Hewlett Packard Enterprise HPE Support Center

HPE ProLiant DL380 Gen10 Plus Server - Overview

Product description

HPE ProLiant DL380 Gen10 Plus delivers world-class performance with the right balance of expandability and scalability. Designed for supreme versatility and resiliency while being backed by a comprehensive warranty make it ideal for multiple environments from containers to Cloud to Big Data. Standardize on the industry's most trusted compute platform.

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What's new

- Additional 3rd Generation Intel Xeon Scalable processors spanning Gold 6000 to Silver Models: 8 to 24 cores; 2.1 to 3.6 GHz base frequency, 105 W to 230 W TDP.
- Pre-Configured models added
- NVIDIA T4 16GB computational accelerator support.
- Support for PCIe Gen4, resulting in improved bandwidth and throughput over PCIe Gen3.
- Support for industry standard OCP 3.0 network adapters.
- Support for Trimodal (NVMe/SAS/SATA) smart array controllers.

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Product features

Feature	Description
Platform Information	
Form factor	2U rack
Chassis types	• 8SFF (SAS/SATA) with optional SFF universal media bay (P14609-B21), 8SFF midtray and/or up to 6SFF rear drive bay options. • 24SFF bay (SAS/SATA) with optional 8SFF midtray drives and/or up to 6SFF rear drive bay options to a total 38 SFF drives. • 8LFF with universal media bay (Standard), supporting 2SFF front, optional 8SFF midtray or 4LFF mid tray and up to 4LFF rear or 6SFF rear drive bay options. • 12LFF with optional 4LFF midtray and up to 4LFF rear for a total 20LFF drives.
System fans	Standard – Fan types included
Processors	**Up to 2 of the following depending on mode** The 2nd digit of the processor model number **x3xx** is used to denote the processor generation (i.e. 3=3rd generation Intel scalable series processors).

In der Tabelle suchen

Feature	Description

3rd Generation Intel Xeon Scalable Processor Family

Intel Xeon Models	CPU Frequency	Cores	L3 Cache (MB)	Power	UPI	DDR4	SGX Enclave size
Platinum 8352Y Processor	2.2 GHz	32	48MB	205 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8358 Processor	2.6 GHz	32	48MB	250 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8360Y Processor	2.4 GHz	36	54MB	250 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8368 Processor	2.4 GHz	38	57MB	270 W	3 @ 11.2 GT/s	3200 MT/s	512GB
Platinum 8380 Processor	2.3 GHz	40	60MB	270 W	3 @ 11.2 GT/s	3200 MT/s	512GB
Platinum 8358P Processor	2.6 GHz	32	48MB	240 W	3 @ 11.2 GT/s	3200 MT/s	8GB
Platinum 8352V Processor	2.1 GHz	36	54MB	195 W	3 @ 11.2 GT/s	3200 MT/s	8GB
Platinum 8351N Processor	2.4 GHz	36	54MB	225 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8352S Processor	2.2 GHz	32	48MB	205 W	3 @ 11.2 GT/s	3200 MT/s	512GB
Gold 6354 Processor	3.0 GHz	18	39MB	205 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6348 Processor	2.6 GHz	28	42MB	235 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6346 Processor	3.1 GHz	16	36MB	205 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6338N Processor	2.2 GHz	32	48MB	185 W	3 @ 11.2 GT/s	2667 MT/s	64GB
Gold 6338 Processor	2.0 GHz	32	48MB	205 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6330N Processor	2.2 GHz	28	42MB	165 W	3 @ 11.2 GT/s	2667 MT/s	64GB
Gold 6330 Processor	2.0 GHz	28	42MB	205 W	3 @ 11.2 GT/s	2933 MT/s	64GB
Gold 6326 Processor	2.9 GHz	16	24MB	185 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6342 Processor	• 2.8 GHz • 2.4 GHz	• 24 • 24	36MB	• 230 W • 185 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6336Y Processor	• 2.9 GHz • 3.1 GHz	• 12 • 8	36MB	150 W	3 @ 11.2 GT/s	3200 MT/s	64GB

