



HPE DL380 Gen10 Hybrid NVMe-SAS SFF WSSD Premium Solution

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WSSD solution BOM/node
Version 1.0

HPE DL380 Gen10 Hybrid SFF WSSD Premium Solution
NVMe cache/SAS HDD capacity
Processor configurations 1.7 GHz or faster
Memory configurations from 128 GB to 3 TB
Minimum of 2 nodes with a cluster witness
Maximum of 16 nodes

Item	Description	Part number	Quantity
Operating system	Windows Server® 2016 Datacenter (16 core)—HPE recommends HPE OEM licenses; see Appendix for more details	See Appendix for HPE OEM license options	1
Additional processor core licenses depend upon processor option	Windows Server 2016 Datacenter Additional License (2 cores)—HPE recommends HPE OEM licenses; see Appendix for available SKUs	See Appendix for HPE OEM license options	Varies
Server	HPE DL380 Gen10 8SFF Configure-to-order Server	868703-B21	1
Processors	Any processor 1.7 GHz or faster. See the HPE ProLiant DL380 Gen10 QuickSpecs for Processor Options	xxxxxx-L21 xxxxxx-B21	1 or 2
Memory	Memory size must be between 128 GB and 3 TB. See HPE ProLiant DL380 Gen10 QuickSpecs for Memory Options		
Network adapters	See network adapter options for FlexibleLOM and PCIe plug-in controllers	xxxxxx-B21	1 or more
OS boot (rear cage)	HPE 2TB 6G SATA 7.2K rpm SFF HDD	765455-B21	2
2 SFF kit	HPE DL380 Gen10 Premium 2SFF HDD Kit	826687-B21	1
Storage controllers	See storage controller options for modular and PCIe plug-in controllers	xxxxxx-B21	1 or more
NVMe riser kit	HPE DL38x Gen10 4-port 8 NVMe Slim SAS Riser	867807-B21	1
NVMe bay	HPE DL38x NVMe 8 SSD Express Bay	826689-B21	1
Cable	Drive backplane to HPE SAS Expander	786092-B21	1
Power supply	HPE 800W FS Plat Ht Plg LH Pwr Sply Kit	865414-B21	2
TPM	HPE TPM 2.0 Gen10 Kit	864279-B21	1
Rail kit	HPE 2U SFF Easy Install Rail Kit	733660-B21	1
HPE OneView	HPE OV w/o iLO 3yr 24x7 FIO Phys 1 LTU	P8B31A	1
HPE iLO Advanced	HPE iLO Adv Security Lic 3yr Support	BD505A	1

Option type	Description	Part number	Quantity
Network FlexibleLOM	HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter	867334-B21	1
Network adapter PCIe plug-in	HPE Ethernet 10Gb 2-port 521T Adapter	867707-B21	1
Network adapter PCIe plug-in	HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter	867328-B21	1
Storage controller modular	HPE Smart Array P816i-a SR Gen10 (16 Internal Lanes/4GB Cache/SmartCache) 12G SAS Modular Controller	804338-B21	1
Storage controller modular	HPE Smart Array E208i-a SR Gen10 (8 Internal Lanes/No Cache) 12G SAS Modular Controller	804326-B21	1
Storage controller modular	HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller	804331-B21	1
Storage controller PCIe plug-in	HPE Smart Array E208i-p SR Gen10 (8 Internal Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804394-B21	1
Storage controller PCIe plug-in	HPE Smart Array P408i-p SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS PCIe Plug-in Controller	830824-B21	1
Storage controller PCIe plug-in	HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21	1
Storage controller PCIe plug-in	HPE Smart Array P408e-p SR Gen10 (8 External Lanes/4GB Cache) 12G SAS PCIe Plug-in Controller	804405-B21	1
Storage SAS Expander	HPE DL38x Gen10 12Gb SAS Expander	870549-B21	1



Option type	Description	Part number	Quantity
Minimum drive size validated, equal or larger drive sizes may be used			
Cache NVMe	HPE 400GB NVMe x4 Lanes MU SFF SCN DS SFF	See guidelines below	2–8
Capacity HDD	HPE 600GB SAS 12G 10K SFF SC DS HDD	See guidelines below	4–16

Cabling instructions can be found [here](#).

Configuration guidelines

- HPE P816i-a controller has 16 PCIe lanes allowing connection of up to 16 SAS or SATA drives. It is your perfect choice for achieving maximum Storage Spaces Direct I/O performance without the use of an SAS expander.
- The D3610/D3710 Enclosures are supported for adding additional SAS drives to this solution.
- Use of alternative size cache NVMe and capacity SAS SSD drives within this WSSD solution is permitted.
 - The cache must be configured with a minimum of 2 NVMe with a size greater than or equal to 400 GB.
 - The capacity must be configured with 4 or more SAS HDD drives with a size greater than or equal to 600 GB.
 - See the HPE ProLiant DL380 Gen10 QuickSpecs for alternative drive options.
- We recommend that you select NVMe drives from the following list of currently available DL380 Gen10 drives.
 - 875591-B21 HPE 1.92TB NVMe x4 Lanes Read Intensive SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD
 - 875589-B21 HPE 960GB NVMe x4 Lanes Read Intensive SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD
 - 875587-B21 HPE 480GB NVMe x4 Lanes Read Intensive SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD
 - 875593-B21 HPE 400GB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD
 - 875595-B21 HPE 800GB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD
 - 875597-B21 HPE 1.6TB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD
 - For more information on hardware requirements, see [Microsoft®’s Storage Spaces Direct web doc—hardware requirements](#).
- Use of alternative boot drives other than what is specified in this configuration is supported. SDDC Premium AQ is not required for boot drives.
- Update this WSSD solution drivers and firmware for the smart arrays, network adapters, and storage drives using [Service Pack for ProLiant \(SPP\) Version 2018.06.0](#) or newer.

Appendix

Hewlett Packard Enterprise recommends cost-efficient HPE OEM Windows Server 2016 Datacenter Edition licenses for a complete WSSD solution. Alternatively, customer-supplied Windows Server 2016 Datacenter licenses such as volume license or retail can also be used.

The HPE OEM Windows Server 2016 Core Licensing Calculator tool can assist you in calculating the number of required licenses: hpe.com/servers/windows-license-calculator.

HPE offers OEM Windows Server licenses in two distinct options and a wide range of languages:

- **Reseller Option Kit (ROK)**—Available through authorized HPE resellers at the time of purchase of an [HPE server system](#).
- **Direct from HPE factory**—Available for sale along with the purchase of your HPE server from the factory, you can select OEM Windows Server 2016 Datacenter as a **not preinstalled** (Npi) option (also referred to as **drop-in-the-box** license).

In both the options, the OS media is included with the server.

For an updated list of available part numbers, see the [HPE OEM Windows Server 2016 OEM QuickSpecs](#).




Reference

[Microsoft Windows Server 2016 OEM from HPE](#)

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hpe.com/solutions/wssd



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