart Memory 5600 MT/s
<b>Memory protection features</b>	Advanced ECC Memory Mirroring Mode Memory Online Spare Mode
<b>Drive description</b>	Multiple drive cage options to cover: 2 SFF SAS/SATA/NVMe, 4 SFF SAS/SATA/NVMe, and 8 EDSFF NVMe E3.S Hardware RAID M.2 Boot Option w/ Dual 480 GB M.2 Boot drive included, or blank no drive cage for M.2 only solutions.
<b>System fan features</b>	Frame-based
<b>Compute nodes</b>	Half-Height 2 socket compute node
<b>Memory, standard</b>	DDR5
<b>Security</b>	HPE Trusted Platform Module 2.0 and silicon root of trust from HPE
<b>Infrastructure management</b>	HPE Synergy Composer powered by HPE OneView and HPE iLO Advanced (standard) with all HPE Synergy solutions.
<b>Product dimensions</b>	6.35 cm x 21.4 cm x 60.0 cm
<b>Weight</b>	8.16 kg
<b>Warranty</b>	3/3/3 server warranty includes three years of parts, three years of labor, and 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 HPE 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, visit <a href="http://www.hpe.com/services/support">www.hpe.com/services/support</a> .



For additional technical information, available models and options, please reference the [QuickSpecs](#)

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## HPE Services

No matter where you are in your transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From strategy and planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

### Consulting services

Experts can help you map out your path to hybrid cloud and optimize your operations.

### Managed services

HPE runs your IT operations, giving you unified control, so you can focus on innovation.

### Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources.

- HPE Complete Care Service: a modular service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals. All delivered by an assigned team of HPE experts.
- HPE Tech Care Service: the operational service experience for HPE products. The service provides access to product specific experts, an AI driven digital experience, and general technical guidance to help reduce risk and search for ways to do things better.

### Lifecycle Services

Address your specific IT deployment project needs with tailored project management and deployment services.

### HPE Education Services

Training and certification designed for IT and business professionals across all industries. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.

The Defective Media Retention (DMR) service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction. Comprehensive Defective Material Retention (CDMR) allows you to keep all data retentive components.

## HPE GreenLake

HPE GreenLake edge-to-cloud platform is HPE's market-leading as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model, on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please explore them [here](#).

Explore **HPE GreenLake**



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Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered hardware.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

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