Data sheet

HPE ProLiant Compute ML350 Gen12

What's new

- Powered by Intel® Xeon® 6700 and 6500 series with P-cores; up to 86 P-cores per socket (172 P-cores per server), 350W (TDP); increased memory bandwidth to 6400 MT/s[2], up to 8TB DDR5 memory capacity.
- Supports ultra-high SSD performance with NVMe x4 and EDSFF drive cages, and allowing mixed dual-mode LFF and tri-mode SFF drive cages as hybrid storage optimization solution.
- Provides up to 24 NVMe drives with PCIe Gen5 x2 bandwidth to have maximum storage capacity with balanced performance solution.
- Includes HPE Integrated Lights-Out 7 (iLO 7) server management software that enables you to securely configure, monitor, and update your HPE ProLiant Compute Gen12 servers

Overview

Are you looking for our most flexible and powerful tower server for your SMB and remote offices?

The HPE ProLiant Compute ML350 Gen12 is a robust 2P tower server with optional rackable chassis for various environments, and delivers exceptional compute performance, security, reliability, and expandability.

Powered by latest Intel® Xeon® 6700/6500 P-series processors (up to 86 P-cores per socket), up to 8 TB DDR5 6400 memory, the HPE ProLiant Compute ML350 Gen12 server fulfills a wide range of demanding workloads.

The silicon root of trust anchors the server firmware to an HPE-exclusive ASIC, creating a fingerprint for the Intel® Xeon® 6700/6500 P-series processors that must be matched exactly before the server will boot.

The HPE ProLiant Compute ML350 Gen12 server is an excellent choice for diverse workloads such as IT infrastructure, data management, VDI, and ERP/CRM. Scale and adapt to any environment with this server and accelerate your growing business.

seamlessly from anywhere.

- Supports new NS204i-u V2 as hot-pluggable, high-availability, RAID1-protected M.2 NVMe boot option.
- Supports NVIDIA® L4 24GB Accelerator.

Features

Next-Level Security, Chip to Cloud

From silicon to software, from factory to cloud, and from generation to generation, HPE ProLiant Compute Gen12 is engineered with a fundamental security approach to defend against increasingly complex threats through an uncompromising commitment to constant security advancements.

Silicon root of trust from HPE, establishes a zero-trust security framework at the silicon level to ensure firmware integrity. Continuous protection detects compromised servers and prevents them from booting if malicious code is found. Edge servers are safeguarded with default IDevID certificates.

HPE ProLiant Compute servers provide automated recovery from a security event, including restoration of validated firmware, and facilitating recovery of operating system, application and data connections, providing the fastest path to bring a server back online and into normal operations.

Intel® Xeon® 6 processors add hardware- and software-assisted security features such as Intel® Software Guard Extensions (SGX) for application isolation and Trusted Domain Extensions (TDX) for VM Isolation, which help protect the server hardware foundation and safeguard data in memory.

HPE iLO 7 supports quantum-resistant (PQC) algorithms and signs HPE ProLiant Compute Gen12 firmware with algorithms approved by CNSA 2.0, which enhances resilience against potential future attacks by quantum computers.

Optimized Performance for your Workloads: Accelerated, Open, and Efficient

The HPE ProLiant Compute ML350 Gen12 server is an excellent choice for compute and data storage demanding workloads (AI, machine learning [ML], telco, DB analytics,) requiring high core count, GPU capabilities, and network and I/O bandwidth.

Harness major compute performance. The HPE ProLiant Compute ML350 Gen12 server is powered by Intel® Xeon® 6700P/6500P-series processors that support up to 86 P-cores (172 P-cores per server) at 350W TDP.

Enjoy advanced data transfer rates and higher network speeds from the PCIe Gen5 serial expansion bus, with up to 4 x16 PCIe Gen5 and 2 x16 OCP slots to improve I/O throughput and reduce latency.

Utilize 32 DIMM slots for up to 8 TB DDR5 memory with increased memory bandwidth and performance.

Intuitive Cloud Operating Experience: Simple, Self-service, and Automated

HPE ProLiant Compute ML350 Gen12 servers are engineered for your hybrid world. The new HPE ProLiant Compute Gen12 servers simplify the way you control your business's 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 self-service console.

