João Pessoa, 04 novembro de 2025.

A
DEFENSORIA PÚBLICA DO ESTADO DA PARAÍBA
DEPARTAMENTO DE ACOMPANHAMENTO DE LICITAÇÃO, CONTRATOS, CONVÊNIOS E COMPRAS
PREGÃO ELETRÔNICO SRP Nº 027/2025
PROCESSO ADMINISTRATIVO Nº DPE-PRC-2025/02502

Atendendo a sua solicitação através do Edital **Pregão Eletrônico Nº 027/2025**, com data de abertura para 30 de outubro de 2025, às 08:30 horas, O objeto da presente licitação é a escolha da proposta mais vantajosa para formação de registro de preços de AQUISIÇÃO DE MÓDULOS DE EXPANSÃO DE MEMÓRIA, UNIDADES DE ARMAZENAMENTO (SSD SATA E NVME), KITS DE GPU E FONTES REDUNDANTES, TODOS PLENAMENTE COMPATÍVEIS COM O SERVIDOR HPE PROLIANT DL380 GEN11, DE PROPRIEDADE DA DEFENSORIA PÚBLICA DO ESTADO DA PARAÍBA. Estamos ofertando as expansões abaixo.

Atenciosamente,

Plugnet Comércio e Representações Ltda
Frederico J.E.César
CPF 620.732.224-04
RG 3.818.860 SSP/PE
Gerente de Filial

PLUGNET COMÉRCIO E REPRESENTAÇÕES LTDA
Insc. Estadual Nº. – 16.130.327-7
C.N.P.J. Nº. - 02.213.325/0002-69
www.plugnetshop.com.br
plugnet@plugnetshop.com.br

MATRIZ – RECIFE / PE
Av. General Abreu e lima, 222
Rosarinho – 52041-042
Fone/Fax: 81 3426.7006
plugnet@plugnetshop.com.br

FILIAL – SERRA / ES
Rodovia Governador Mário Covas, s/n – Km 279 – Sala 89
Jacuhy – 29161-230
plugnetes@plugnetshop.com.br

FILIAL – JOÃO PESSOA / PB
Av. Nossa Senhora dos Navegantes, 104 / 402 Tambaú
Fone/Fax: 83 3226.1422
plugnetpb@plugnetshop.com.br

FILIAL – BELÉM / PA
Av. Romulo Maiorana, 700 – Sala 1709 – Marco – Belém – Pará –
CEP: 66093-672
plugnetpa@plugnetshop.com.br

LOTE 01 - EXPANSÃO DE UNIDADES

ITEM	DESCRIÇÃO / ESPECIFICAÇÃO	Und	Qtde	PREÇO UNIT	PREÇO TOTAL
01	**EXPANSÃO MEMORIA DE 64GB DDR-5 HPE PARA SERVIDORES PROLIANT DL380 GEN11** **FABRICANTE: Hewlett Packard Enterprise** **MARCA: HPE** **Modelo: HPE 64GB 2Rx4 PC5-5600B-R Smart Kit P64707-B21 +** **HA113A1 HPE Installation SVC + HU4A6A5 HPE 5Y Tech Care Essential SVC** **Procedência: Direto do fabricante HPE** 1.1.1 Upgrade de Memória HPE do Brasil para servidores HPE Proliant DL380 1.1.2 Gen11 existente na DPE-PB e equipados com processadores Intel de Quinta geração. 1.1.2. Deve ser composto de 01(um) Pente de Memória de 64GB padrão DDR-5 de 5600MT/s do mesmo modelo utilizado na configuração inicial. 1.1.3. Devem ser informados na proposta todos os códigos e part numbers de equipamentos e serviços do fabricante para efeito de análise e comprovação dos produtos e serviços ofertados. 1.1.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 1.1.5. Deverá contemplar serviço de instalação física do próprio fabricante no servidor designado pela contratante, devendo esse ser realizado em horário comercial, não sendo aceita oferta de instalação de serviços de terceiros; 1.2. GARANTIA, SUPORTE ASSISTÊNCIA E ATENDIMENTO 1.2.1. Todos os itens deverão ser fornecidos com o mesmo tempo de garantia, nível de suporte e SLA para reposição de peças, mão de obra e atendimento no Onsite dos equipamentos onde serão instalados. 1.2.2. Deverão ser informados na proposta todos os part numbers de equipamento, software e serviços que compõem as soluções ofertadas. A omissão dessas informações acarretará na desclassificação da proposta. O modelo ofertado deve estar em linha de produção, na data de entrega da proposta. 1.2.3. Todos os componentes dos equipamentos devem ser do próprio fabricante ou estar em conformidade com a política de garantia do mesmo, não sendo permitida a integração de itens de terceiros que possam acarretar perda parcial da garantia ou não realização da manutenção técnica pelo próprio fabricante quando solicitada. 1.2.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 1.2.5. Deverá ser comprovada a existência da assistência técnica local no domicílio da contratante e na modalidade on-site, devendo essa ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados. 1.2.6. Deverá haver comprovação de que serviços de garantia ofertados na proposta do fabricante/revendedor cobrem as condições exigidas de garantia e suporte e que caso eventualmente a assistência técnica autorizada local esteja impedida de realizar atendimentos, os mesmos serão realizados por outra autorizada (indicada pelo fabricante) ou pelo próprio fabricante	**Und**	**48**	**R$ 5.505,00**	**R$ 264.240,00**

PLUGNET COMÉRCIO E REPRESENTAÇÕES LTDA
Insc. Estadual Nº. – 16.130.327-7
C.N.P.J. Nº. - 02.213.325/0002-69
www.plugnetshop.com.br
plugnet@plugnetshop.com.br

MATRIZ – RECIFE / PE
Av. General Abreu e lima, 222
Rosarinho – 52041-042
Fone/Fax: 81 3426.7006
plugnet@plugnetshop.com.br

FILIAL – SERRA / ES
Rodovia Governador Mário Covas, s/n – Km 279 – Sala 89
Jacuhy – 29161-230
plugnetes@plugnetshop.com.br

FILIAL – JOÃO PESSOA / PB
Av. Nossa Senhora dos Navegantes, 104 / 402 Tambaú
Fone/Fax: 83 3226.1422
plugnetpb@plugnetshop.com.br

FILIAL – BELÉM / PA
Av. Romulo Maiorana, 700 – Sala 1709 – Marco – Belém – Pará –
CEP: 66093-672
plugnetpa@plugnetshop.com.br

	sem ônus adicional para a contratante. Essa comprovação deverá ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados.				
02	**EXPANSÃO ARMAZENAMENTO SSD SATA DE 3.84TB PARA SERVIDORES PROLIANT DL380 GEN11** **FABRICANTE: Hewlett Packard Enterprise** **MARCA: HPE** **Modelo: HPE 3.84TB SATA MU SFF BC MV SSD P40505-B21 + HA113A1 HPE Installation SVC + HU4A6A5 HPE 5Y Tech Care Essential SVC** **Procedência: Direto do fabricante HPE** 2.1.1. Upgrade de Unidade de Armazenamento HPE do Brasil com capacidade mínima bruta de 3.84TB em Tecnologia SSD, padrão SATA 6G, Mixed Use (MU) para servidores HPE Proliant DL380 Gen11 com DWDP mínimo de 3.0, Velocidade de Leitura: 510 MiB/s, Velocidade de Escrita: 480 MiB/s, Desempenho de 59.000 IOPS em leitura randômica com blocos de 4KiB e Desempenho de 32.000 IOPS em escrita randômica com blocos de 4KiB. 2.1.2. Deve ser vir devidamente acomodado em gaveta hotplug original do próprio fabricante devidamente identificado com o part number ou spare part do mesmo. 2.1.3. Devem ser informados na proposta todos os códigos e part numbers de equipamentos e serviços do fabricante para efeito de análise e comprovação dos produtos e serviços ofertados. 2.1.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 2.1.5. Deverá contemplar serviço de instalação física do próprio fabricante no servidor designado pela contratante, devendo esse ser realizado em horário comercial, não sendo aceita oferta de instalação de serviços de terceiros; 2.2. GARANTIA, SUPORTE ASSISTÊNCIA E ATENDIMENTO 2.2.1. Todos os itens deverão ser fornecidos com o mesmo tempo de garantia, nível de suporte e SLA para reposição de peças, mão de obra e atendimento no Onsite dos equipamentos onde serão instalados. 2.2.2. Deverão ser informados na proposta todos os part numbers de equipamento, software e serviços que compõem as soluções ofertadas. A omissão dessas informações acarretará na desclassificação da proposta. O modelo ofertado deve estar em linha de produção, na data de entrega da proposta. 2.2.3. Todos os componentes dos equipamentos devem ser do próprio fabricante ou estar em conformidade com a política de garantia do mesmo, não sendo permitida a integração de itens de terceiros que possam acarretar perda parcial da garantia ou não realização da manutenção técnica pelo próprio fabricante quando solicitada. 2.2.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 2.2.5. Deverá ser comprovada a existência da assistência técnica local no domicílio da contratante e na modalidade on-site, devendo essa ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio	**Und**	**38**	**R$ 11.165,00**	**R$ 424.270,00**

	público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados. 2.2.6. Deverá haver comprovação de que serviços de garantia ofertados na proposta do fabricante/revendedor cobrem as condições exigidas de garantia e suporte e que caso eventualmente a assistência técnica autorizada local esteja impedida de realizar atendimentos, os mesmos serão realizados por outra autorizada (indicada pelo fabricante) ou pelo próprio fabricante sem ônus adicional para a contratante. Essa comprovação deverá ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados.				
03	**EXPANSÃO ARMAZENAMENTO SSD SATA DE 7.68TB PARA SERVIDORES PROLIANT DL380 GEN11** **FABRICANTE: Hewlett Packard Enterprise** **MARCA: HPE** **Modelo: HPE 7.68TB SATA RI SFF BC MV SSD P40501-B21 + HA113A1 HPE Installation SVC + HU4A6A5 HPE 5Y Tech Care Essential SVC** **Procedência: Direto do fabricante HPE** 3.1.1. Upgrade de Unidade de Armazenamento HPE do Brasil com capacidade mínima bruta de 7.68TB em Tecnologia SSD, padrão SATA 6G, Read Intensive (RI) para servidores HPE Proliant DL380 Gen11 com DWDP mínimo de 0.7, Velocidade de Leitura: 500 MiB/s, Velocidade de Escrita: 480 MiB/s, Desempenho de 65.000 IOPS em leitura randômica com blocos de 4KiB e Desempenho de 11.000 IOPS em escrita randômica com blocos de 4KiB. 3.1.2. Deve ser vir devidamente acomodado em gaveta hotplug original do próprio fabricante devidamente identificado com o part number ou spare part do mesmo. 3.1.3. Devem ser informados na proposta todos os códigos e part numbers de equipamentos e serviços do fabricante para efeito de análise e comprovação dos produtos e serviços ofertados. 3.1.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 3.1.5. Deverá contemplar serviço de instalação física do próprio fabricante no servidor designado pela contratante, devendo esse ser realizado em horário comercial, não sendo aceita oferta de instalação de serviços de terceiros; 3.2. GARANTIA, SUPORTE ASSISTÊNCIA E ATENDIMENTO 3.2.1. Todos os itens deverão ser fornecidos com o mesmo tempo de garantia, nível de suporte e SLA para reposição de peças, mão de obra e atendimento no Onsite dos equipamentos onde serão instalados. 3.2.2. Deverão ser informados na proposta todos os part numbers de equipamento, software e serviços que compõem as soluções ofertadas. A omissão dessas informações acarretará na desclassificação da proposta. O modelo ofertado deve estar em linha de produção, na data de entrega da	**Und**	**38**	**R$ 15.063,00**	**R$ 572.394,00**

PLUGNET COMÉRCIO E REPRESENTAÇÕES LTDA
Insc. Estadual Nº. – 16.130.327-7
C.N.P.J. Nº. - 02.213.325/0002-69
www.plugnetshop.com.br
plugnet@plugnetshop.com.br

MATRIZ – RECIFE / PE
Av. General Abreu e lima, 222
Rosarinho – 52041-042
Fone/Fax: 81 3426.7006
plugnet@plugnetshop.com.br

FILIAL – SERRA / ES
Rodovia Governador Mário Covas, s/n – Km 279 – Sala 89
Jacuhy – 29161-230
plugnetes@plugnetshop.com.br

FILIAL – JOÃO PESSOA / PB
Av. Nossa Senhora dos Navegantes, 104 / 402 Tambaú
Fone/Fax: 83 3226.1422
plugnetpb@plugnetshop.com.br

FILIAL – BELÉM / PA
Av. Romulo Maiorana, 700 – Sala 1709 – Marco – Belém – Pará –
CEP: 66093-672
plugnetpa@plugnetshop.com.br

	proposta. 3.2.3. Todos os componentes dos equipamentos devem ser do próprio fabricante ou estar em conformidade com a política de garantia do mesmo, não sendo permitida a integração de itens de terceiros que possam acarretar perda parcial da garantia ou não realização da manutenção técnica pelo próprio fabricante quando solicitada. 3.2.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 3.2.5. Deverá ser comprovada a existência da assistência técnica local no domicílio da contratante e na modalidade on-site, devendo essa ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados. 3.2.6. Deverá haver comprovação de que serviços de garantia ofertados na proposta do fabricante/revendedor cobrem as condições exigidas de garantia e suporte e que caso eventualmente a assistência técnica autorizada local esteja impedida de realizar atendimentos, os mesmos serão realizados por outra autorizada (indicada pelo fabricante) ou pelo próprio fabricante sem ônus adicional para a contratante. Essa comprovação deverá ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados.				
04	**EXPANSÃO ARMAZENAMENTO NVME U.3 DE 3.84TB PARA SERVIDORES PROLIANT DL380 GEN11** **FABRICANTE: Hewlett Packard Enterprise** **MARCA: HPE** **Modelo: HPE 3.84T NVMeRI SFF BC U.3ST V2 MV SSD P64846-B21+ HA113A1 HPE Installation SVC + HU4A6A5 HPE 5Y Tech Care Essential SVC** **Procedência: Direto do fabricante HPE** 4.1.1. Upgrade de Unidade de Armazenamento HPE do Brasil com capacidade mínima bruta de 3.84TB em Tecnologia NVME, padrão mínimo U.3, Read Intensive (RI) para servidores HPE Proliant DL380 Gen11 com DWDP mínimo de 1.0, Velocidade de Leitura: 6.200 MiB/s, Velocidade de Escrita: 3.800 MiB/s, Desempenho de 196.000 IOPS em leitura randômica com blocos de 4KiB e Desempenho de 180.000 IOPS em escrita randômica com blocos de 4KiB. 4.1.2. Deve ser vir devidamente acomodado em gaveta hotplug original do próprio fabricante devidamente identificado com o part number ou spare part do mesmo. 4.1.3. Devem ser informados na proposta todos os códigos e part numbers de equipamentos e serviços do fabricante para efeito de análise e comprovação dos produtos e serviços ofertados. 4.1.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores.	**Und**	**48**	**R$ 7.470,00**	**R$ 358.560,00**

