

HPE ProLiant DL360 Gen10

1U rack server, dual Intel Xeon Scalable, 24 x DDR4, iLO 5

FORM FACTOR	SOCKETS	MEMORY	DRIVE BAYS	MANAGEMENT
1U rack	2 x LGA3647	24 x DDR4	4, 8 or 10	iLO 5

Overview

Refurbished HPE ProLiant DL360 Gen10 1U rack servers, tested and stocked in Doha, with dual Intel Xeon Scalable processors, 24 DDR4 DIMM slots and 4, 8 or 10 front bays, delivered across Qatar within a day.

The DL360 Gen10 is HPE's dual-socket 1U server, released in 2017 alongside the DL380 Gen10 and the direct equivalent of the Dell R640. It runs two Intel Xeon Scalable processors, 24 memory slots and up to 10 small-form-factor drives in a single rack unit, with iLO 5 management. It is the server most HPE shops standardise on for virtualisation hosts, database nodes and web tiers, and refurbished units are plentiful because so many were sold. Every part of it, from Smart Carriers to Flex Slot power supplies, is still readily available.

Chassis options

The DL360 Gen10 shipped in three front-bay layouts. The base chassis (SFF or LFF) is fixed at the factory, but an 8 SFF unit can often take a 2 SFF bay in the optical slot to reach 10.

CHASSIS	FRONT BAYS	DRIVE TYPES	TYPICAL USE
4 LFF	4	SAS, SATA	Bulk capacity, backup targets, file servers
8 SFF	8	SAS, SATA, SSD	General virtualisation and application hosts
10 SFF	10	SAS, SATA, SSD, NVMe with the NVMe backplane	All-flash databases, VDI, vSAN nodes

An optional rear 1 SFF or 2 SFF cage and an M.2 riser keep the operating system off the front bays.

Processors

The DL360 Gen10 takes first-generation (Skylake-SP, 2017) and second-generation (Cascade Lake, 2019) Intel Xeon Scalable processors in two LGA3647 sockets. Second-generation CPUs need System ROM v2.00 or later and unlock 2933 MT/s memory. Both CPUs in a system must be identical. The list below covers the SKUs most commonly found in refurbished units; the platform supports the full range up to 28 cores.

Second-generation Xeon Scalable (Cascade Lake)

PROCESSOR	CORES	BASE CLOCK	TDP	MEMORY SPEED
Xeon Silver 4210	10	2.2 GHz	85 W	2400 MT/s
Xeon Silver 4214	12	2.2 GHz	85 W	2400 MT/s
Xeon Silver 4216	16	2.1 GHz	100 W	2400 MT/s
Xeon Gold 5218	16	2.3 GHz	125 W	2666 MT/s
Xeon Gold 5220	18	2.2 GHz	125 W	2666 MT/s
Xeon Gold 6230	20	2.1 GHz	125 W	2933 MT/s
Xeon Gold 6238	22	2.1 GHz	140 W	2933 MT/s
Xeon Gold 6240	18	2.6 GHz	150 W	2933 MT/s
Xeon Gold 6248	20	2.5 GHz	150 W	2933 MT/s
Xeon Gold 6252	24	2.1 GHz	150 W	2933 MT/s
Xeon Platinum 8260	24	2.4 GHz	165 W	2933 MT/s
Xeon Platinum 8268	24	2.9 GHz	205 W	2933 MT/s
Xeon Platinum 8280	28	2.7 GHz	205 W	2933 MT/s

First-generation Xeon Scalable (Skylake-SP)

PROCESSOR	CORES	BASE CLOCK	TDP	MEMORY SPEED
Xeon Silver 4110	8	2.1 GHz	85 W	2400 MT/s
Xeon Silver 4114	10	2.2 GHz	85 W	2400 MT/s
Xeon Silver 4116	12	2.1 GHz	85 W	2400 MT/s

HPE ProLiant DL360 Gen10

1U rack server, dual Intel Xeon Scalable, 24 x DDR4, iLO 5

PROCESSOR	CORES	BASE CLOCK	TDP	MEMORY SPEED
Xeon Gold 5118	12	2.3 GHz	105 W	2400 MT/s
Xeon Gold 5120	14	2.2 GHz	105 W	2400 MT/s
Xeon Gold 6130	16	2.1 GHz	125 W	2666 MT/s
Xeon Gold 6138	20	2.0 GHz	125 W	2666 MT/s
Xeon Gold 6140	18	2.3 GHz	140 W	2666 MT/s
Xeon Gold 6148	20	2.4 GHz	150 W	2666 MT/s
Xeon Platinum 8160	24	2.1 GHz	150 W	2666 MT/s
Xeon Platinum 8168	24	2.7 GHz	205 W	2666 MT/s
Xeon Platinum 8180	28	2.5 GHz	205 W	2666 MT/s

Silver and Gold 5xxx processors cap memory at 2400 or 2666 MT/s regardless of the DIMMs fitted. If memory bandwidth matters to your workload, a Gold 6xxx or Platinum with second-generation silicon is the difference between 2400 and 2933 MT/s on the same board.