Automate tasks for efficiency in deployment, instant scalability, and seamless, simplified support and lifecycle management reducing tasks and shortening maintenance windows.

These experiences are engineered and built into all HPE ProLiant Compute Gen12 servers, whether purchased as physical servers or consumed as-a-service using HPE GreenLake as your compute and storage demands grow.

Industry-leading Services and Ease of Deployment

The HPE ProLiant Compute ML350 Gen12 server comes with a complete set of HPE Services, delivering confidence, reducing risk, and helping customers realize agility and stability.

HPE Services simplify all stages of the IT journey. Advisory and Transformation Services professionals understand your challenges and design an effective solution. Professional Services enable rapid deployment of solutions and Operational Services provide ongoing support.

Services provided under Operational Services include: HPE Flexible Capacity, HPE Datacenter Care, HPE Infrastructure Automation, HPE Campus Care, HPE Proactive Services and multi-vendor coverage.

HPE IT investment solutions help you transform into a digital business with IT economics that align with your business goals.

Benefit from real-time operational feedback on server performance plus recommendations for fine-tuning BIOS settings to customize for changing business needs.

Technical specifications	HPE ProLiant Compute ML350 Gen12
Processor type	Intel
Processor family	Intel® Xeon® 6700 and 6500 series with P-cores
Processor core available	8 to 86 P-cores, depending on processor
Processor cache	Up to 336 MB L3, depending on processor.
Processor number	1 or 2
Processor speed	3.5 GHz, maximum depending on processor.
Maximum memory	8.0 TB with 256 GB DDR5 DIMM
Memory slots	32 DIMM slots
Memory type	HPE DDR5 Smart Memory
Memory protection features	Advanced ECC Memory Online Spare Mode Memory Lock Step Mode
Drive supported	Up to 12 LFF SAS/SATA drives or 24 SFF SAS/SATA/NVMe drives or 12 EDSFF NVMe SSD drives, depending on model.
Optical drive type	Optional DVD-ROM or DVD-RW. Refer to the QuickSpecs for more detail.
Security	UEFI Secure Boot and Secure Start support. Intel® Software Guard Extensions (SGX) support. Immutable Silicon Root of Trust. TPM (Trusted Platform Module) 2.0 support. Front bezel key-lock feature, Intrusion Cable (Optional), Padlock slot and Kensington Lock slot support.
Infrastructure management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download) HPE iLO Advanced, HPE OneView Advanced (require licenses), and HPE Compute Ops Management.
Power supply type	1 or 2 Flexible Slot Power Supply
Expansion slots	Up to 10[1] PCIe Gen5 and 2 OCP slots. Refer to the QuickSpecs for more detail.
Network controller	Choice of networking controllers with OCP type and standup form factor. Refer to the QuickSpecs for more detail.
Storage controller	Choice of storage controllers with OCP type (OROC) and standup form factor. Refer to the QuickSpecs for more detail.
System fan features	Default with 3 standard fans, non-hot-pluggable. Optional additional fan kits with 8 fans in total to provide hot-plug and N+1 redundancy. Refer to the QuickSpecs for more detail.
Form factor	4U Tower

Technical specifications	HPE ProLiant Compute ML350 Gen12
Warranty	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: https://support.hpe.com/hpesc/public/docDisplay?docId=sd00004309en_us. Additional HPE support and service coverage, to supplement the product warranty, is available. For more information, visit https://www.hpe.com/support.

Tertiary riser kit to support Slot 9/10 with PCIe Gen5 will be available in Q2, 2025.

The maximum memory speed is a function of the memory type, memory configuration, and processor model.

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.

Advisory & Professional 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.

Support 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.

— **HPE Multivendor Services:** Single point of accountability for managing on-site hardware and software support for multivendor products. HPE experts help manage your IT across technologies and platforms for HPE and non-HPE technologies, acting as the single point of contact for your IT operational needs.

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.

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

Visit HPE.com

Chat now

© Copyright 2025 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.

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.

Intel and Intel Xeon are trademarks of Intel Corporation in the U.S. and other countries. NVIDIA is a trademark and/or registered trademark of NVIDIA Corporation in the U.S. and other countries. All third-party marks are property of their respective owners.

Image may differ from the actual product.

PSN1014865657AUEN, October, 2025.

HEWLETT PACKARD ENTERPRISE

hpe.com