	4.1.5. Deverá contemplar serviço de instalação física do próprio fabricante no servidor designado pela contratante, devendo esse ser realizado em horário comercial, não sendo aceita oferta de instalação de serviços de terceiros; 4.2. GARANTIA, SUPORTE ASSISTÊNCIA E ATENDIMENTO 4.2.1. Todos os itens deverão ser fornecidos com o mesmo tempo de garantia, nível de suporte e SLA para reposição de peças, mão de obra e atendimento no Onsite dos equipamentos onde serão instalados. 4.2.2. Deverão ser informados na proposta todos os part numbers de equipamento, software e serviços que compõem as soluções ofertadas. A omissão dessas informações acarretará na desclassificação da proposta. O modelo ofertado deve estar em linha de produção, na data de entrega da proposta. 4.2.3. Todos os componentes dos equipamentos devem ser do próprio fabricante ou estar em conformidade com a política de garantia do mesmo, não sendo permitida a integração de itens de terceiros que possam acarretar perda parcial da garantia ou não realização da manutenção técnica pelo próprio fabricante quando solicitada. 4.2.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 4.2.5. Deverá ser comprovada a existência da assistência técnica local no domicílio da contratante e na modalidade on-site, devendo essa ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados. 4.2.6. Deverá haver comprovação de que serviços de garantia ofertados na proposta do fabricante/revendedor cobrem as condições exigidas de garantia e suporte e que caso eventualmente a assistência técnica autorizada local esteja impedida de realizar atendimentos, os mesmos serão realizados por outra autorizada (indicada pelo fabricante) ou pelo próprio fabricante sem ônus adicional para a contratante. Essa comprovação deverá ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados.				
05	**EXPANSÃO ARMAZENAMENTO NVME U.3 DE 7.68TB PARA SERVIDORES PROLIANT DL380 GEN11** **FABRICANTE: Hewlett Packard Enterprise** **MARCA: HPE** **Modelo: HPE 7.68T NVMeRI SFF BC U.3ST V2 MV SSD P64848-B21 + HA113A1 HPE Installation SVC + HU4A6A5 HPE 5Y Tech Care Essential SVC** **Procedência: Direto do fabricante HPE** **5**.1.1. Upgrade de Unidade de Armazenamento HPE do Brasil com capacidade mínima bruta de 7.68TB em Tecnologia NVME, padrão mínimo U.3, Read Intensive (RI) para servidores HPE Proliant DL380 Gen11 com DWDP mínimo	**Und**	**48**	**R$ 12.620,00**	**R$ 605.760,00**

	de 1.0, Velocidade de Leitura: 6.200 MiB/s, Velocidade de Escrita: 3.800 MiB/s, Desempenho de 196.000 IOPS em leitura randômica com blocos de 4KiB e Desempenho de 180.000 IOPS em escrita randômica com blocos de 4KiB. 5.1.2. Deve ser vir devidamente acomodado em gaveta hotplug original do próprio fabricante devidamente identificado com o part number ou spare part do mesmo. 5.1.3. Devem ser informados na proposta todos os códigos e part numbers de equipamentos e serviços do fabricante para efeito de análise e comprovação dos produtos e serviços ofertados. 5.1.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 5.1.5. Deverá contemplar serviço de instalação física do próprio fabricante no servidor designado pela contratante, devendo esse ser realizado em horário comercial, não sendo aceita oferta de instalação de serviços de terceiros; 5.2. GARANTIA, SUPORTE ASSISTÊNCIA E ATENDIMENTO 5.2.1. Todos os itens deverão ser fornecidos com o mesmo tempo de garantia, nível de suporte e SLA para reposição de peças, mão de obra e atendimento no On site dos equipamentos onde serão instalados. 5.2.2. Deverão ser informados na proposta todos os part numbers de equipamento, software e serviços que compõem as soluções ofertadas. A omissão dessas informações acarretará na desclassificação da proposta. O modelo ofertado deve estar em linha de produção, na data de entrega da proposta. 5.2.3. Todos os componentes dos equipamentos devem ser do próprio fabricante ou estar em conformidade com a política de garantia do mesmo, não sendo permitida a integração de itens de terceiros que possam acarretar perda parcial da garantia ou não realização da manutenção técnica pelo próprio fabricante quando solicitada. 5.2.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 5.2.5. Deverá ser comprovada a existência da assistência técnica local no domicílio da contratante e na modalidade on-site, devendo essa ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados. 5.2.6. Deverá haver comprovação de que serviços de garantia ofertados na proposta do fabricante/revendedor cobrem as condições exigidas de garantia e suporte e que caso eventualmente a assistência técnica autorizada local esteja impedida de realizar atendimentos, os mesmos serão realizados por outra autorizada (indicada pelo fabricante) ou pelo próprio fabricante sem ônus adicional para a contratante. Essa comprovação deverá ser				

	realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados.				
06	**KIT UPAGRADE GRAPHIC PROCESS UNIT (GPU) L4 PARA SERVIDOR HPE DL380 GEN11** **FABRICANTE: Hewlett Packard Enterprise** **MARCA: HPE** **Modelo: NVIDIA L4 24GB PCIe Accelerator S0K89C + HA113A1 HPE Installation SVC + HU4A6A5 HPE 5Y Tech Care Essential SVC** **Procedência: Direto do fabricante HPE** 6.1.1. Kit de Expansão Graphic Process Unit (GPU) para Servidor de Rack HPE Proliant DL380 Gen11 6.1.2. Deve contemplar 02 (duas) GPUs (graphics processing unit) NVIDIA L4 24GB PCIe Accelerator for HPE. 6.1.3. Padrão PCIe Gen4 x16 ou superior; 6.1.4. Memória GDDR6 própria de 24GB (vinte e quatro gigabytes), cada; 6.1.5. Ocupação máxima por cada GPU deverá ser de um slot PCI-E; 6.1.6. Acoplamento mecânico-elétrico compatível com a fonte de alimentação; 6.1.7. Cabos, conectores e acessórios necessários à ativação e que incluam a ligação à fonte de alimentação deverão estar contemplados; 6.1.8. As GPUs devem obrigatoriamente absorver a mesma garantia, suporte e SLA do servidor onde serão acoplados. 6.1.9. Deverá contemplar serviço de instalação física do próprio fabricante no servidor designado pela contratante, devendo esse ser realizado em horário comercial, não sendo aceita oferta de instalação de serviços de terceiros; 6.1.10. Devem ser informados na proposta todos os códigos e part numbers de equipamentos e serviços do fabricante para efeito de análise e comprovação dos produtos e serviços ofertados. 6.1.11. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 6.2. GARANTIA, SUPORTE ASSISTÊNCIA E ATENDIMENTO 6.2.1. Todos os itens deverão ser fornecidos com o mesmo tempo de garantia, nível de suporte e SLA para reposição de peças, mão de obra e atendimento no Onsite dos equipamentos onde serão instalados. 6.2.2. Deverão ser informados na proposta todos os part numbers de equipamento, software e serviços que compõem as soluções ofertadas. A omissão dessas informações acarretará na desclassificação da proposta. O modelo ofertado deve estar em linha de produção, na data de entrega da proposta. 6.2.3. Todos os componentes dos equipamentos devem ser do próprio fabricante ou estar em conformidade com a política de garantia do mesmo, não sendo permitida a integração de itens de terceiros que possam acarretar perda parcial da garantia ou não realização da manutenção técnica pelo próprio fabricante quando solicitada. 6.2.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 6.2.5. Deverá ser comprovada a existência da assistência técnica local no	**Und**	**02**	**R$ 26.532,00**	**R$ 53.064,00**

	domicílio da contratante e na modalidade on-site, devendo essa ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados. 6.2.6. Deverá haver comprovação de que serviços de garantia ofertados na proposta do fabricante/revendedor cobrem as condições exigidas de garantia e suporte e que caso eventualmente a assistência técnica autorizada local esteja impedida de realizar atendimentos, os mesmos serão realizados por outra autorizada (indicada pelo fabricante) ou pelo próprio fabricante sem ônus adicional para a contratante. Essa comprovação deverá ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados.				
07	**KIT UPAGRADE GRAPHIC PROCESS UNIT (GPU) L40 PARA SERVIDOR HPE DL380 GEN11** **FABRICANTE: Hewlett Packard Enterprise** **MARCA: HPE** **Modelo: NVIDIA L40 48GB PCIe Accelerator S0K90C + HA113A1 HPE Installation SVC + HU4A6A5 HPE 5Y Tech Care Essential SVC** **Procedência: Direto do fabricante HPE** **7**.2. Kit de Expansão Graphic Process Unit (GPU) para Servidor de Rack HPE Proliant DL380 Gen11 7.2.1. Deve contemplar 01 (uma) GPU (graphics processing unit) NVIDIA L40 48GB PCIe Accelerator for HPE. 7.2.2. Padrão PCIe Gen4 x16 ou superior; 7.2.3. Memória GDDR6 própria de 48GB (quarenta e oito gigabytes); 7.2.4. Ocupação máxima por cada GPU deverá ser de um, dual slot PCI-E; 7.2.5. Acoplamento mecânico-elétrico compatível com a fonte de alimentação; 7.2.6. Deve acompanhar 02 (duas) unidades do HPE ProLiant DL380/DL560 Gen11 High Performance 2U Heat Sink Kit, de forma a compatibilizar o equipamento com a nova demanda proveniente da instalação da GPU de alto desempenho. 7.2.7. Cabos, conectores e acessórios necessários à ativação e que incluam a ligação à fonte de alimentação deverão estar contemplados; 7.2.8. A GPU deve obrigatoriamente absorver a mesma garantia, suporte e SLA do servidor onde serão acoplados. 7.2.9. Deverá contemplar serviço de instalação física do próprio fabricante no servidor designado pela contratante, devendo esse ser realizado em horário comercial, não sendo aceita oferta de instalação de serviços de terceiros; 7.2.10. Devem ser informados na proposta todos os códigos e part numbers de equipamentos e serviços do fabricante para efeito de análise e comprovação dos produtos e serviços ofertados. 7.2.11. Por questões vinculadas a garantia, suporte e tempo de solução da	**Und**	**02**	**R$ 104.432,00**	**R$ 208.864,00**

	solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 7.3. GARANTIA, SUPORTE ASSISTÊNCIA E ATENDIMENTO 7.3.1. Todos os itens deverão ser fornecidos com o mesmo tempo de garantia, nível de suporte e SLA para reposição de peças, mão de obra e atendimento no Onsite dos equipamentos onde serão instalados. 7.3.2. Deverão ser informados na proposta todos os part numbers de equipamento, software e serviços que compõem as soluções ofertadas. A omissão dessas informações acarretará na desclassificação da proposta. O modelo ofertado deve estar em linha de produção, na data de entrega da proposta. 7.3.3. Todos os componentes dos equipamentos devem ser do próprio fabricante ou estar em conformidade com a política de garantia do mesmo, não sendo permitida a integração de itens de terceiros que possam acarretar perda parcial da garantia ou não realização da manutenção técnica pelo próprio fabricante quando solicitada. 7.3.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 7.3.5. Deverá ser comprovada a existência da assistência técnica local no domicílio da contratante e na modalidade on-site, devendo essa ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados. 7.3.6. Deverá haver comprovação de que serviços de garantia ofertados na proposta do fabricante/revendedor cobrem as condições exigidas de garantia e suporte e que caso eventualmente a assistência técnica autorizada local esteja impedida de realizar atendimentos, os mesmos serão realizados por outra autorizada (indicada pelo fabricante) ou pelo próprio fabricante sem ônus adicional para a contratante. Essa comprovação deverá ser realizada por meio de documentação oficial do fabricante dos produtos e de **domínio** público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados.				
08	**KIT FONTES HPE PARA SERVIDOR HPE DL380 GEN11** **FABRICANTE: Hewlett Packard Enterprise** **MARCA: HPE** **Modelo: HPE 1800W-2200W FS Ti Ht Plg PS Kit P44712-B21+ HA113A1 HPE Installation SVC + HU4A6A5 HPE 5Y Tech Care Essential SVC** **Procedência: Direto do fabricante HPE** 8.1.1. Kit de Expansão energética composto de 02 (duas) unidades de fontes, HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit, de forma a compatibilizar o equipamento com a nova demanda energética proveniente da instalação das GPUs. 8.1.2. Cabos, conectores e acessórios necessários à ativação da fonte de alimentação deverão estar contemplados; 8.1.3. A fontes devem obrigatoriamente absorver a mesma garantia, suporte	**Und**	**02**	**R$ 4.662,00**	**R$ 9.324,00**

	e SLA do servidor onde serão acoplados. 8.1.4. Deverá contemplar serviço de instalação física do próprio fabricante no servidor designado pela contratante, devendo esse ser realizado em horário comercial, não sendo aceita oferta de instalação de serviços de terceiros; 8.1.5. Devem ser informados na proposta todos os códigos e part numbers de equipamentos e serviços do fabricante para efeito de análise e comprovação dos produtos e serviços ofertados. 8.1.6. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 8.2. GARANTIA, SUPORTE ASSISTÊNCIA E ATENDIMENTO 8.2.1. Todos os itens deverão ser fornecidos com o mesmo tempo de garantia, nível de suporte e SLA para reposição de peças, mão de obra e atendimento no Onsite dos equipamentos onde serão instalados. 8.2.2. Deverão ser informados na proposta todos os part numbers de equipamento, software e serviços que compõem as soluções ofertadas. A omissão dessas informações acarretará na desclassificação da proposta. O modelo ofertado deve estar em linha de produção, na data de entrega da proposta. 8.2.3. Todos os componentes dos equipamentos devem ser do próprio fabricante ou estar em conformidade com a política de garantia do mesmo, não sendo permitida a integração de itens de terceiros que possam acarretar perda parcial da garantia ou não realização da manutenção técnica pelo próprio fabricante quando solicitada. 8.2.4. Por questões vinculadas a garantia, suporte e tempo de solução da solução existente, não serão aceitas ou consideradas proposta contendo itens genéricos ou similares para integração nos servidores. 8.2.5. Deverá ser comprovada a existência da assistência técnica local no domicílio da contratante e na modalidade on-site, devendo essa ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados. 8.2.6. Deverá haver comprovação de que serviços de garantia ofertados na proposta do fabricante/revendedor cobrem as condições exigidas de garantia e suporte e que caso eventualmente a assistência técnica autorizada local esteja impedida de realizar atendimentos, os mesmos serão realizados por outra autorizada (indicada pelo fabricante) ou pelo próprio fabricante sem ônus adicional para a contratante. Essa comprovação deverá ser realizada por meio de documentação oficial do fabricante dos produtos e de domínio público, através de catálogos, folder impressos ou da internet, devendo constar o endereço URL na mesma. Caso não seja comprovada por um dos meios citados anteriormente, será possível a comprovação através da apresentação de declaração expressa do fabricante dos equipamentos, indicando a referida assistência técnica que será responsável pelo atendimento e manutenção durante o período de garantia dos produtos ofertados.				
09	**ESCOPO DOS SERVIÇOS DE INSTALAÇÃO** 9.1.1. O serviço de integração física e lógica do modulo de expansão, deverá ser realizado pelo fabricante no rack designado pelo corpo técnico da DEP-PB.				