Feature	Description

3rd Generation Intel Xeon Scalable Processor Family

Intel Xeon Models	CPU Frequency	Cores	L3 Cache (MB)	Power	UPI	DDR4	SGX Enclave size
Gold 6334 Processor	3.6 GHz	8	18MB	165 W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6314U Processor	2.3 GHz	32	48MB	205 W	N/A	3200 MT/s	64GB
Gold 6312U Processor	2.4 GHz	24	36MB	185 W	N/A	3200 MT/s	64GB
Gold 5320 Processor	2.2 GHz	26	39MB	185 W	3 @ 11.2 GT/s	2933 MT/s	64GB
Gold 5318Y Processor	• 2.1 GHz • 1.9 GHz • 2.0 GHz	• 24 • 24 • 22	36MB	• 165 W • 150 W • 150 W	3 @ 11.2 GT/s	2933 MT/s	64GB
Gold 5318S Processor	• 2.1 GHz • 1.9 GHz • 2.0 GHz	• 24 • 24 • 22	36MB	• 165 W • 150 W • 150 W	3 @ 11.2 GT/s	2933 MT/s	512GB
Gold 5318N Processor	• 2.1 GHz • 2.0 GHz	• 24 • 20	36MB	• 150 W • 135 W	3 @ 11.2 GT/s	2667 MT/s	64GB
Gold 5317 Processor	3.0 GHz	12	18MB	150 W	3 @ 11.2 GT/s	2933 MT/s	64GB
Gold 5315Y Processor	• 3.2 GHz • 3.2 GHz • 3.4 GHz	• 8 • 6 • 4	12MB	• 140 W • 125 W • 115 W	3 @ 11.2 GT/s	2933 MT/s	64GB
Silver 4316 Processor	2.3 GHz	20	30MB	150 W	2 @ 10.4 GT/s	2667 MT/s	8GB
Silver 4314 Processor	2.4 GHz	16	24MB	135 W	2 @ 10.4 GT/s	2667 MT/s	8GB
Silver 4310 Processor	2.1 GHz	12	18MB	120 W	2 @ 10.4 GT/s	2667 MT/s	8GB
Silver 4309Y Processor	• 2.8 GHz • 2.6 GHz • 2.3 GHz	• 8 • 8 • 8	12MB	• 105 W • 95 W • 85 W	2 @ 10.4 GT/s	2667 MT/s	8GB

Chipset	Intel C620A Chipset C620A series PCH Lewisburg (LBG-R)
On system management chipset	HPE iLO 5 ASIC
Memory	One of the following depending on model.

Feature	Description

Type	HPE DDR4 SmartMemory, Registered Dual In-line Memory Module (RDIMM)
Dual In-line Memory Module (DIMM) slots available	32, 16 DIMM slots per processor, 8channels per processor, 2 DIMMs per channel
Maximum capacity Load Reduced Dual In-line Memory Module (LRDIMM)	8.0TB, 32 x 256GB LRDIMM - 3200 MT/s
Maximum capacity (RDIMM)	2.0TB, 32 x 64GB RDIMM - 3200 MT/s
Maximum capacity (Intel Optane Persistent Memory for HPE)	8.0TB, 16 X 512GB memory modules

Expansion slots

Primary Riser

In der Tabelle suchen

Slot no.	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
Primary riser 1					
1	PCIe 4.0	X8	X16	Full-height, full-length slot	Proc 1
2	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 1
3	PCIe 4.0	X8	X16	Full-height, full-length slot	Proc 1
Primary riser 2					
1	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 1
2	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 1
3	NA	NA	NA	NA	NA
Primary riser 3					
1[1]	NA	NA	NA	NA	NA
1	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 1
2	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 1
3	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 1

NOTE: 1. Default slot1 on the primary riser3 is empty and not available. It requires P14600-B21 in conjunction with the primary riser3 to add additional x16 PCIe Gen4 in slot1.

