



HPE ProLiant Compute DL580 Gen12, powered by Intel Xeon 6

Modern data centers demand highly versatile and powerful servers capable of supporting data-intensive tasks. With its 4U form factor, the HPE ProLiant Compute DL580 Gen12 is ideal for organizations seeking a quad-socket, rack-optimized system with superior scalability for data-driven operations. It is equipped with the latest Intel® Xeon® 6 processors with up to 86 cores per socket, memory capacity of up to 16 TB, and high-speed PCIe Gen5, providing exceptional performance and scalability to handle a wide range of data-intensive workloads such as data analytics, Big Data, and SAP HANA®.

Built with a focus on security, performance, and efficiency, the HPE ProLiant Compute DL580 Gen12 comes equipped with advanced features such as HPE iLO 7 silicon root of trust technology to safeguard your critical data against cyberthreats. It offers a comprehensive suite of management tools, including HPE Compute Ops Management, which provide remote management capabilities, enabling IT administrators to manage and troubleshoot the server from anywhere, reducing downtime and operational costs. Whether you are looking to transform your data management or harness data-driven insights the HPE ProLiant Compute DL580 Gen12 delivers superior security, performance, and efficiency to support your business-critical applications and drive your IT initiatives forward.



HPE ProLiant Compute

Secured

Next-level security

Optimized

More performance and efficiency

Automated

AI-driven productivity

Next-level security, performance, and efficiency



Secured: Like all HPE ProLiant Compute Gen12 servers, the HPE ProLiant Compute DL580 Gen12 delivers next-level security with built-in, industry-leading HPE iLO silicon root of trust, to safeguard every phase of the server lifecycle now and for the future—from manufacturing to end of life.



Optimized: Designed for performance and efficiency, the HPE ProLiant Compute DL580 Gen12 delivers tailored solutions to power data-intensive workloads and allows you to harness superior scalability for diverse and demanding data-driven workloads with the economics and efficiency of a quad-socket, 4U rack-optimized system.



Automated: By combining the use of HPE ProLiant Compute DL580 Gen12 and HPE Compute Ops Management, you achieve smooth enterprise operations with proactive and predictive automation from data center to edge. Your operators are enabled to react quicker and gain greater control, from forecasting energy costs to managing a global server footprint. In addition, productivity of IT staff is boosted because they can quickly pinpoint problem areas through dashboards, intelligent alerts, and a global map view of all servers with status and activity.



HPE ProLiant Compute DL580 Gen12 specifications

Form factor	4U
Processors	Up to: Four (4) Intel Xeon 6 processors
I/O slots	Up to: 12x16 PCIe Gen5 (rear) 2x16 OCP slots
Memory	Up to: 16 TB of DDR5 up to 6400 MT/s
Storage	Up to 32x EDSFF or 32x SFF drives
Cooling	Air cooling with standard or performance heatsink and fan kit
Management	HPE iLO 7

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Intel Xeon 6 processors

Intel Xeon 6 processors are designed to address market needs for diverse performance and efficiency requirements. These new processors are available with performance cores (P-cores), allowing better optimization for user workloads while sharing a common platform foundation and shared software stack. Compute and general purpose workloads benefit from P-core processors, which are optimized for high performance.

Intel Xeon 6 processor specifications

	Intel Xeon 6700-Series Processors with P-Cores	Intel Xeon 6500-Series Processors with P-Cores
Ideal workloads	Enhanced performance, ideal for a wide array of data center and telco environments	Essential performance, ideal for mainstream server and edge environments
Total cores	Up to 86	Up to 32
Maximum turbo frequency	Up to 4.3 GHz	Up to 5.1 GHz
Base frequency	Up to 4.0 GHz	Up to 3.5 GHz
Cache	Up to 336 MB	Up to 144 MB
TDP	195W–350W	150W–225W



New generation HPE iLO 7

HPE ProLiant Compute Gen12 servers come equipped with HPE iLO 7, enabling you to securely manage and update the server. HPE iLO 7 has been enhanced for increased usability with an improved UI featuring workflow-based organization of functions, feature search capability, and simplified dashboards with real-time actionable data. Built atop the HPE iLO silicon root of trust, HPE iLO 7 features an additional layer of protection with secure enclave, an embedded security processor within the HPE iLO ASIC, helping ensure a highly controlled, tamper-resistant environment and mitigating vulnerabilities associated with external EEPROM storage.

HPE Services

HPE Services experts can help you plan, operate, and beyond, so you can adopt AI, accelerate edge-to-cloud transformation, optimize operations, and maximize IT investments.



Take the next step toward your data-driven future

The next-generation benefits of the new HPE ProLiant Compute DL580 Gen12, powered by Intel Xeon 6 processors, are within reach. Contact your authorized HPE representative to learn more today.

Learn more at

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