PLUGNET COMÉRCIO E REPRESENTAÇÕES LTDA
Insc. Estadual Nº. – 16.130.327-7
C.N.P.J. Nº. - 02.213.325/0002-69
www.plugnetshop.com.br
plugnet@plugnetshop.com.br

MATRIZ – RECIFE / PE
Av. General Abreu e lima, 222
Rosarinho – 52041-042
Fone/Fax: 81 3426.7006
plugnet@plugnetshop.com.br

FILIAL – SERRA / ES
Rodovia Governador Mário Covas, s/n – Km 279 – Sala 89
Jacuhy – 29161-230
plugnetes@plugnetshop.com.br

FILIAL – JOÃO PESSOA / PB
Av. Nossa Senhora dos Navegantes, 104 / 402 Tambaú
Fone/Fax: 83 3226.1422
plugnetpb@plugnetshop.com.br

FILIAL – BELÉM / PA
Av. Romulo Maiorana, 700 – Sala 1709 – Marco – Belém – Pará –
CEP: 66093-672
plugnetpa@plugnetshop.com.br

	9.1.2. O serviço de integração deverá compreender no mínimo as seguintes tarefas: 9.1.3. Instalação física e lógica, com a atualização de todas as versões de firmware, BIOS e outros dispositivos integrados; 9.1.4. Configuração dois dispositivos, possibilitando acessar e administrar através da interface, ferramenta de gerenciamento e de AIoPS; 9.1.5. Ativação e parametrização do sistema com atualização de todos os firmwares, paths de segurança e correções necessários que estiverem disponíveis no momento da ativação e sejam compatíveis com o sistema operacional pretendido pela DEP-PB; 9.1.6. Realizar testes de abertura automática de chamados pelo "Call Home" da solução, validando que o sistema está sendo monitorado e com o nível de serviço solicitado;				

VALOR GLOBAL DA PROPOSTA:
R$ 2.496.476,00 (dois milhões, quatrocentos e noventa e seis mil, quatrocentos e setenta e seis reais)

VALIDADE DA PROPOSTA
60 (sessenta) dias

GARANTIA DOS PRODUTOS OFERTADOS
Garantia mínima de 60 (sessenta) meses, conforme declaração do fabricante em anexo, com abrangência nacional, assegurando a substituição imediata de quaisquer itens com defeito de fabricação ou mau funcionamento, inclusive com cobertura de atendimento técnico e fornecimento de peças de reposição durante todo o período de vigência da garantia;

PRAZO e LOCAL DE ENTREGA
Prazo máximo de entrega de até 30 (trinta) dias corridos, contados a partir do recebimento da Nota de Empenho, com entrega no endereço indicado pela Administração, mediante agendamento prévio.
Endereço: Rua Deputado Barreto Sobrinho nº 168 – Bairro: Tambiá, João Pessoa /PB – CEP: 58.020-680
Telefone: 83 99686-3040 - HORÁRIO: De 08:00h às 14:00h

IMPOSTOS, FRETES, SEGUROS E DEMAIS ENCARGOS:
Incluso nos preços dos equipamentos

FORMA DE PAGAMENTO
O prazo para pagamento será de até 30 (trinta) dias corridos, contados da data do atesto da nota fiscal, conforme disposto no art. 141 da Lei nº 14.133/2021, e obedecerá à ordem cronológica das obrigações assumidas pela Administração Pública, nos termos do art. 141, §1º, da mesma Lei.

BANCO DO BRASIL
AGÊNCIA : TAMBAÚ - 3396-0
CONTA CORRENTE - 7.324-5

1) Dados da Empresa:
a) Razão Social: PLUGNET COMÉRCIO E REPRESENTAÇÕES LTDA.
b) CNPJ/MF: 02.213.325/0002-69
c) Endereço: AV. NOSSA SENHORAS DOS NAVEGANTES, 104 SL 402 TAMBAÚ.
d) Cidade/UF: JOÃO PESSOA – PB - CEP: 58.139-110
e) Tel./Fax: 83 99635-0992
f) E-mail: plugnetpb@plugnetshop.com.br
g) Banco: BANCO DO BRASIL.
h) Agência: 3396-0
i) Conta: 7324-5

2) Dados do Representante Legal da Empresa:

a) Nome: FREDERICO JOSÉ EMERENCIANO CÉSAR.
b) Endereço: RUA BEL. JOSÉ DE OLIVEIRA CURCHATUZ, 691 APT 4001 – AEROCLUBE - CEP: 58.036-130
c) Cidade/UF: JOÃO PESSOA - PB.
d) Tel./Fax: 83 99635-0992
e) CPF/MF: 620.732.224-04
f) RG/ 3.818.860 Órgão Expedidor: SSP PE.
g) Cargo/Função: GERENTE DE CONTAS
h) Naturalidade: PAULISTA/PE.
i) Nacionalidade: BRASILEIRO
j) Estado Civil: CASADO.

LISTA DOS PART NUMBERS DOS PRODUTOS

ITEM 01		
Qty	**Product**	**Description**
48	P64707-B21	HPE 64GB 2Rx4 PC5-5600B-R Smart Kit
48	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 02		
Qty	**Product**	**Description**
38	P40505-B21	HPE 3.84TB SATA MU SFF BC MV SSD
38	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 03		
Qty	**Product**	**Description**
38	P40501-B21	HPE 7.68TB SATA RI SFF BC MV SSD
38	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 04		
Qty	**Product**	**Description**
48	P64846-B21	HPE 3.84T NVMeRI SFF BC U.3ST V2 MV SSD
48	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 05		
Qty	**Product**	**Description**
48	P64848-B21	HPE 7.68T NVMeRI SFF BC U.3ST V2 MV SSD
48	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 06		
Qty	**Product**	**Description**
2	S0K89C	NVIDIA L4 24GB PCIe Accelerator
2	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 07		
Qty	**Product**	**Description**

2	S0K90C	NVIDIA L40 48GB PCIe Accelerator
2	P56072-B21	HPE DL380/DL560 Gen11 2U GPU Pwr Cbl Kit
4	P48818-B21	HPE DL380/DL560 G11 High Perf 2U HS Kit
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
2	HA113A1	HPE Installation SVC
ITEM 08		
Qty	**Product**	**Description**
4	P44712-B21	HPE 1800W-2200W FS Ti Ht Plg PS Kit
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
2	HA113A1	HPE Installation SVC

Atenciosamente,

Plugnet Comércio e Representações Ltda
Frederico J.E.César
CPF 820.732.224-04
RG 3.818.860 SSP/PE
Gerente de Filial

PLUGNET COMÉRCIO E REPRESENTAÇÕES LTDA
Insc. Estadual Nº. – 16.130.327-7
C.N.P.J. Nº. - 02.213.325/0002-69
www.plugnetshop.com.br
plugnet@plugnetshop.com.br

MATRIZ – RECIFE / PE
Av. General Abreu e lima, 222
Rosarinho – 52041-042
Fone/Fax: 81 3426.7006
plugnet@plugnetshop.com.br

FILIAL – SERRA / ES
Rodovia Governador Mário Covas, s/n – Km 279 – Sala 89
Jacuhy – 29161-230
plugnetes@plugnetshop.com.br

FILIAL – JOÃO PESSOA / PB
Av. Nossa Senhora dos Navegantes, 104 / 402 Tambaú
Fone/Fax: 83 3226.1422
plugnetpb@plugnetshop.com.br

FILIAL – BELÉM / PA
Av. Romulo Maiorana, 700 – Sala 1709 – Marco – Belém – Pará –
CEP: 66093-672
plugnetpa@plugnetshop.com.br

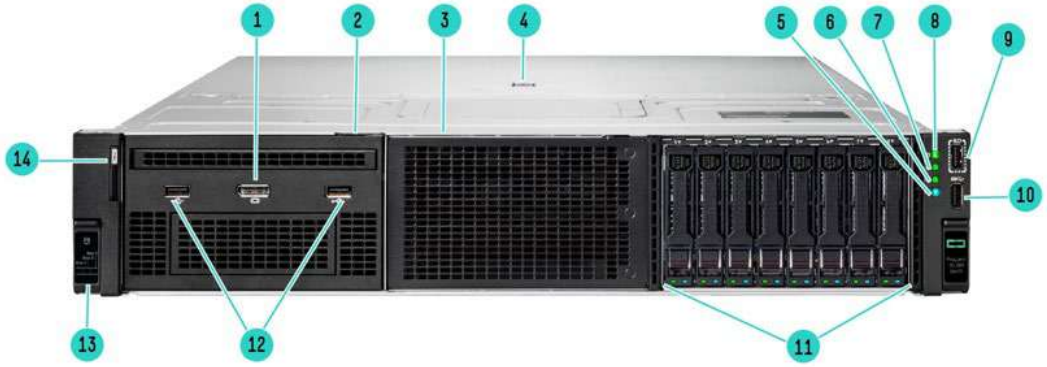
QuickSpecs

Overview

Shape the Future of QuickSpecs – Your Input Matters

HPE ProLiant DL380 Gen11

Adaptable for diverse workloads and environments, the secure 2P 2U HPE ProLiant DL380 Gen11 Servers 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.

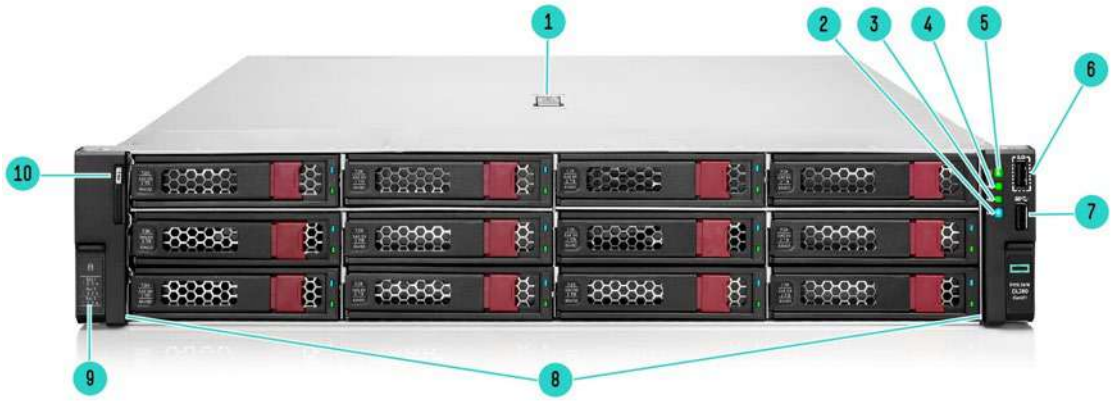


Front View – 8SFF chassis with optional Universal Media Bay shown

1. Optional Front Display Port (via Universal Media Bay)
2. Box 1 (shown with optional Universal Media Bay installed)
3. Box 2 (Empty)
4. Quick removal access panel
5. Unit Identification button/LED
6. NIC Status[1]
7. Health LED
8. Power On / Standby button / LED
9. iLO Service Port
10. USB 3.2 Gen1
11. Box 3 (shown with 8SFF drives populated)
12. Optional USB 2.0 port (via Universal Media Bay)
13. Drive Support Label
14. Serial Number Label Pull Tab

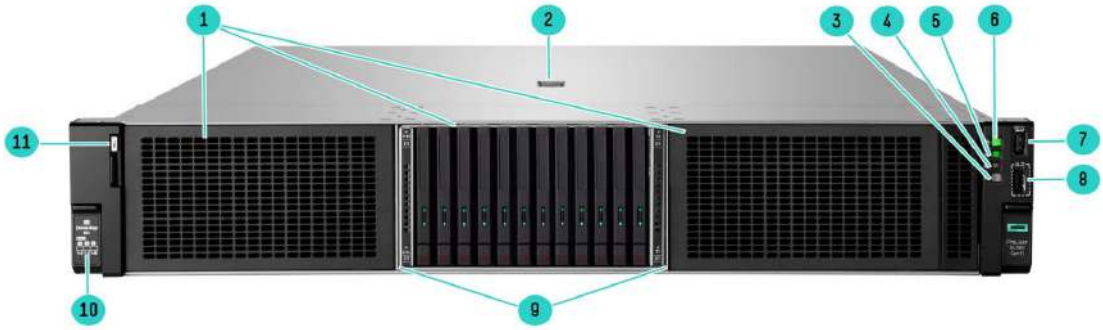
Notes: [1] Front NIC LED display doesn't support NIC LED ACT/LINK indication from ALOM/PCIE/FLOM NIC's

Overview



Front View – 12LFF chassis shown

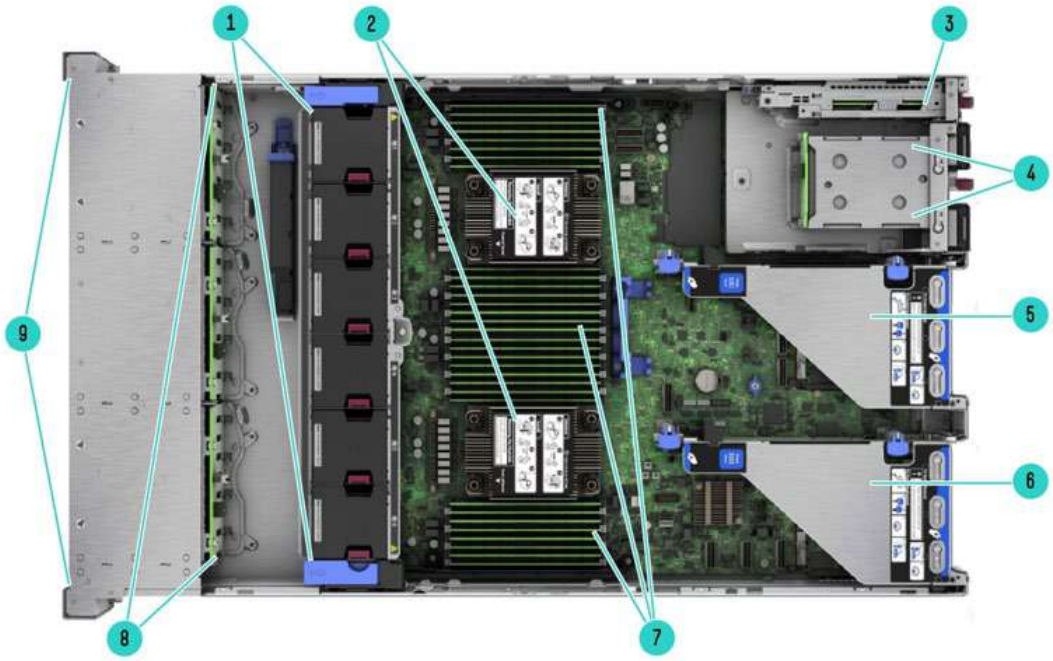
1. Quick removal access panel
2. Unit Identification Button / LED
3. NIC Status
4. Health LED
5. Power On / Standby button / LED
6. iLO Service Port
7. USB 3.2 Gen1 Port
8. 12 x LFF Media
9. Drive support label
10. Serial Number Label Pull Tab



Front View –12EDSFF chassis shown

1 12EDSFF drive bays optical drive
2 Quick removal access panel
3 UID Button / LED
4 NIC Status
5 Health LED
6 Power On / Standby button and LED
7 iLO Service Port
8 USB 3.2 Gne1
9 12x EDSFF Media
10 Drive support label
11 Serial Number Label Pull Tab

Overview



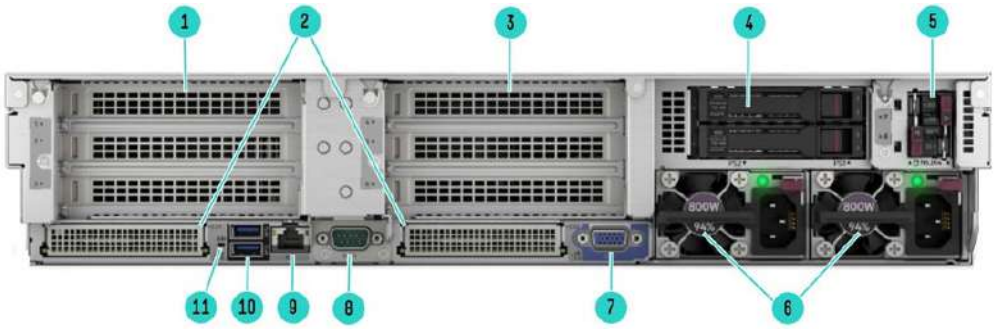
Internal View 8SFF chassis

1. Hot Plug Fans[1]
2. Processors, heatsinks showing
3. Optional NS204i-u Boot Device
4. Hot Plug redundant HPE Flexible Slot Power Supplies
5. Secondary Riser (Optional) (Requires second processor)
6. Primary Riser
7. DIMM slots, shown fully populated in 32 slots[2]
8. Drive Backplanes
9. Drive Cages

Notes:

– [1]High performance temperature fans optional
– [2]Shown fully populated in 32 slots (16 per processor)

Overview



Rear View – Standard for all DL380 Gen11

1. Primary Riser. PCIe 5.0 Slots (Slots 1-3)
2. OCP NIC 3.0 Slots, shown covered
3. Secondary Riser. PCIe 5.0 Slots (Slots 4-6)
4. Tertiary Riser (Slots 7-8) shown with optional 2SFF drive cage installed
5. Optional NS204i-u Boot Device
6. Power Supply
7. VGA Connector
8. Serial Port Optional
9. Dedicated iLO Management Port
10. USB 3.2 Gen1 Connectors (2)
11. UID Indicator LED

Notes: [1] Supports various NICs, and Storage controllers.