Secondary Riser

In der Tabelle suchen

Slot no.	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
Secondary Riser1					
4[1]	PCIe 4.0	X8	X16	Full-height, full-length slot	Proc 2
5	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 2
6	PCIe 4.0	X8	X16	Full-height, full-length slot	Proc 2
Secondary Riser2					
4	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 2
5	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 2
6	NA	NA	NA	NA	NA

Feature **Description**

Slot no.	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
Secondary Riser3					
4	NA	NA	NA	NA	NA
4	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 2
5	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 2
6	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 2

NOTE: 1. Default slot4 on the secondary riser3 is empty and not available. It requires P14600-B21 in conjunction with the secondary riser3 to add additional x16 PCIe Gen4 in slot4.

Tertiary Riser

Slot no.	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
Tertiary Riser1					
7	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 2
8	NA	NA	NA	NA	NA
Tertiary Riser2					
7	PCIe 4.0	X8	X16	Full-height, full-length slot	Proc 2
8	PCIe 4.0	X8	X16	Full-height, full-length slot	Proc 2

Graphics

Integrated video standard

- Video modes up to 1920 x 1200-60 Hz (32 bp)
- 16MB video memory

HPE iLO 5 on system management memory

- 32MB Flash
- 4Gbit DDR 3 with ECC protection

Maximum internal storage

Drive	Capacity	Configuration
Hot-Plug SFF SAS HDD	459TB	24+8+4 x 15.3TB[1] (With optional rear SFF drive cage)
Hot-Plug SFF SATA HDD	230.4TB	24+8+4 x 7.68TB (With optional SFF drive cage)
Hot-Plug LFF SAS HDD	349.68TB	12+4+4 x 18TB + 2 x 3.84TB (With optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot-Plug LFF SATA HDD	349.68TB	12+4+4 x 18TB + 2 x 3.84TB (With optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot-Plug SFF NVMe PCIe SSD	307.2TB	24+8+2 x 15.36TB NVMe

NOTE: 1. UFF drives are also supported

Internal storage devices

One of the following depending on model:

- **Optical Drive:**
  - Ships standard in performance models
  - Optional: DVD-ROM, DVD-RW
- **Hard Drives:**
  - None ship standard

Power supply

- HPE 800 W flex slot Platinum hot plug low halogen power supply kit.
- HPE 1600 W flex slot Platinum hot plug low halogen power supply kit.

Feature	Description
Storage controllers	One of the following depending on model: **Software RAID** • HPE Smart Storage SR100i Gen10 Plus SW RAID • Intel Virtual RAID on CPU (Intel VROC)
Essential RAID controller	• HPE Smart Array E208i-a SR Gen10 controller • HPE Smart Array E208i-p SR Gen10 controller • HPE Smart Array E208e-p SR Gen10 controller
Performance RAID controller	• HPE Smart Array P408i-a SR Gen10 controller • HPE Smart Array P408i-p SR Gen10 controller • HPE Smart Array P408e-p SR Gen10 controller • HPE Smart Array P816i-a SR Gen10 controller
Tri-Mode controller	• HPE MR416i-p Gen10 Plus controller • HPE MR416i-a Gen10 Plus 12G controller • HPE MR216i-p Gen10 Plus 12G controller • HPE MR216i-a Gen10 Plus 12G controller • HPE SR932i-p Gen10 Plus controller
Interfaces	**Serial**: Optional, rear **Display port**: 1 Standard on both SFF and LFF chassis, front **VGA port**: 1 Standard, rear. Optional front VGA via universal media bay, P14609-B21 **Network ports**: None standard. Choice of OCP networking card or stand-up networking card required. BTO models will come pre-selected with a primary OCP networking card. **HPE iLO remote management network port**: 1Gb Dedicated, rear **Front iLO service port**: 1 Standard (Not available on 12 LFF chassis or when SID is ordered, note iLO dongle required. Hewlett Packard Enterprise recommends the HPE USB to Ethernet adapter (Part number Q7Y55A).) **Micro SD slot**: 1 Micro SD - The Micro SD slot is not a hot-pluggable device. Users should not attempt to plug an SD card into the SD slot while the server is powered **USB 3.0**: Up to 5 total: 1 front, 2 rear, 2 internal (Secure), 2 optional USB 2.0 front via universal media bay or standard on 8LFF chassis **Systems Insight Display (SID)**: Optional - Not shipping as standard. Available as a CTO option or as a field upgrade (P27096- B21)
HPE server Unified Extensible Firmware Interface (UEFI)/legacy ROM	UEFI is an industry standard that provides better manageability and more secured configuration than the legacy ROM while interacting with users server at boot time. HPE ProLiant Gen10 servers have a UEFI Class 2 implementation and support both UEFI mode (Default) and legacy BIOS mode. **UEFI enables numerous new capabilities specific to HPE ProLiant servers such as:** • Secure boot and secure start enable for enhanced security • Embedded UEFI Shell • Operating System (OS) specific functionality • Mass configuration deployment tool using iLO RESTful API that is Redfish API conformant • Support for > 2.2TB (Using GPT) boot drives • PXE boot support for IPv6 networks • USB 3.0 stack • Workload Profiles for simple performance optimization **UEFI boot mode only:** • TPM 2.0 support • iSCSI software initiator support • NVMe boot support • HTTP/HTTPs boot support as a PXE alternative • Platform Trust Technology (PTT) can be enabled • Boot support for option cards that only support a UEFI option ROM.
Industry standard compliance	• ACPI 6.3 compliant • PCIe 4.0 compliant • WOL support • Microsoft logo certifications • PXE support

