HPE Synergy 480 Gen11 Compute Module



What's new

- Powered by the 4th Generation Intel® Xeon® Scalable processors with modern technology that support up to 56 cores at 350W and 16 DIMMs for DDR5 memory at speeds up to 4800 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

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 delivers exceptional performance, efficiency, and flexibility in a two-socket, half-height form factor to power demanding workloads. Gen11 delivers more of everything with up to 56 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

options that are selectable at purchase, as well as field upgradable after the sale.

- Support for PCIe Gen5, resulting in improved bandwidth, advanced data 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.

the ideal platform for enterprise workloads now and in the future.

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 software defined infrastructure with integrated HPE OneView for simplification of operations and management. RESTful API with an ecosystem of composable infrastructure provides broad options for 3rd 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 performance increase over previous generations with support for the 4th Generation of Intel® Xeon® Scalable processors.

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

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

HPE Synergy Expansion modules and GPU Options for factory or field installations are designed to support concurrent knowledge workers and larger scale analytic or VDI workloads.

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 is tied into the silicon root of trust and the Intel® Xeon® Scalable processor, a dedicated security processor embedded in the Intel Xeon system on a chip (SoC), to manage secure boot, memory encryption, and secure virtualization.

This module uses the silicon root of trust to anchor the firmware of an HPE ASIC, creating an immutable fingerprint for the Intel® Xeon® processor that must be matched exactly before the server will boot. This verifies malicious code is contained and healthy servers are protected.

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, and facilitating recovery of the operating system, application, and data connections, facilitating the fastest 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
Processor type	Intel
Processor number	Up to 2 with Intel processor choice
Processor core available	up to 56 core solutions available
Processor cache	Up to 105 MB
Processor speed	Up to 2.7 GHz Frequency
Form factor (fully configured)	Frame 12000 - 10U, holds up to 12 half-height Synergy 480 Compute Modules
Power supply type	6, frame-based
Expansion slots	3 PCIe 5 Mezzanine slots for multiple storage and networking solutions (details in QuickSpecs).
Maximum memory	Support for up to 8 TB of DDR5 memory (processor dependent)
Memory slots	32 DIMM slots (16 per processor)
Memory type	HPE DDR5 SmartMemory 4800 MT/s
Memory protection features	Advanced ECC Memory Mirroring Mode Memory Online Spare Mode
Drive description	Multiple Drive Cage Options to cover: 2 SFF SAS/SATA/NVMe, 4 SFF SAS/SATA/NVMe, 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.
System fan features	Frame-based
Compute nodes	Half-Height 2 socket compute node
Memory, standard	DDR5
Security	HPE Trusted Platform Module 2.0 and HPE Silicon Root of Trust
Infrastructure management	HPE Synergy Composer powered by HPE OneView and HPE iLO Advanced (standard) with all HPE Synergy solutions.
Product dimensions (imperial)	2.5 in. x 8.43 in. x 23.62 in.
Weight	18 lb
Warranty	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: www.hpe.com/services/support. 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 www.hpe.com/services/support.

For additional technical information, available models and options, please reference the QuickSpecs

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 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

Defective Media Retention is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

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**

Make the right purchase decision. Contact our presales specialists.

Call for availability

Chat now (sales)

Call now

Buy now

Share now

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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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