Platform Information

Form Factor

- 2U rack

Chassis Types

- 8SFF (SAS/SATA/NVMe) with optional 6SFF Universal Media Bay (P50728-B21), and/or up to 6SFF rear drive bay options.
- 24SFF bay (SAS/SATA/NVMe) with up to 6SFF rear drive bay options for a total 30 SFF drives.
- 8LFF supporting 2SFF front, and up to 4LFF rear or 2SFF rear drive bay options.
- 12LFF with optional 4LFF rear for a total of 16LFF drives.
- 12EDSFF (NVMe) supporting up to 36 EDSFF in front and up to 2SFF rear drive bay option

Notes:

- The 8SFF chassis is upgraded to support up to 24SFF (front) with a variety of 8SFF Drive Cages to select from, including 8SFF U.3 x4/x2 Trimode, 8SFF U.3 (x1 Trimode), and 8SFF SAS/SATA. See “Drive Cages” section within this document for options.
- The 8SFF chassis comes with an 8SFF U.3 x1 Trimode drive bay by default in bay 3.
- The Universal Media Bay (P50728-B21) is only available as an option for the 8SFF chassis and can only be populated in Box 1.
- The 2LFF primary and 2LFF secondary rear cages will consume all PCIe slots for the primary and secondary riser, respectively
- The 8LFF chassis cannot be upgraded to 12LFF front in the field.
- The 2LFF primary and 2LFF secondary rear cages supported in LFF chassis only.

Overview

System Fans

- High Performance Fan Kit – required for all CPUs over 205W TDP.

Notes:

- On 8SFF CTO server models ship with 4 standard fans.
- The 12LFF and 8LFF CTO server models ship with 4 standard fans.
- The 24SFF CTO server model ships with 6 high performance fans.
- The High-Performance fan kit (P48820-B21) is available to meet ambient temperature requirements.
- In general, the Maximum Performance fan kit is required when rear drives, or >205W Processors SKUs, or High Performance NVMe drives, three drive cages, mid-tray, GPU card, or certain backplanes are populated. See notes under each option category or each individual option for specifics.

Standard Features

Processors – Up to 2 of the following depending on model.

- The 2nd digit of the processor model number "x4xx" is used to denote the processor generation (i.e. 4=4th generation Intel Scalable Series Processors)
- The required firmware for the 5th Generation Intel Xeon Processors is not compatible with the DL380 Gen11 system board shipped with the 4th Generation Intel Xeon Processors. A new server order (latest firmware system board) is required for the activation of the 5th Generation Intel Xeon Processors. Field upgrade from the 4th Generation Intel Xeon Processors to the 5th Generation is not supported.

For more information regarding Intel Xeon processors, please see the following **https://www.intel.com/xeon.**

This table covers the public Intel offering only.

Processor Suffix	Description	Offering
H	Database and Analytics	Highest core counts. Database and Analytics usages benefit from Intel Data Streaming Accelerator (DSA) and Intel In-Memory Accelerator Analytics (IAA)
M	Media Transcode	Optimized for Intel Advanced Vector Extensions (AVX) frequencies to deliver better performance/watt for Media, AI, and HPC workloads.
N	Network/5G/Edge (High Throughput / Low Latency)	Designed for Network Function Visualization and networking workloads, such as: L3 forwarding, 5G User Plane Function, Open vSwitch Data Plane Development Kit, Vector Packet Processing FIB router, VPP IPsec, web server/NGINX, vEPC, vBNG, and vCMTS.
S	Storage and HCI	Optimized for Storage UMA use cases with increased UPI Bandwidth for vs Mainline SKUs.
P	Cloud - IAAS	Designed for cloud IaaS environments to deliver higher frequencies at constrained TDPs.
Q	Liquid Cooling	Liquid cooled processors with higher frequency and performance at same TDP.
U	Single Socket Optimized	Optimized for targeted platforms adequately served by the cores, memory bandwidth and IO capacity available from a single processor
V	Cloud - SAAS	Optimized for orchestration efficiency that delivers higher core counts and VMs per rack.
Y	Intel SST-PP (Speed Select Technology - Performance Profile)	Intel® SST-PP increases base frequency when fewer cores are enabled. Allows greater flexibility, deployment options and platform longevity.

5th Generation Intel® Xeon® Scalable Processor Family (Platinum)								
Intel® Xeon® Models	**Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR5**	**SGX Enclave size**	**Die**
Platinum 8593Q Processor	2.2 GHz	64	320 MB	385W	4	5600 MT/s	512 GB	XCC
Platinum 8592+ Processor	1.9 GHz	64	320 MB	350W	4	5600 MT/s	512 GB	XCC
Platinum 8592V Processor	2.0 GHz	64	320 MB	330W	3	4800 MT/s	512 MB	XCC
Platinum 8581V[1] Processor	2.0 GHz	60	300 MB	270W	0	4800 MT/s	512 GB	XCC
Platinum 8580 Processor	2.0 GHz	60	300 MB	350W	4	5600 MT/s	512 GB	XCC
Platinum 8570 Processor	2.1 GHz	56	300 MB	350W	4	5600 MT/s	512 GB	XCC
Platinum 8568Y Processor	2.3 GHz	48	300 MB	350W	4	5600 MT/s	512 GB	XCC
Platinum 8562Y+ Processor	2.8 GHz	32	60.0 MB	300W	3	5600 MT/s	512 GB	MCC
Platinum 8558P Processor	2.7 GHz	48	260 MB	350W	3	5600 MT/s	512 GB	XCC
Platinum 8558 Processor	2.1 GHz	48	260 MB	330W	4	5200 MT/s	512 GB	XCC
Platinum 8558U1 Processor	2.0 GHz	48	260 MB	300W	0	4800 MT/s	512 GB	XCC

Standard Features

Notes:

- In 300Watt processor one socket configuration, the air cooling with Performance Heatsinks & Performance Fan Kits can be supported. Field upgrade to two socket is not supported with air cooling solution.
- [1] Single socket only, no dual socket support
- Intel® Speed Select enabled processors: Platinum 8593Q, 8592V, 8581V, 8568Y+, 8562Y+, 8558P, 8558 and 8558U

5th Generation Intel® Xeon® Scalable Processor Family (Gold 6)								
Intel® Xeon® Models	**Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR5**	**SGX Enclave size**	**Die**
Gold 6558Q Processor	3.2 GHz	32	60.0 MB	350W	3	5200 MT/s	128 GB	MCC
Gold 6554S Processor	2.2 GHz	36	180 MB	270W	4	5200 MT/s	128 GB	XCC
Gold 6548N Processor	2.8 GHz	32	60.0 MB	300W	3	5200 MT/s	128 GB	MCC
Gold 6548Y+ Processor	2.5 GHz	32	60.0 MB	250W	3	5200 MT/s	128 GB	MCC
Gold 6544Y Processor	3.6 GHz	16	45.0 MB	270W	3	5200 MT/s	128 GB	MCC
Gold 6542Y Processor	2.9 GHz	24	60.0 MB	250W	3	5200 MT/s	128 GB	MCC
Gold 6538N Processor	2.1 GHz	32	60.0 MB	205W	3	5200 MT/s	128 GB	MCC
Gold 6538Y+ Processor	2.2 GHz	32	60.0 MB	225W	3	5200 MT/s	128 GB	MCC
Gold 6534 Processor	3.9 GHz	8	22.5 MB	195W	3	4800 MT/s	128 GB	MCC
Gold 6530 Processor	2.1 GHz	32	160 MB	270W	3	4800 MT/s	128 GB	XCC
Gold 6526Y Processor	2.8 GHz	16	37.5 MB	195W	3	5200 MT/s	128 GB	MCC

Notes:

- One or two processor(s)
- Intel® Speed Select enabled processors: Gold 6558Q, 6554S, 6548N, 6548Y+, 6544Y, 6542Y, 6538N, 6538Y+ and 6526Y

5th Generation Intel® Xeon® Scalable Processor Family (Gold 5)								
Intel® Xeon® Models	**Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR5**	**SGX Enclave size**	**Die**
Gold 5520+ Processor	2.2 GHz	28	52. 5MB	205W	3	4800 MT/s	128 GB	MCC
Gold 5515+Processor	3.2 GHz	8	22.5 MB	165W	3	4800 MT/s	128 GB	MCC

Notes:

- One or two processor(s)
- Intel® Speed Select enabled processors: N.A.

5th Generation Intel® Xeon® Scalable Processor Family (Silver)								
Intel® Xeon® Models	**Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR5**	**SGX Enclave size**	**Die**
Silver 4516+ Processor	2.2 GHz	24	45.0 MB	185W	2	4400 MT/s	64 GB	MCC
Silver 4514Y Processor	2.0 GHz	16	30.0 MB	150W	2	4400 MT/s	64 GB	MCC
Silver 4510 Processor	2.4 GHz	12	30.0 MB	150W	2	44000 MT/s	64 GB	EE LCC
Silver 4509Y Processor	2.6 GHz	8	22.5 MB	125W	2	4400 MT/s	64 GB	EE LCC

Notes:

- One or two processor(s)
- Intel® Speed Select enabled processors: 4516Y+, 4514Y and 4509Y

5th Generation Intel® Xeon® Scalable Processor Family (Bronze)								
Intel® Xeon® Models	**Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR5**	**SGX Enclave size**	**Die**
Bronze 3508U Processor1	2.1 GHz	8	22.5 MB	125W	N/A	4400 MT/s	64 GB	EE LCC

Notes:

- [1] Single socket capable, no dual socket support
- Intel® Speed Select enabled processors: N.A.
- If 3508U is selected, then 96GB 5600MT/s Memory cannot be selected
- PCIe4.0 only

Standard Features

4th Generation Intel® Xeon® Scalable Processor Family (Platinum)							
Intel Xeon Model	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**Power**	**UPI Links**	**DDR5**	**SGX Enclave size (GB)**
Platinum 9462 Processor[2]	2.7GHz	32	75	350W	3	4800 MT/s	128
Platinum 8490H Processor	1.9GHz	60	112.5	350W	4	4800 MT/s	512
Platinum 8480+ Processor	2.0GHz	56	105	350W	4	4800 MT/s	512
Platinum 8470 Processor	2.0GHz	52	105	350W	4	4800 MT/s	512
Platinum 8470N Processor	1.7GHz	52	97.5	300W	4	4800 MT/s	128
Platinum 8470Q Processor[1]	2.1GHz	52	105	350W	4	4800 MT/s	512
Platinum 8468 Processor	2.1GHz	48	105	350W	4	4800 MT/s	512
Platinum 8468V Processor	2.4GHz	48	97.5	330W	3	4800 MT/s	128
Platinum 8462Y+ Processor	2.8GHz	32	60	300W	3	4800 MT/s	128
Platinum 8460Y+ Processor	2.0GHz	40	105	300W	4	4800 MT/s	128
Platinum 8458P Processor	2.7GHz	44	82.5	350W	3	4800 MT/s	512
Platinum 8452Y Processor	2.0GHz	36	67.5	300W	3	4800 MT/s	128
Platinum 8444H Processor	2.9GHz	16	45	270W	4	4800 MT/s	512

Notes:

- Processors do not ship with heatsinks or fan kits, these must be ordered separately.
- Processors with TDP equal to or greater than 150W through 350W require High Performance Heatsink (P48818-B21)
- Processors with TDP greater than 205W through 350W and mid-tray drive cage require HPE DL3xx/560 Gen11 High Performance Heatsink (P48905-B21)
- "Q" processors require Max Performance Heatsink (P48817-B21)
- Processors with TDP equal to or less than 150W require Standard Heatsink (P49145-B21)
- [1]Liquid cooled CPUs require Maximum Performance Heat Sink (P48817-B21). One heatsink covers both CPUs.
- [2] This is Intel High Bandwidth Memory (HBM) CPU.

4th Generation Intel® Xeon® Scalable Processor Family (Gold)							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**Power**	**UPI Links**	**DDR5**	**SGX Enclave size (GB)**
Gold 6454S Processor	2.2GHz	32	60	270W	4	4800 MT/s	128
Gold 6448H Processor	2.4GHz	32	60	250W	3	4800 MT/s	512
Gold 6430 Processor	2.1GHz	32	60	270W	3	4400 MT/s	128
Gold 6414U Processor[1]	2.0GHz	32	60	250W	0	4800 MT/s	128
Gold 6458Q Processor	3.1GHz	32	60	350W	3	4800 MT/s	128
Gold 6448Y Processor	2.1GHz	32	60	225W	3	4800 MT/s	128
Gold 6444Y Processor	3.6GHz	16	45	270W	3	4800 MT/s	128
Gold 6442Y Processor	2.6GHz	24	60	225W	3	4800 MT/s	128
Gold 6438N Processor	2.0GHz	32	60	205	3	4800 MT/s	128
Gold 6438Y+ Processor	2.0GHz	32	60	205W	3	4800 MT/s	128
Gold 6434 Processor	3.7GHz	8	22.5	195W	3	4800 MT/s	128
Gold 6426Y Processor	2.5GHz	16	37.5	185W	3	4800 MT/s	128
Gold 6421N Processor	1.8GHz	32	60	185	0	4400 MT/s	128
Gold 6418H	2.1GHz	24	60	185W	3	4800 MT/s	512
Gold 6416H	2.2GHz	18	45	165W	3	4800 MT/s	512
Gold 5415+ Processor	2.9GHz	8	22.5	150W	3	4400 MT/s	128
Gold 5416S Processor	2.0GHz	16	30	150W	3	4400 MT/s	128
Gold 5418N Processor	1.8GHz	24	45	165W	3	4000 MT/s	128
Gold 5418Y Processor	2.0GHz	24	45	185W	3	4400 MT/s	128
Gold 5420+ Processor	2.0GHz	28	52.5	205W	3	4400 MT/s	128
Gold 5411N Processor	1.9GHz	24	45	165W	0	4400 MT/s	128

Standard Features

Notes:
- Processors do not ship with heatsinks or fan kits, these must be ordered separately.
- Processors with TDP greater than 150W through 350W require High Performance Heatsink (P48818-B21)
- Processors with TDP greater than 205W through 350W and mid-tray drive cage require HPE DL3xx/560 Gen11 High Performance Heatsink (P48905-B21)
- "Q" processors require Max Performance Heatsink (P48817-B21)
- Processors with TDP equal to or less than 150W require Standard Heatsink (P49145-B21)
- 8-Channel DDR5 @ 4800 MT/s
- [1]Single socket processor. No dual socket support.