Feature	Description
	• VGA/Display port • USB 3.0 compliant (Internal) • USB 2.0 compliant (External ports via SUV) • Energy star • SMBIOS 3.2 • Redfish API • IPMI 2.0 • Secure digital 4.0 • TPM 1.20 and 2.0 support • Advanced Encryption Standard (AES) • Triple Data Encrytion Standard (3DES) • SNMP v3 • TLS 1.2 • DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP) • Active directory v1.0 • ASHRAE A3/A4 • EU Lot9 • UEFI 2.6
Embedded management	• HPE Integrated Lights-Out (HPE iLO) • UEFI • Intelligent provisioning • iLO RESTful API
Server utilities	• Active Health System • Active Health System Viewer • Smart update • iLO amplifier pack • HPE iLO mobile application • RESTful interface tool • Scripting tools • HPE OneView standard • HPE Systems Insight Manager (HPE SIM)
Security	• UEFI secure boot and secure start support • Tamper-free updates – Components digitally signed and verified • Immutable silicon root of trust • Ability to rollback firmware • FIPS 140-2 validation • Secure erase of NAND/User data • Common criteria certification • Trusted Platform Module (TPM) 1.2 option • Configurable for PCI DSS compliance • TPM 2.0 option • AES and 3DES on browser • Bezel locking kit option • Support for Commercial National Security Algorithms (CNSA) • Chassis intrusion detection option • Secure recovery – Recover critical firmware to known good state on detection of compromised firmware
Server management	• HPE iLO Advanced • HPE OneView Advanced • HPE InfoSight for Servers • HPE Insight Cluster Management Utility (CMU)

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Software overview

Feature	Description
OS and virtualization software support	• 3rd Generation Intel Xeon Scalable Processor Family • Windows Server 2019: Essentials, Standard, Datacenter • Windows Server 2016: Essentials, Standard, Datacenter • Microsoft Hyper-V Server: 2016 and 2019 • VMware vSphere 6.7 U3 with P03, 7.0 U1, 7.0 U2 • Red Hat Enterprise Linux (RHEL) 7.9 & 8.2 – Includes KVM • SUSE Linux Enterprise Server (SLES) 12 SP5, 15 SP2 (Includes Xen and KVM)

Feature	Description
	• Ubuntu 20.04 LTS

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Link to product specification

Click here to view the specifications page .

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Link to warranty information

Click here to check the warranty status .

Click here for detailed information regarding worldwide limited warranty and technical support .

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Link to QuickSpecs

Information for this Overview is taken from the product QuickSpecs. To access the complete QuickSpecs for this product, select the desired link from the following list:

- Click here to access the HPE ProLiant DL380 Gen10 Plus Server Worldwide QuickSpecs in html format .
- Click here to access the HPE ProLiant DL380 Gen10 Plus Server Worldwide QuickSpecs in pdf format .

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