Memory

Twenty-four DDR4 DIMM slots, twelve per processor across six channels. HPE SmartMemory registered (RDIMM) and load-reduced (LRDIMM) modules are supported; they cannot be mixed in the same system. With one CPU installed, only the twelve slots on that side are usable. Third-party DIMMs work but the system reports them as non-HPE memory and disables some HPE Fast Fault Tolerance features.

MODULE	CAPACITIES	MAXIMUM SYSTEM MEMORY
RDIMM	8 GB, 16 GB, 32 GB, 64 GB	1.5 TB with 24 x 64 GB
LRDIMM	64 GB, 128 GB	3 TB with 24 x 128 GB
Intel Optane DC Persistent Memory (second-gen CPUs only)	128 GB, 256 GB, 512 GB	Up to 12 modules alongside DRAM, in mixed configurations

For best performance populate all six channels per CPU in matched sets: 6, 12 or 24 DIMMs in total for a dual-CPU system. Memory runs at the lower of the DIMM rating and the CPU limit.

Storage and RAID

Drive support depends on the cages fitted. All cages are hot-plug. HPE Smart Array controllers come in two forms: modular (fitted to a dedicated slot) and PCIe card. The controller options are:

CONTROLLER	TYPE	CACHE	RAID LEVELS	NOTES
Smart Array S100i	Software RAID (SATA)	None	0, 1, 5, 10	Onboard; SATA only, adequate for boot mirrors
Smart Array E208i-a	Hardware RAID / HBA	None	0, 1, 5, 10	No cache, so write-heavy RAID 5 is slow; good HBA-mode choice
Smart Array P408i-a	Hardware RAID	2 GB FBWC	0, 1, 5, 6, 10, 50, 60	The common choice for virtualisation and database hosts
Smart Array P816i-a	Hardware RAID	4 GB FBWC	0, 1, 5, 6, 10, 50, 60	16 lanes; needed for 24 SFF without an expander

The E208i-a and P408i-a can be switched to HBA (pass-through) mode for vSAN, Ceph, ZFS and Storage Spaces. Supported drive types are 12 Gb/s SAS and 6 Gb/s SATA in hard disk and SSD form, plus U.2 NVMe on the 10 SFF NVMe backplane. Drives need HPE Gen10 Smart Carriers; Gen8 and Gen9 carriers are not interchangeable.

Networking and expansion

Onboard networking is an embedded HPE 331i quad-port 1 GbE adapter, and a FlexibleLOM slot takes a second adapter without using a PCIe slot. Common FlexibleLOM options:

- HPE 366FLR quad-port 1 GbE
- HPE 561FLR-T dual-port 10 GbE BASE-T
- HPE 562FLR-SFP+ dual-port 10 GbE SFP+

HPE ProLiant DL360 Gen10

1U rack server, dual Intel Xeon Scalable, 24 x DDR4, iLO 5

- HPE 640FLR-SFP28 dual-port 25 GbE

Beyond the FlexibleLOM, the DL360 Gen10 offers up to three PCIe Gen3 slots: one full-height x16 and one low-profile x8 on the primary riser, plus a low-profile x16 on the secondary riser with the second CPU fitted. That is enough for a Fibre Channel HBA, a 25 GbE adapter and a single-width accelerator such as the NVIDIA T4. Full-height or double-width GPUs need the 2U DL380 Gen10.

Power supplies

Two hot-plug redundant Flex Slot power supply bays, configured 1+1. Options are 500 W, 800 W and 1600 W in Platinum and Titanium grades. A dual-CPU system with a full memory load and a Smart Array generally sits within the 800 W envelope. Both supplies in a system should be the same rating.

Management

Every DL360 Gen10 includes iLO 5 with a dedicated management port. iLO Standard covers remote power, health monitoring and basic alerts; iLO Advanced adds the virtual console, virtual media, remote firmware updates and the full Redfish API, which is what most buyers actually want for a server they do not visit. Advanced licences can be added to any unit. Intelligent Provisioning handles bare-metal OS installs, and HPE OneView or iLO Amplifier Pack cover fleet management.

Physical specification

Form factor	1U rack, 2 socket
Height	42.9 mm (1U)
Width	434.6 mm
Depth	Approximately 707 mm without bezel
Weight	Up to approximately 17 kg fully configured
Rails	HPE Easy Install rails, ball-bearing or friction
Operating temperature	10 to 35 °C continuous, with ASHRAE A3 and A4 support in qualified configurations

Supported operating systems

Windows Server 2016, 2019 and 2022; Red Hat Enterprise Linux 7, 8 and 9; SUSE Linux Enterprise Server 12 and 15; Ubuntu Server LTS releases; VMware ESXi 6.5, 6.7, 7.0 and 8.0; Citrix Hypervisor; and Proxmox VE, which is unsupported by HPE but widely deployed on this platform. Confirm your hypervisor's hardware compatibility list before buying if you need vendor support.