4th Generation Intel® Xeon® Scalable Processor Family (Silver)							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**Power**	**UPI Links**	**DDR5**	**SGX Enclave size (GB)**
Silver 4410Y Processor	2.0GHz	12	30	150W	2	4000 MT/s	64
Silver 4416+ Processor	2.0GHz	20	37.5	165W	2	4000 MT/s	64

Notes:
- Processors do not ship with heatsinks or fan kits, these must be ordered separately.
- Processors with TDP greater than 150W through 350W require High Performance Heatsink (P48818-B21)
- Processors with TDP greater than 205W through 350W and mid-tray drive cage require HPE DL3xx/560 Gen11 High Performance Heatsink (P48905-B21)
- Processors with TDP equal to or less than 150W require Standard Heatsink (P49145-B21)

4th Generation Intel® Xeon® Scalable Processor Family (Bronze)							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**Power**	**UPI Links**	**DDR5**	**SGX Enclave size (GB)**
Bronze 3408U	1.8GHz	8	22.5	125W	0	4000 MT/s	64

Notes:
- Processors do not ship with heatsinks or fan kits, these must be ordered separately.
- Processors with TDP equal to or less than 150W require Standard Heatsink (P49145-B21)

Chipset
Intel C741 Chipset
Notes: For more information regarding Intel® chipsets, please see the following URL:
https://www.intel.com/content/www/us/en/products/chipsets/server-chipsets.html

On System Management Chipset
HPE iLO 6 ASIC
Read and learn more in the **iLO QuickSpecs**.

Memory
One of the following depending on model.

Type	HPE DDR5 Smart Memory, Registered (RDIMM)
DIMM Slots Available	32 16 DIMM slots per processor, 8channels per processor, 2 DIMMs per channel
Maximum capacity	8.0 TB 32 x 256 GB RDIMM @ 4800 MT/s (32 DIMMs only with 8SFF or 16SFF, 16 DIMMs maximum with 24SFF)

Notes: The maximum memory speed is limited by the processor selection.

Standard Features

Memory Protection

One of the following depending on model.

Advanced ECC

Advanced ECC uses single device data correction to detect and correct single and all multibit error that occurs within a single DRAM chip.

Expansion Slots

Primary Riser

Notes:

- Bus width indicates the number of physical electrical lanes running to the connector.
- There are 2 types of risers supported on Primary Slot
- x16 cards installed on x8 slots could observe sub-optimal performance.

Primary Riser1					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
1	PCIe 5.0	X8	X16	Full-height, full-length slot	Proc 1
2	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 1
3	PCIe 5.0	X8	X16	Full-height, half-length slot	Proc 1

Primary Riser2					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
1**	NA	NA	NA	NA	NA
1	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 1
2	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 1
3	PCIe 5.0	X16	X16	Full-height, half-length slot	Proc 1

Notes: ** If Slot 1 of HPE DL380 Gen11 2U 3x16 Prim Riser Kit needs to be enabled then 3 x16 Primary Cable Kit (P56073-B21) must be selected.

Secondary Riser:

Notes:

- Bus Width Indicates the number of physical electrical lanes running to the connector.
- There are 2 types of risers support on Secondary Slot
- x16 cards installed on x8 slots could observe sub-optimal performance.

Secondary Riser1					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
4	PCIe 5.0	X8	X16	Full-height, full-length slot	Proc 2
5	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 2
6	PCIe 5.0	X8	X16	Full-height, half-length slot	Proc 2

Secondary Riser2					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
4*	NA	NA	NA	NA	NA
4	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 2
5	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 2
6	PCIe 5.0	X16	X16	Full-height, half-length slot	Proc 2

Standard Features

Notes: * If Slot 4 of HPE DL380 Gen11 2U 3x16 Sec Riser Kit needs to be enabled then 3 x16 Secondary Cable Kit (P56074-B21) must be selected.

Tertiary Riser

Notes:

- Bus Width Indicates the number of physical electrical lanes running to the connector.
- There is 1 type of riser supported on the Tertiary Slot
- x16 cards installed on x8 slots could observe sub-optimal performance.

Tertiary Riser1 (default)					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
7	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 2
8	PCIe 4.0	X16	X16	Full-height, full-length slot	Proc 2

Tertiary Riser1 (with Optional Tertiary Riser FIO x8 Enablement Kit P53632-B21)					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
7	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 2
8	PCIe 5.0	X8	X16	Full-height, full-length slot	Proc 2

Graphics

Integrated Video Standard

- Video modes up to 1920 x 1200@60Hz (32 bpp)
- 16MB Video Memory

Maximum Internal Storage

Drive	Capacity	Configuration
Hot Plug SFF SAS HDD	91.2 TB	24+8+6 x 2.4TB
Hot Plug SFF SAS SSD	583.3 TB	24 +8+6 15.35TB
Hot Plug SFF SATA HDD	76 TB	24+8+6 x 2 TB
Hot Plug SFF SATA SSD	291.84 TB	24 +8+ 6 x 7.68 TB
Hot Plug LFF SAS HDD	360 TB	12+4+4x 18 TB (with optional rear LFF drive cage)
Hot Plug LFF SATA HDD	360 TB	12+4+4 x 18 TB (with optional rear LFF drive cage)
Hot Plug SFF NVMe PCIe SSD	374.4 TB	24+ x 15.36TB + 6 x 960GB<10W (with optional rear Primary and Secondary 2SFF and rear 2SFF drive cages)
EDSFF NVMe	550.8 TB	36EDSFF Drives x 15.3 TB

Notes:

- If all seven Drive cages are selected, then maximum SAS Drive support will be 30 drives (16+8+6).
- Maximum SAS Drive support can be 36 Drives (24+8+4), if one 2SFF Primary / Secondary cage is not selected.

Internal Storage Devices

- **Optical Drive**
  Optional: DVD-ROM, DVD-RW
- **Hard Drives**
  None ship standard

Standard Features

Power Supply

- HPE 1800W-2200W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
  Notes: 1 available in 96% efficiency.
- HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes: 1 available in 94% efficiency.
- HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
- HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
  Notes: 1 available in 96% efficiency.
- HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes: 1 available in 94% efficiency.

HPE Flexible Slot (Flex Slot) Power Supplies share a common electrical and physical design that allows for hot plug, tool-less installation into HPE ProLiant Gen11 Performance Servers. Flex Slot power supplies are certified for high-efficiency operation and offer multiple power output options, allowing users to "right-size" a power supply for specific server configurations. This flexibility helps to reduce power waste, lower overall energy costs, and avoid "trapped" power capacity in the data center.

A standard 6-foot IEC C-13/C-14 jumper cord (A0K02A) is included with each standard AC power supply option kit. If a different power cord is required, please check the **ProLiant Power Cables** web page. review the power requirements for your selected system, please use the **HPE Power Advisor Tool**.

For information on power specifications and technical content visit **HPE Server power supplies**.

Storage Controllers

The available Gen11 controllers are depicted below.

Hybrid RAID Controller

- **Intel VROC SATA for HPE ProLiant Gen11**
  Notes:
  - All models feature an embedded storage controller, with embedded software SATA RAID support for up to 14 bays.
  - Intel VROC for HPE ProLiant Gen11 is an enterprise, hybrid RAID solution specifically designed for SSDs.
  - Intel VROC is a software-based solution utilizing Intel CPU to RAID or HBA direct connected drives.
  - RAID Support- 0/1/5/10.
  - Windows and Linux OS support.
  - Host Tools- Windows GUI/CLI, Linux CLI.
  - UEFI Support- HII Utility, OBSE.
  - iLO Support- IML, Alert, SNMP, AHS.
  - iLO Redfish- Redfish Read.
  - Intel VROC SATA for HPE ProLiant Gen11 will operate in UEFI mode only. For legacy support an additional storage controller will be needed.
  - Intel VROC SATA is off by default and must be enabled.
  - VROC cannot support mix among SATA/sSATA/tSATA due to VROC limitation. Visit **Intel Virtual RAID on CPU for HPE Gen11 User Guide**.
    - 12LFF: Mix of raid is not allowed across boxes/drive bays. Each LFF drive cage (box1/2/3) has four bays and is separated with different drive group with Intel VROC SATA RAID configuration.
    - 8SFF: Mix of raid is not allowed across boxes/drive bays. One box contains 8 bays and is separated into two drive groups (Bay1-4 and Bay5-8) with Intel VROC SATA RAID configuration.

Standard Features

- **Intel VROC NVMe for HPE ProLiant Gen11**
  Notes:
  - All models feature 4 x8 PCIe 5.0 connectors per socket for NVMe connectivity, provides support for up to 8 direct attach x4 NVMe bays.
  - Only supported on SFF models.
  - Intel VROC for HPE ProLiant Gen11 is an enterprise, hybrid RAID solution specifically designed for NVMe SSDs connected directly to the CPU. Intel VROC is a software-based solution utilizing Intel CPU to RAID or HBA direct connected drives.
  - Intel Virtual RAID on CPU Standard for RAID 0/1/10 (S3Q19A/S3Q39AAE) or Premium SKU for RAID 0/1/5/10 (R7J57A/R7J59AAE) must be ordered to enable RAID support.
  - Windows, Linux, VMware OS support.
  - Host Tools- Windows GUI/CLI, Linux CLI.
  - UEFI Support- HII Utility, OBSE.
  - Active health monitoring of NVMe M.2 drives requires use of SMART tools.
  - Intel VROC NVMe for HPE ProLiant Gen11 will operate in UEFI mode only. For legacy support an additional Tri-
  - Mode controller will be needed.
  - For NVMe SSDs only, no PCIe card support.

Essential RAID Controller

- HPE Smart Array E208e-p SR Gen10 Controller

Tri-Mode Controller

- HPE MR416i-p Gen11 Controller
- HPE MR416i-o Gen11 Controller
- HPE MR216i-p Gen11 Controller
- HPE MR216i-o Gen11 Controller
- HPE MR408i-o Gen11 Controller
- HPE SR932i-p Gen11 Controller[1,2]
  Notes:
  - PE80xx NVMe drives are not supported.
  - [1]Requires x16 physical and electrical riser slot
  - [2]If second controller is required, must select secondary riser
  - Controllers with cache require either P02377-B21 HPE Smart Storage Hybrid Capacitor with 145mm Cable Kit or P01366-B21 HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit.

Standard Features

Interfaces

Serial	Optional Rear
Display Port	1 optional front display port via Universal Media Bay
VGA Port	1 standard, rear for all chassis. 1 Optional front display port (Via Universal Media Bay) **Notes:** Both ports are not active simultaneously.
Network Ports	None standard. Choice of OCP networking card or stand-up networking card required. BTO models will come pre-selected with a primary networking card.
HPE iLO Remote Management Network Port	1 Gb Dedicated, rear
Front iLO Service Port	1 standard (Not available when System Insight Display Kit is ordered)
USB 3.2 Port Gen1	Up to 4 total: 1 front (3.2 Gen1), 2 rear (3.0), 2 internal (secure – 1 – 3.2 Gen1, 1 – 2.0), 1 optional USB 2.0 front via Universal Media Bay
System Insight Display (SID)	Optional **Notes:** Not shipping as standard. Available as a CTO option or as a field upgrade (P48819-B21).

Operating Systems and Virtualization Software Support for HPE Servers

HPE servers are designed for seamless integration with partner Operating Systems and Virtualization Software. By collaborating closely with our partners, we ensure that their products are optimized, certified, and fully supported within your HPE server environment.

Access the certified and supported servers for each of the OS and Virtualization software: **HPE Servers Support & Certification Matrices**

HPE Server UEFI

Unified Extensible Firmware Interface (UEFI) is an industry standard that provides better manageability and more secured configuration than the legacy ROM while interacting with your server at boot time. HPE ProLiant Gen11 servers have a UEFI Class 3 implementation to support UEFI Mode.

Notes: The UEFI System Utilities tool is analogous to the HPE ROM-Based Setup Utility (RBSU) of legacy BIOS. For more information, please visit **https://www.hpe.com/servers/uefi**.

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 specific functionality
- Mass Configuration Deployment Tool using iLO RESTful API that is Redfish API Conformant
- Support for > 2.2 TB (using GPT) boot drives
- PXE boot support for IPv6 networks
- USB 3.0 Stack
- Workload Profiles for simple performance optimization

Standard Features

UEFI Boot Mode only

- TPM 2.0 Support
  Notes: Enabling TPM 2.0 no longer requires TPM module option kit for Gen11. It is an embedded feature.
- 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

Notes: For UEFI Boot Mode, boot environment and OS image installations should be configured properly to support UEFI.

Industry Standard Compliance

- ACPI 6.4 Compliant
- PCIe 5.0 Compliant
- Wake on LAN (WoL) Support
- Microsoft® Logo certifications
- PXE Support
- VGA
- Display Port
  Notes: This support is on the optional Universal Media Bay.
- USB 3.2 Gen1 Compliant
- USB 2.0 Compliant (via Universal Media Bay)
  Notes: This support is on the optional Universal Media Bay.
- Energy Star
- SMBIOS 3.4
- Redfish API
- IPMI 2.0
- Secure Digital 4.0
- 2.0 Support
  Notes: Enabling TPM 2.0 no longer requires TPM module option kit for Gen11. It is an embedded feature.
- Advanced Encryption Standard (AES)
- Triple Data Encryption 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
  Notes: For additional technical, thermal details regarding ambient temperature, humidity, and feature support, please visit **DL380 Gen11 Extended Ambient Temperature Guidelines**
- European Union ErP Lot 9 Regulation
  Notes:
  - Beginning on January 1st, 2024, units sold into the European Union (EU), European Economic Area (EEA), the United Kingdom, or Switzerland must include more efficient AC power supplies: 94% for multi-output and 96% for single-output. HPE Flexible Slot power supplies are single-output, and part numbers 865438-B21, P03178-B21, and P44712-B21 are 96% efficient, thus meeting requirements.
  - HPE is on target to fulfil compliant systems ahead of time and will begin enforcing these requirements in advance to satisfy requests with the current power supplies by the set deadline.
  - Please visit: **https://www.hpe.com/us/en/about/environment/msds-specs-more.html** for more information regarding HPE Lot 9 conformance.
  - UEFI (Unified Extensible Firmware Interface Forum) 2.8

Standard Features

Embedded Management

HPE Integrated Lights-Out (HPE iLO)
Monitor your servers for ongoing management, service alerting, reporting and remote management with HPE iLO.
Learn more at **https://www.hpe.com/info/iLO.**

UEFI
Configure and boot your servers securely with industry standard Unified Extensible Firmware Interface (UEFI).

Intelligent Provisioning
Hassle free server and OS provisioning for 1 or more servers with Intelligent Provisioning.
Learn more at **https://support.hpe.com/hpesc/public/docDisplay?docId=c04465280&docLocale=en_US**

iLO RESTful API
iLO RESTful API is DMTF Redfish API implementation and offers simplified server management automation such as configuration and maintenance tasks based on modern industry standards. Learn more at **https://www.hpe.com/info/restfulapi.**

OpenBMC Support
OpenBMC Capable through iLO6 Transfer of Ownership Process.
Learn more at **OpenBMC Support**

Active Health System
The HPE Active Health System (AHS) is an essential component of the iLO management portfolio that provides continuous, proactive health monitoring of HPE servers. Learn more at **https://www.hpe.com/servers/ahs**.

Smart Update
Keep your servers up to date with the HPE Smart Update solution by using Smart Update Manager (SUM) to optimize the firmware and driver updates of the Service Pack for ProLiant (SPP).

iLO Amplifier Pack
Designed for large enterprise and service provider environments with hundreds of HPE servers, the iLO Amplifier Pack is a free, downloadable open virtual application (OVA) that delivers the power to discover, inventory and update Gen8, Gen9 and Gen10 HPE servers. Use with an iLO Advanced License to unlock full capabilities.
Learn more at **https://www.hpe.com/servers/iLOamplifierpack**

RESTful Interface Tool
RESTful Interface tool (iLOREST) is a single scripting tool to provision using iLO RESTful API to discover and deploy servers at scale. Learn more at **https://www.hpe.com/info/resttool**.

Scripting Tools
Provision one to many servers using your own scripts to discover and deploy with Scripting Tool (STK) for Windows and Linux or Scripting Tools for Windows PowerShell. Learn more at **https://www.hpe.com/servers/powershell**.

HPE OneView Standard
HPE OneView is an on premise, multi-generational server monitoring and management solution. HPE OneView Standard can be used for inventory, health monitoring, alerting, and reporting without additional fees. Customers can upgrade their management experience with an HPE OneView Advanced license all provided by the same tool. Learn more at **https://www.hpe.com/info/oneview.**

Standard Features

HPE Compute Ops Management
Transform compute lifecycle management with a cloud experience that delivers greater simplicity, agility, and speed across your entire server environment, wherever it lives. This software-as-a-service tool provides a dashboard with global visibility and intuitive management of server health, security and compliance status to help you easily identify areas that need immediate attention. Users can update tens to thousands of servers faster through intelligent delta-based firmware downloads and on-demand HPE iLO firmware updates.

HPE Compute Ops Management is cloud-native software that is continually updated with new services, features, patches, and firmware packs. The management application resides in HPE GreenLake cloud (access via **https://common.cloud.hpe.com**) and leverages the HPE GreenLake architecture, security, and unified operations.
For a complete list of software as-a-service subscription SKUs and more information, visit the HPE Compute Ops Management QuickSpecs: **https://www.hpe.com/psnow/doc/a50004263enw**
For information on supported HPE servers, the complete list can be found here:
https://www.hpe.com/info/com-supported-servers

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
- Configurable for PCI DSS compliance
- TPM (Trusted Platform Module) 2.0 option
  Notes: Enabling TPM 2.0 no longer requires TPM module option kit for Gen11. It is an embedded feature.
- Advanced Encryption Standard (AES) and Triple Data Encryption Standard (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

Warranty

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE Services operational services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

Notes: Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available.
https://www.hpe.com/support/ProLiantServers-Warranties.

Optional Features

Server Management

HPE iLO Advanced
HPE iLO Advanced licenses offer smart remote functionality without compromise, for all HPE ProLiant servers. The license includes the full integrated remote console, virtual keyboard, video, and mouse (KVM), multi-user collaboration, console record and replay, and GUI-based and scripted virtual media and virtual folders. You can also activate the enhanced security and power management functionality.

HPE OneView Advanced
HPE OneView Advanced offers a sophisticated level of automation to infrastructure management by taking a template driven approach to provisioning, updating, and integrating compute, storage, and networking infrastructure. It builds upon the base features of HPE OpenView Standard, provides full-featured licenses which can be purchased for managing multiple HPE server generations.
To learn more visit **https://www.hpe.com/info/oneview**.

HPE Insight Cluster Management Utility (CMU)
HPE Insight Cluster Management Utility is a HyperScale management framework that includes software for the centralized provisioning, management and monitoring of nodes and infrastructure. Learn more at **https://www.hpe.com/info/cmu**.

One Config Simple (OCS/SCE)
OCS/SCE is a guided self-service tool to help sales and non-technical people provide customers with initial configurations in 3 to 5 minutes. You may then send the configuration on for configuration help, or use in your existing ordering processes. If you require "custom" rack configuration or configuration for products not available in SCE, please contact Hewlett Packard Enterprise Customer Business Center or an Authorized Partner for assistance.
https://h22174.www2.hpe.com/SimplifiedConfig/Welcome#

Rack and Power Infrastructure
The story may end with servers, but it starts with the foundation that makes compute go – and business grow. We've reinvented our entire portfolio of rack and power products to make IT infrastructure more secure, more practical, and more efficient. In other words, we've created a stronger, smarter, and simpler infrastructure to help you get the most out of your IT equipment. As an industry leader, Hewlett Packard Enterprise is uniquely positioned to address the key concerns of power, cooling, cable management and system access.

HPE G2 Advanced and Enterprise Racks are perfect for the server room or today's modern data center with enhanced airflow and thermal management, flexible cable management, and a 10 year Warranty to support higher density computing.

HPE G2 PDUs offer reliable power in flexible form factors that operate at temperatures up to 60°C, include color-coded outlets and load segments and a low-profile design for optimal access to the rack and support for dense rack environments.

HPE Uninterruptible Power Systems are cost-effective power protection for any type workload. Some UPSs include options for remote management and extended runtime modules so your critical dense data center is covered in power outages.
HPE KVM Solutions include a console and switches designed to work with your server and IT equipment reliably. We've got a cost-effective KVM switch for your first rack and multiple connection IP switches with remote management and security capabilities to keep your data center rack up and running.

Learn more about HPE Racks, KVM, PDUs and UPSs at **HPE Rack and Power Infrastructure**.

Service and Support

HPE Services

No matter where you are in your digital transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.
https://www.hpe.com/services

Consulting Services

No matter where you are in your journey to hybrid cloud, experts can help you map out your next steps. From determining what workloads should live where, to handling governance and compliance, to managing costs, our experts can help you optimize your operations.
https://www.hpe.com/services/consulting

HPE Managed Services

HPE runs your IT operations, providing services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.
HPE Managed Services | HPE

Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources. Meet service-level targets and business objectives with features designed to drive better business outcomes.
https://www.hpe.com/services/operational

HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals through a personalized experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

https://www.hpe.com/services/completecare

HPE Tech Care Service

HPE Tech Care Service is the operational support service experience for HPE products. The service goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service delivers a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available in three response levels. Basic, which provides 9x5 business hour availability and a 2-hour response time. Essential which provides a 15-minute response time 24x7 for most enterprise level customers, and Critical which includes a 6-hour repair commitment where available and outage management response for severity 1 incidents.
https://www.hpe.com/services/techcare

Service and Support

HPE Lifecycle Services

HPE Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Lifecycle Install and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Analysis Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- Implementation assistance services: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service activities, including assessments, performance maintenance reviews, firmware management, professional services, and operational best practices.

Notes: To review the list of Lifecycle Services available for your product go to:
https://www.hpe.com/services/lifecycle

For a list of the most frequently purchased services using service credits, see the **HPE Service Credits Menu**

Other Related Services from HPE Services:

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Broad catalogue of course offerings to expand skills and proficiencies in topics ranging from cloud and cybersecurity to AI and DevOps. 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.
https://www.hpe.com/services/training

Defective Media Retention

An option available with HPE Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and services options.

Parts and Materials

HPE will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

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.

How to Purchase Services

Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at **https://ssc.hpe.com/portal/site/ssc/**

Service and Support

AI Powered and Digitally Enabled Support Experience

Achieve faster time to resolution with access to product-specific resources and expertise through a digital and data driven customer experience

Sign into the HPE Support Center experience, featuring streamlined self-serve case creation and management capabilities with inline knowledge recommendations. You will also find personalized task alerts and powerful troubleshooting support through an intelligent virtual agent with seamless transition when needed to a live support agent.
https://support.hpe.com/hpesc/public/home/signin

Consume IT On Your Terms

HPE GreenLake edge-to-cloud platform brings the cloud experience directly to your apps and data wherever they are—the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, HPE GreenLake edge-to-cloud platform accelerates digital transformation in a distributed, edge-to-cloud world.

- Get faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

To learn more about HPE Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Contact information for a representative in your area can be found at "Contact HPE"
https://www.hpe.com/us/en/contact-hpe.html

For more information
https://www.hpe.com/services

Pre-Configured Models

HPE Smart Choice purchase program

The HPE Smart Choice purchase program features popular fully configured products that can be quoted in minutes and shipped quickly through HPE Authorized Partners. Products are configured and tested in an HPE factory and stocked at HPE Authorized Distributors and Partners. The products arrive in a single box, making onsite integration easier and more efficient for partners and customers. Additionally, there are aggressively priced HPE Tech Care Services available only through the HPE Smart Choice program when you purchase an HPE Smart Choice product.

For HPE Smart Choice configuration and product details, please visit the Smart Choice Supplemental QuickSpecs:
https://www.hpe.com/psnow/doc/a50009219enw

Pre-Configured models ship with the configurations below.

- Pre-Configured models ship with the configurations below. Options can be selected from the Core or Additional options section of this QuickSpecs.
- Hewlett Packard Enterprise does not allow factory integration of options into pre-configured models. Any additional options purchased will not be shipped inside the server.
- Network Choice models do not include embedded LOM.

SKU Number	P52560-B21 P52560-291 P52560-421	P52561-B21 P52561-291 P52561-421	P52562-B21 P52562-291 P52562-421
Model Name	**P52560-B21 & P52560-291:** HPE ProLiant DL380 Gen11 4410Y 2.0GHz 12-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server	**P52561-B21 & P52561-291:** HPE ProLiant DL380 Gen11 5416S 2.0GHz 16-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server	**P52562-B21 & P52562-291:** HPE ProLiant DL380 Gen11 4410Y 2.0GHz 12-core 1P 32GB-R NC 12LFF 800W PS Server
	P52560-421: HPE ProLiant DL380 Gen11 4410Y 2.0GHz 12-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS Server	**P52561-421:** HPE ProLiant DL380 Gen11 5416S 2.0GHz 16-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS Server	**P52562-421:** HPE ProLiant DL380 Gen11 4410Y 2.0GHz 12-core 1P 32GB-R NC 12LFF 1000W PS Server
Chassis	HPE ProLiant DL380 Gen11 8SFF NC Configure-to-order Server	HPE ProLiant DL380 Gen11 8SFF NC Configure-to-order Server	HPE ProLiant DL380 Gen11 12LFF NC Configure-to-order Server
Processor	4410Y (12 core, 2.0 GHz, 150W)	5416S (16 core, 2.0 GHz, 150W)	4410Y (12 core, 2.0 GHz, 150W)
Number of Processors	One		
Memory	32 GB (1x32 GB, 4800 MT/s) **Notes:** Runs at 4000 MT/s due to processor limitation.	32 GB (1x32 GB, 4800 MT/s) **Notes:** Runs at 4400 MT/s due to processor limitation.	32 GB (1x32 GB, 4800 MT/s) **Notes:** Runs at 4000 MT/s due to processor limitation.
Network Controller	Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE **Notes:** No embedded networking	Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller	HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller	Embedded SATA controller (AHCI or Intel SATA hybrid RAID controller)
Included Hard Drives	None ship standard, 8 SFF supported	None ship standard, 8 SFF supported	None ship standard, 12 LFF supported

Pre-Configured Models

Optical Drive	Optional DVD-ROM Optional via Universal Media Bay External support only	Optional DVD-ROM Optional via Universal Media Bay External support only	Not supported
Expansion Slots	3-slots (x8, x16, x8) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	**P52560-B21 & P52560-291:** 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	**P52561-B21 & P52561-291:** 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	**P52562-B21 & P52562-291:** 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
	P52560-421: 1x HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	**P52561-421:** 1x HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	**P52562-421:** 1x HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit
Fans	4x Standard Fans		
Management	HPE iLO 6		
Rail Kit	HPE ProLiant DL3XX Gen11 Easy Install Rail 3 Kit		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-Configured Models

SKU Number	P52564-B21 P52564-291 P52564-421	P58417-B21 P58417-291	P60636-B21 P60636-291 P60636-421
Model Name	**P52564-B21 & P52564-291:** HPE ProLiant DL380 Gen11 5415+ 2.9GHz 8-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server	**P58417-B21:** HPE ProLiant DL380 Gen11 6430 2.1GHz 32-core 1P 64GB-R NC 8SFF 1000W PS Server	**P60636-B21 & P60636-291:** HPE ProLiant DL380 Gen11 4416+ 2.0GHz 20-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server
	P52564-421: HPE ProLiant DL380 Gen11 5415+ 2.9GHz 8-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS Server	**P58417-291 & P58417-421:** HPE ProLiant DL380 Gen11 6430 2.1GHz 32-core 1P 32GB-R NC 8SFF 1000W PS Server	**P60636-421:** HPE ProLiant DL380 Gen11 4416+ 2.0GHz 20-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS Server
Chassis	HPE ProLiant DL380 Gen11 8SFF NC Configure-to-order Server		
Processor	5415+ (8 core, 2.9 GHz, 150W)	6430 (32 core, 2.1 GHz, 270W)	4416+ (20 core, 2.0 GHz, 165W)
Number of Processors	One	One with high performance heatsink	One with high performance heatsink
Memory	32 GB (1x32 GB, 4800 MT/s) **Notes:** Runs at 4400 MT/s due to processor limitation.	**P58417-B21:** 64 GB (2x32 GB, 4800 MT/s) **Notes:** Runs at 4400 MT/s due to processor limitation. **P58417-291 & P58417-421:** 32 GB (2x32 GB, 4800 MT/s) **Notes:** Runs at 4400 MT/s due to processor limitation.	32 GB (1x32 GB, 4800 MT/s) **Notes:** Runs at 4000 MT/s due to processor limitation.
Network Controller	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE **Notes:** No embedded networking
Storage Controller	HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller	Embedded SATA controller (AHCI or Intel SATA hybrid RAID controller)	HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	Optional DVD-ROM Optional via Universal Media Bay External support only		
Expansion Slots	3-slots (x8, x16, x8) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	**P52564-B21 & P52564-291:** 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit **P52564-421:** 1x HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	1x HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	**P60636-B21 & P60636-291:** 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit **P60636-421:** 1x HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit

Pre-Configured Models

Fans	4x Standard Fans	6x High Performance Fan	4x Standard Fans
Management	HPE iLO 6		
Rail Kit	HPE ProLiant DL3XX Gen11 Easy Install Rail 3 Kit		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-Configured Models

SKU Number	P60637-B21 P60637-291 P60637-421	P60638-B21 P60638-291 P60638-421	P60740-AA1
Model Name	**P60637-B21 & P60637-291:** HPE ProLiant DL380 Gen11 6426Y 2.5GHz 16-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server	**P60638-B21 & P60638-291:** HPE ProLiant DL380 Gen11 5418Y 2.0GHz 24-core 1P 64GB-R MR408i-o NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen11 4416+ 2.1GHz 20-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server
	P60637-421: HPE ProLiant DL380 Gen11 6426Y 2.5GHz 16-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS Server	**P60638-421:** HPE ProLiant DL380 Gen11 5418Y 2.0GHz 24-core 1P 64GB-R MR408i-o NC 8SFF 1000W PS Server	
Chassis	HPE ProLiant DL380 Gen11 8SFF NC Configure-to-order Server		
Processor	6426Y (16 core, 2.5 GHz, 185W)	5418Y (24 core, 2.0 GHz, 185W)	4416+ (20 core, 2.0 GHz, 165W)
Number of Processors	One with high performance heatsink		
Memory	32 GB (1x32 GB, 4800 MT/s)	64 GB (2x32 GB, 4800 MT/s) **Notes:** Runs at 4400 MT/s due to processor limitation.	32 GB (1x32 GB, 4800 MT/s) **Notes:** Runs at 4000 MT/s due to processor limitation.
Network Controller	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE **Notes:** No embedded networking	Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	Optional DVD-ROM Optional via Universal Media Bay External support only		
Expansion Slots	3-slots (x8, x16, x8) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	**P60637-B21 & P60637-291:** 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	**P60638-B21 & P60638-291:** 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
	P60637-421: 1x HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	**P60638-421:** 1x HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	
Fans	4x Standard Fans		
Management	HPE iLO 6		
Rail Kit	HPE ProLiant DL3XX Gen11 Easy Install Rail 3 Kit		
Security	TPM (Trusted Platform Module)	TPM (Trusted Platform Module)	TPM (Trusted Platform Module)

Pre-Configured Models

Form Factor	2U Rack
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.

Pre-Configured Models

SKU Number	P70456-291 P70456-421	P70457-291 P70457-421	P70458-421
Model Name	**P70456-291:** HPE ProLiant DL380 Gen11 4509Y 2.6GHz 8-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS JP Server	**P70457-291:** HPE ProLiant DL380 Gen11 4514Y 2.0GHz 16-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS JP Server	HPE ProLiant DL380 Gen11 4514Y 2.0GHz 16-core 1P 32GB-R MR416i-p NC 12LFF 1000W PS EMEA Server
	P70456-421: HPE ProLiant DL380 Gen11 4509Y 2.6GHz 8-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS EMEA Server	**P70457-421:** HPE ProLiant DL380 Gen11 4514Y 2.0GHz 16-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS EMEA Server	
Chassis	HPE ProLiant DL380 Gen11 8SFF NC Configure-to-order Server	HPE ProLiant DL380 Gen11 8SFF NC Configure-to-order Server	HPE ProLiant DL380 Gen11 12LFF NC Configure-to-order Server
Processor	4509Y (8 core, 2.6 GHz, 125W)	4514Y (16 core, 2.0 GHz, 150W)	4514Y (16 core, 2.0 GHz, 150W)
Number of Processors	One		
Memory	32 GB (1x32 GB, 5600 MT/s) **Notes:** Runs at 4400 MT/s due to processor limitation.		
Network Controller	Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE **Notes:** No embedded networking
Storage Controller	HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller	HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller	HPE MR416i-p Gen11 x16 Lanes 8GB Cache PCI SPDM Plug-in Storage Controller
Included Hard Drives	None ship standard, 8 SFF supported	None ship standard, 8 SFF supported	None ship standard, 12 LFF supported
Optical Drive	Optional DVD-ROM Optional via Universal Media Bay External support only		
Expansion Slots	3-slots (x8, x16, x8) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	1x HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit		
Fans	4x Standard Fans		
Management	HPE iLO 6		
Rail Kit	HPE ProLiant DL3XX Gen11 Easy Install Rail 3 Kit		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-Configured Models

SKU Number	P70579-D61	P70580-D61
Model Name	HPE ProLiant DL380 Gen11 6430 2.1GHz 32-core 1P 32GB-R NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen11 6442Y 2.6GHz 24-core 1P 32GB-R NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL380 Gen11 8SFF NC Configure-to-order Server	
Processor	6430 (32 core, 2.1 GHz, 270W)	6442Y (24 core, 2.6 GHz, 225W)
Number of Processors	One with high performance heatsink	
Memory	32 GB (1x32 GB, 4800 MT/s) **Notes:** Runs at 4400 MT/s due to processor limitation.	32 GB (1x32 GB, 4800 MT/s)
Network Controller	Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE **Notes:** No embedded networking	
Storage Controller	Embedded SATA controller (AHCI or Intel SATA hybrid RAID controller)	
Included Hard Drives	None ship standard, 8 SFF supported	
Optical Drive	Optional DVD-ROM Optional via Universal Media Bay External support only	
Expansion Slots	3-slots (x8, x16, x8) as standard; upgradeable to 8-slots in a 2 processor configuration	
Power Supply	2x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	
Fans	6x High Performance Fan	
Management	HPE iLO 6	
Rail Kit	HPE ProLiant DL3XX Gen11 Easy Install Rail 3 Kit	
Security	TPM (Trusted Platform Module)	
Form Factor	2U Rack	
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.	

Pre-Configured Models

Country Code Key

- -B21 = Worldwide
- -291 = Japan
- -421 = Europe, the Middle East and Africa
- -AA1 = China
- -D61 = India

Configuration Information

Smart Templates from HPE

HPE is releasing new Smart Template technology in the One Config Advanced (OCA) configurator. These Templates represent the CTO equivalents of the top-selling BTO configurations. They are intended to provide simple starting points to assist you in easily creating and customizing your desired Server solutions. HPE Servers that have Platform Templates, developed by HPE Product Managers, will have a separate tab in the HPE OCA configurator.

Workload Solutions Templates from HPE

The Workload Solutions Templates build on the Smart Templates technology to easily develop working configurations of the most compelling Workload Solutions. The templates complement the Reference Builds developed by HPE. Workload Solutions templates preconfigure some of the key architecture decisions and make it easier for Sellers to get started and complete a differentiated server solution for your customer's specific workload.

Mainstream SKUs

HPE launched the Mainstream SKU initiative as a market-driven approach to Demand Steering. It is a simplified portfolio of our top selling options that meet the current and future market trends. HPE has committed to provide a more predictable and faster experience for these options. Mainstream SKUs enjoy higher safety stock levels and have higher fulfilment service levels than non-Mainstream SKUs. Mainstream orders are fulfilled +30% faster than non-Mainstream orders, have fewer shortages and better recovery dates. This platform has Mainstream SKUs in the options portfolio, and is eligible for the improved Mainstream experience. Mainstream SKUs are designated with a Mainstream symbol in our configurators.

Mainstream Configurations

HPE is using the new Smart Templates technology to present Mainstream configurations. All the options in a Mainstream configuration are pre-selected Mainstream SKUs to optimize the performance, predictability and fulfilment experience. Check the Template section in our configurators for eligible Mainstream configurations.

This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of an HPE approved configurator. Contact your local sales representative for information on configurable product offerings and requirements.

- Factory Integrated Models must start with a CTO Server.
- FIO indicates that this option is only available as a factory installable option.
- All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number of initial hard drives ordered with the server.
- Some options may not be integrated at the factory. Contact your local sales representative for additional information.

Step 1: Base Configuration (choose one (1) of the following four (4) configurable server models from the tables below)
The below (4) CTO server models, denoted with "NC" in the SKU description, provide flexibility in the networking choice and require a network adapter from the "HPE Networking" section be selected.

Networking Choice CTO Server Models	HPE ProLiant DL380 Gen11 8LFF NC CTO Server	HPE ProLiant DL380 Gen11 12LFF NC CTO Server	HPE ProLiant DL380 Gen11 8SFF NC CTO Server	HPE ProLiant DL380 Gen11 24SFF NC CTO Server
SKU Number	P52532-B21	P52533-B21	P52534-B21	P52535-B21
TAA SKU*	P52532-B21#GTA	P52533-B21#GTA	P52534-B21#GTA	P52535-B21#GTA
HPE Trusted Supply Chain	P36394-B21 – Optional			
Processor	Not included as standard	Not included as standard	Not included as standard	Not included as standard
DIMM Slots	32-DIMM slots	32-DIMM slots	32-DIMM slots	32-DIMM slots
Storage Controller	Embedded SW RAID with 14 SATA ports (12-ports accessible), optional choice of HPE modular MegaRAID controller.			
PCIe	Three standard in primary riser			
Drive Cage - available	8LFF	12LFF	8 SFF (8SFF U.3 x1)	24SFF (3x 8SFF U.3 x1)

Configuration Information

Network Controller	Choice of either OCP 3.0 or select stand-up network adapters for primary networking selection plus additional/optional stand-up network adapters. **Notes:** No embedded networking			
Fans	4-Standard	4-Standard	4-Standard	6-High Performance
Management	HPE iLO with Intelligent Provisioning (standard), iLO Advanced and OneView (optional)			
USB	4x 3.0 standard plus iLO front service port	4x 3.0 standard plus iLO front service port	4x 3.0 standard plus iLO front service port	4x 3.0 standard plus iLO front service port
Networking Choice CTO Server Models	HPE ProLiant DL380 Gen11 12EDSFF NC Configure-to-order Server			
SKU Number	P52536-B21			
TAA SKU*	P52536-B21#GTA			
HPE Trusted Supply Chain	P36394-B21 – Optional			
Processor	Not included as standard			
DIMM Slots	32-DIMM slots			
Storage Controller	Embedded SW RAID with 14 SATA ports (12-ports accessible), and optional choice of HPE modular MegaRAID controller.			
PCIe	Three standard in primary riser			
Drive Cage - available	12 EDSFF			
Network Controller	Choice of either OCP 3.0 or select stand-up network adapters for primary networking selection plus additional/optional stand-up network adapters **Notes:** No embedded networking			
Fans	6 -Standard			
Management	HPE iLO with Intelligent Provisioning (standard), iLO Advanced and OneView (optional)			
USB	4x 3.0 standard plus iLO front service port			

Notes:

- Network Choice (NC) server models require a networking selection of a network adapters in the “HPE Networking” section.
- HPE Trusted Supply Chain (P36394-B21) is an optional security upgrade intended for agencies and regulated industries needing enhanced security and compliance needs. Applying this option to a DL380 Gen11 CTO server ensures it is built in the USA in a secured facility by vetted HPE personnel assigned to the manufacturing processes. A multitude of checkpoints/inspections for malicious microcode and counterfeit parts are performed throughout the server build, and additional safeguards are put in place against cyber-exploits throughout the server lifecycle. The HPE ProLiant DL380 Gen11 is re-branded as a HPE ProLiant DL380T Gen11 to denote the HPE Trusted Supply Chain security enhancements. The DL380T is Trade Agreement Act (TAA) compliant. See “HPE Security” section within this document for more detail and learn more at **https://www.hpe.com/security**
- *HPE offers multiple Trade Agreement Act (TAA) compliant configurations to meet the needs of US Federal Government customers. These products are either manufactured or substantially transformed in a designated country. TAA compliance is only provided when HPE options are included as part of factory integrated orders (CTO).
- All CTO servers are Energy Star 3.0 compliant.

Configuration Information

CTO Server	8 SFF CTO Chassis	24SFF CTO Chassis	8LFF CTO Chassis	12LFF CTO Chassis
Available Drive Cage	8SFF U.3 x1 Drive Cage	3x 8SFF U.3 x1 Drive Cage	8LFF (2x 4LFF Drive Cages)	12LFF (3x 4LFF Drive Cages)
Universal Media Bay	1 Optional	Not available	Not available	Not available
Optical Disk Drive	1 Optional with UMB	Not available	1 Optional with ODD Enable Kit	Not available
8 SFF NVMe/SAS/SATA Drive Cage (mid-tray)	1 Optional	1 Optional	1 Optional	1 Optional
2 SFF NVMe/SAS/SATA (Front)	1 Optional with UMB	Not available	1 Optional with Side-by-Side Drive Cage	Not available
2 SFF NVMe/SAS/SATA (Rear)	3 Optional	3 Optional	1 Optional	1 Optional
2LFF SAS/SATA (Rear riser)	Not available	Not available	2 Optional	2 Optional
CTO Server	**EDSFF CTO Chassis**			
Available Drive Cage	12 EDSFF Drive Cage			
Universal Media Bay	Not supported			
Optical Disk Drive	Not supported			
8 SFF NVMe/SAS/SATA Drive Cage	Up to 1 Optional			
2 SFF NVMe/SAS/SATA (Front)	Not supported			
2 SFF NVMe/SAS/SATA (Rear)	1 Optional			
2LFF SAS/SATA (Rear riser)	Not available			

Notes: This applies to CTO configurations; field upgrades may differ depending on field configuration.

Step 2: Choose Required Options

Please select up to two processors required below.

Notes:

- 8SFF, 8LFF, and 12LFF CTO models ship with 4 standard fans.
- 24SFF CTO Servers ship with 6 High performance fans included. Maximum Performance fan kit is available to meet ambient temperature environments and are required for rear drives or NVMe configurations.
- Maximum memory capacity per processor is dependent on processor models. All processors support up to 4TB max memory per processor.
- Mixing of 2 different processor models are NOT allowed.
- Processors with TDP greater than 150W require High Performance Heatsink (P48818-B21).
- Q series processors require Max Performance Heat Sink (P48817-B21)
- DDR5 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.

Configuration Information

Step 2a: Choose Processors

Processor Option Kits (Required Processor)

5th Generation Intel Xeon-Platinum

All SKUs below ship with processors only. Adequate fans and heatsinks must be selected.
Supports "HPE DDR5 Smart Memory – Registered (RDIMM), 5600MT/s".

Intel Xeon-Platinum 8593Q 2.2GHz 64-core 385W Processor for HPE P68449-B21

Notes:
- XCC die
- Max 2
- Qty 2 of processor must be selected.
- Max Performance Heat Sink or DLC Module must be selected
- High Performance Fan Kit must be selected and defaulted
- Max Performance Heat Sink is defaulted however customer is allowed to deselect and select DLC Module.
- Without DLC Module, drives above 11W cannot be populated in Rear Drive cages
- If Full Length (FL) GPU is selected with this Processor then DLC Module must be selected for Processors.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8592+ 1.9GHz 64-core 350W Processor for HPE P67089-B21

Notes:
- XCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected and defaulted
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8592V 2.0GHz 64-core 330W Processor for HPE P67107-B21

Notes:
- XCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected and defaulted
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8581V 2.0GHz 60-core 270W Processor for HPE P67109-B21

Notes:
- XCC die
- Max 1
- High Performance Heat Sink must be selected.
- DLC Module cannot be selected.
- High Performance Fan Kit must be selected
- Cannot be selected with EDSFF CTO Server.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8580 2.0GHz 60-core 350W Processor for HPE P67088-B21

Notes:
- XCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected

Configuration Information

– Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8570 2.1GHz 56-core 350W Processor for HPE P67087-B21

Notes:
– XCC die
– Max 2
– High Performance Heat Sink or DLC Module must be selected.
– High Performance Fan Kit must be selected
– Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8568Y+ 2.3GHz 48-core 350W Processor for HPE P67086-B21

Notes:
– XCC die
– Max 2
– High Performance Heat Sink or DLC Module must be selected.
– High Performance Fan Kit must be selected
– Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8562Y+ 2.8GHz 32-core 300W Processor for HPE P67085-B21

Notes:
– MCC die
– Max 2
– High Performance Heat Sink or DLC Module must be selected.
– High Performance Fan Kit must be selected
– Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8558P 2.7GHz 48-core 350W Processor for HPE P67108-B21

Notes:
– XCC die
– Max 2
– High Performance Heat Sink or DLC Module must be selected.
– High Performance Fan Kit must be selected
– Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8558 2.1GHz 48-core 330W Processor for HPE P67097-B21

Notes:
– XCC die
– Max 2
– High Performance Heat Sink or DLC Module must be selected.
– High Performance Fan Kit must be selected
– Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8558U 2.0GHz 48-core 300W Processor for HPE P67102-B21

Notes:
– XCC die
– Max 1
– High Performance Heat Sink or DLC Module must be selected.
– High Performance Fan Kit must be selected
– Single socket processor and DLC Module cannot be selected together.
– Cannot be selected with EDSFF CTO Server.
– Supports only PC5-5600B/ PC5-5200B Memory.

Configuration Information

Intel Xeon-Gold 6558Q 3.2GHz 32-core 350W Processor for HPE P67098-B21

Notes:
- MCC die
- Qty 2 of processor must be selected.
- Max Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected
- Supports only PC5-5600B/ PC5-5200B Memory.
- If Full Length (FL) GPU is selected with this Processor then DLC Module must be selected for Processors.

Intel Xeon-Gold 6554S 2.2GHz 36-core 270W Processor for HPE P67110-B21

Notes:
- XCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6548N 2.8GHz 32-core 250W Processor for HPE P67105-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6548Y+ 2.5GHz 32-core 250W Processor for HPE P67082-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6544Y 3.6GHz 16-core 270W Processor for HPE P67084-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6542Y 2.9GHz 24-core 250W Processor for HPE P67081-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Configuration Information

Intel Xeon-Gold 6538N 2.1GHz 32-core 205W Processor for HPE P67104-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6538Y+ 2.2GHz 32-core 225W Processor for HPE P67096-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6534 3.9GHz 8-core 195W Processor for HPE P67083-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6530 2.1GHz 32-core 270W Processor for HPE P67095-B21

Notes:
- XCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6526Y 2.8GHz 16-core 195W Processor for HPE P67080-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 5520+ 2.2GHz 28-core 205W Processor for HPE P67094-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Configuration Information

Intel Xeon-Gold 5515+ 3.2GHz 8-core 165W Processor for HPE P67079-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Silver 4516Y+ 2.2GHz 24-core 185W Processor for HPE P67093-B21

Notes:
- MCC die
- Max 2
- High Performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Silver 4514Y 2.0GHz 16-core 150W Processor for HPE P67092-B21

Notes:
- MCC die
- Max 2
- Standard Heat Sink or High Performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Silver 4510 2.4GHz 12-core 150W Processor for HPE P67091-B21

Notes:
- EE LCC die
- Max 2
- Standard Heat Sink or High Performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.
- 96GB 5600B Memory cannot be selected.

Intel Xeon-Silver 4509Y 2.6GHz 8-core 125W Processor for HPE P67090-B21

Notes:
- EE LCC die
- Max 2
- Standard Heat Sink or High Performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.
- If “HPE Energy Star4.0 configuration FIO kit” is selected then Qty2 of this Processor cannot be selected.
- 96GB 5600B Memory cannot be selected.

Configuration Information

Intel Xeon-Bronze 3508U 2.1GHz 8-core 125W Processor for HPE P67100-B21

Notes: 18, 282, 283, 284, 285, 288, 309, 319, 320, 322, 323, 430, 436, 499, 500, 501, 510

- EE LCC die
- Max 1
- Standard Heat Sink or High Performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High Performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.
- If "HPE Energy Star4.0 configuration FIO kit" is selected then Qty2 of this Processor cannot be selected.
- 96GB 5600B Memory cannot be selected.
- Supports PCIe4.0 Only29, 30, 31, 32, 34, 259, 445, 449, 458, 475, 499

4th Generation Intel Xeon-Platinum

Notes:

- All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.
- Processors with TDP equal to or greater than 150W require High Performance Heatsink (P48818-B21)
- Q series processors require Max Performance Heat Sink (P48817-B21)
- 8470Q processor is not supported with 12LFF CTO Server and 24SFF CTO Server.

Intel Xeon-Platinum 9462 2.7GHz 32-core 350W Processor for HPE P49645-B21

Notes:

- This is Intel High Bandwidth Memory (HBM) CPU.
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8490H 1.9GHz 60-core 350W Processor for HPE P49630-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8480+ 2.0GHz 56-core 350W Processor for HPE P49607-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8470Q 2.1GHz 52-core 350W Processor for HPE P49609-B21

Notes:

- Requires selection of Max Performance Heat Sink or DLC Module
- Requires High Performance Fan Kit
- If Full Length (FL) GPU is selected with this Processor then DLC Module must be selected for Processors.

Intel Xeon-Platinum 8470 2.0GHz 52-core 350W Processor for HPE P49606-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8470N 1.7GHz 52-core 300W Processor for HPE P49649-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Configuration Information

Intel Xeon-Platinum 8468V 2.4GHz 48-core 330W Processor for HPE P49631-B21

Notes:
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8468 2.1GHz 48-core 350W Processor for HPE P49605-B21

Notes:
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8462Y+ 2.8GHz 32-core 300W Processor for HPE P49603-B21

Notes:
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8458P 2.7GHz 44-core 350W Processor for HPE P49632-B21

Notes:
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8460Y+ 2.0GHz 40-core 300W Processor for HPE P49604-B21

Notes:
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8452Y 2.0GHz 36-core 300W Processor for HPE P49616-B21

Notes:
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8444H 2.9GHz 16-core 270W Processor for HPE P49625-B21

Notes:
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

4th Generation Intel Xeon-Gold

Intel Xeon-Gold 6458Q 3.1GHz 32-core 350W Processor for HPE P49608-B21

Notes:
- Requires selection of Max Performance Heat Sink or DLC Module
- Requires High Performance Fan Kit
- If Full Length (FL) GPU is selected with this Processor then DLC Module must be selected for Processors.

Intel Xeon-Gold 6448H 2.4GHz 32-core 250W Processor for HPE P49622-B21

Notes:
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6448Y 2.1GHz 32-core 225W Processor for HPE P49600-B21

Notes:
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6444Y 3.6GHz 16-core 270W Processor for HPE P49602-B21

Notes:
- Requires High Performance Heat Sink

Configuration Information

– Requires High Performance Fan Kit

Intel Xeon-Gold 6442Y 2.6GHz 24-core 225W Processor for HPE P49599-B21

Notes:
– Requires High Performance Heat Sink
– Requires High Performance Fan Kit

Intel Xeon-Gold 6438N 2.0GHz 32-core 205W Processor for HPE P49638-B21

Notes:
– Requires High Performance Heat Sink
– Requires High Performance Fan Kit

Intel Xeon-Gold 6438Y+ 2.0GHz 32-core 205W Processor for HPE P49615-B21

Notes:
– Requires High Performance Heat Sink
– Requires High Performance Fan Kit

Intel Xeon-Gold 6434 3.7GHz 8-core 195W Processor for HPE P49601-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 6430 2.1GHz 32-core 270W Processor for HPE P49614-B21

Notes:
– Requires High Performance Heat Sink
– Requires High Performance Fan Kit

Intel Xeon-Gold 6426Y 2.5GHz 16-core 185W Processor for HPE P49598-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 6454S 2.2GHz 32-core 270W Processor for HPE P49654-B21

Notes:
– Requires High Performance Heat Sink
– Requires High Performance Fan Kit

Intel Xeon-Gold 6421N 1.8GHz 32-core 185W Processor for HPE P49641-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 6418H 2.1GHz 24-core 185W Processor for HPE P49621-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 6416H 2.2GHz 18-core 165W Processor for HPE P49620-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 6414U 2.0GHz 32-core 250W Processor for HPE P49619-B21

Notes:
– This is a single socket CPU, max allowed = 1
– Requires High Performance Heat Sink
– Requires High Performance Fan Kit

Intel Xeon-Gold 5415+ 2.9GHz 8-core 150W Processor for HPE P49597-B21

Notes: Requires Standard Heat Sink

Intel Xeon-Gold 5416S 2.0GHz 16-core 150W Processor for HPE P49653-B21

Notes: Requires Standard Heat Sink

Intel Xeon-Gold 5418N 1.8GHz 24-core 165W Processor for HPE P49640-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 5418Y 2.0GHz 24-core 185W Processor for HPE P49612-B21

Notes: Requires High Performance Heat Sink

Configuration Information

Intel Xeon-Gold 5420+ 2.0GHz 28-core 205W Processor for HPE	P49613-B21

Notes:
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 5415+ 2.9GHz 8-core 150W Processor for HPE	P49597-B21

Notes:
- Requires Standard Heat Sink
- 4th Generation Intel Xeon-Silver

Intel Xeon-Gold 5411N 1.9GHz 24-core 165W Processor for HPE	P49639-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Silver 4410Y 2.0GHz 12-core 150W Processor for HPE	P49610-B21

Notes: Requires Standard Heatsink

Intel Xeon-Silver 4416+ 2.0GHz 20-core 165W Processor for HPE	P49611-B21

Notes:
- Requires Standard Heatsink
- 4th Generation Intel Xeon-Bronze

Intel Xeon-Bronze 3408U 1.8GHz 8-core 125W Processor for HPE	P49617-B21

Notes: Requires Standard Heatsink

Step 2b: Choose Memory Options

Please select one or more memory from below.
For new Gen11 memory population rule whitepaper and optimal memory performance guidelines, please go to:
HPE Memory Population Rules
For details on the HPE Server Memory Options Population Rules, please go to:
Memory population rules for HPE Gen11 servers with 4th Generation Intel Scalable Processors

Notes:
- HPE Server Memory compatibility for a specific server platform may vary or be limited within a server platform depending upon the specific configuration being requested. Because each server environment and requirements can vary, memory compatibility is based not only upon the server family, but may also be affected by the amount and type of additional hardware options installed within a specific server configuration. For this reason, some HPE memory DIMMs may be qualified for an HPE server model or family and yet occasionally not be supported with some configurations within that server family
- Memory should be installed in even quantity of DIMMs
- The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.
- DDR5-4800 Memory Kits are only supported with 4th Generation Intel Xeon Scalable Series Processors.
- Memory compatibility may vary or be limited within a specific server family depending upon the specific configuration being requested. Because each server environment and requirements can vary, memory compatibility is based not only upon the server family, but may also be affected by the amount and type of additional hardware options installed within a specific server configuration. For this reason, some HPE memory DIMMs may be qualified for a server model or family and yet occasionally not be supported with limited configurations within that server family.
- Please consult with the HPE server QuickSpecs or your HPE representative if you have any questions regarding memory compatibility with a specific HPE server configuration.

Registered DIMMs DDR5 (RDIMMs)

HPE 16GB (1x16GB) Single Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43322-B21
HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43328-B21
HPE 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43331-B21
HPE 96GB (1x96GB) Dual Rank x4 DDR5-4800 CAS-46-45-45 EC8 Registered Smart Memory Kit	P66675-B21

Notes: 96GB DIMMs supported only on XCC and MCC CPUs.

Configuration Information

HPE 128GB (1x128GB) Dual Rank x4 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit	P69976-B21
HPE 128GB (1x128GB) Quad Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit	P43334-B21
HPE 256GB (1x256GB) Octal Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit	P43337-B21

Notes:

- 4800 MT/s memory SKUs offer a transfer rate of 4800 MT/s at 1 DIMM per channel and 4400 MT/s at 2 DIMMs per channel
- Mixing of 3DS memory and non-3DS memory is not supported
- Mixing of x4 and x8 memory is not allowed
- Memory with larger than 128GB capacity will need High Performance Fan Kit (P48820-B21) and ambient limitation. 256GB DIMM will also need to limit the maximum front-end cage to two.
- If 96GB or higher density memory is selected then High Performance Fan Kit must be selected.
- 96GB memory cannot be mixed with any other memory.
- 96GB memory configuration must be either 8 or 16 only on 1 processor unit.
- 96GB memory configuration must be either 16 or 32only on 2 processor unit.

Memory Blank Kit

HPE DDR4 DIMM Blank Kit	P07818-B21

Notes: DIMM Blanks are optional and not required.

Step 2c: Choose Power Supplies

Select one or two power supplies from below.
Notes: Mixing of 2 different power supplies is NOT allowed.

HPE Flex Slot Power Supplies

HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit	P44712-B21
HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38997-B21
HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit	P17023-B21
HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	P03178-B21
HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38995-B21

Notes:

- Select a minimum (1), maximum (2) power supplies.
- 1600W Power supplies only support high line voltage (200VAC to 240VAC).
- Prior to making a power supply selection it is highly recommended that the HPE Power Advisor is run to determine the right size power supply for your server configuration. The HPE Power Advisor is located at: **https://www.hpe.com/info/hppoweradvisor**.
- All power supplies in a server should match.
- Mixing Power Supplies is not supported.
- HPE ProLiant servers ship with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). Visit **HPE power cords** for a full list of optional power cords.
- Beginning on January 1st, 2024, units sold into the European Union (EU), European Economic Area (EEA), the United Kingdom, or Switzerland must include more efficient AC power supplies: 94% for multi-output and 96% for single-output.
- HPE Flexible Slot power supplies are single-output, and part numbers 865438-B21, P03178-B21, and P44712-B21 are 96% efficient, thus meeting requirements. HPE is on target to fulfil compliant systems ahead of time and will begin enforcing these requirements in advance to satisfy requests with the current power supplies by the set deadline.

Configuration Information

Step 3: Choose Additional Factory Integratable Options

One of the following from each list may be selected if desired at time of factory integration

HPE Security Options

HPE iLO Common Password FIO Setting P08040-B21

Notes:

- Replaces iLO default randomized password by an HPE defined common password. HPE highly recommends changing this password immediately after the initial onboarding process.
- Customers who want to choose their own custom iLO default password should use the HPE Factory Express Integration Services

HPE Bezel Lock Kit 875519-B21

Notes: This option can be selected only if HPE Gen11 2U Bezel Kit (P50400-B21) is selected.

HPE ProLiant DL3XX Gen11 Intrusion Cable Kit P48922-B21

Notes: This option must be selected if HPE Trusted Supply Chain SKU (P36394-B21) is selected.

HPE Gen11 2U Bezel Kit P50400-B21

Factory Instructions and Server Settings

HPE ProLiant DL380 Gen11 8NVMe 1P FIO Bundle Kit P69548-B21

Notes:

- This bundle provides Direct Attach to 8NVMe Drives through First/ Single Processor
- If NVMe bundle is selected then defaulted Controller has to be deselected.
- If this NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit must be selected and defaulted.
- If this NVMe Bundle/ EDSFF Bundle is selected then Qty 1 of High Performance Fan Kit must be selected and defaulted.
- If 8NVMe Bundle is selected then Qty 1 (min/max) of 8SFF U.3 x4 cage OR 8SFF U.2 x4 cage must be selected.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 8SFF U.3 x1 Cage is selected along with 8 OR 16 NVMe bundle then controller must be selected except SR308i-o/SR308i-p.
- If 8NVMe 1P Bundle is selected then Primary 3 x16 Cable Kit cannot be selected and vice-versa.

HPE ProLiant DL380 Gen11 36EDSFF FIO Bundle Kit P56075-B21

HPE ProLiant DL380 Gen11 20EDSFF FIO Bundle Kit P56076-B21

Notes:

- If this NVMe Bundle/ EDSFF Bundle is selected then Qty 1 of High Performance Fan Kit must be selected.
- If NVMe Bundle/ EDSFF Bundle is selected then Second Processor must be selected.
- For 12EDSFF CTO Server, If EDSFF Bundle is selected then Max Quantity of 256GB Memory is limited to 16.
- EDSFF Drive cage supports Direct attach Only and requires selection of EDSFF Bundle.
- If EDSFF Bundle is selected then Qty1 of HPE DL380 Gen11 12EDSFF CPU1/2 Cable Kit must be selected
- If EDSFF Bundle is selected then Qty2 of HPE DL380/DL560 G11 2U 12EDSFF NVMe Kit must be selected.
- EDSFF Bundle is supported with 12EDSFF CTO Server Only.
- If EDSFF Bundle is selected then OCP1 x16 Enablement Kit AND OCP2 x16 Enablement Kit AND CPU1 OCP2 x8 Enable kit cannot be selected.
- If EDSFF Bundle is selected then Tertiary Riser cannot be selected.
- If EDSFF Bundle is selected then HPE DL380 Gen11 x16/x16/x16 Prim Cable Kit AND HPE DL380 Gen11 x16/x16/x16 Sec Cable Kit cannot be selected.

Configuration Information

– If 20EDSFF Bundle is selected then Maximum 20 EDSFF Drives only can be selected.

HPE ProLiant DL380 Gen11 32NVMe Balanced FIO Bundle Kit P53639-B21

Notes:

– If NVMe bundle is selected then default storage controller cannot be selected.
– If this NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit must be selected.
– If this NVMe Bundle/ EDSFF Bundle is selected then Qty 1 of High Performance Fan Kit must be selected.
– If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 3 (min/max) of 8SFF U.3 x4 cage must be selected.
– If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 Primary riser must be selected.
– If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 SEC Riser must be selected.
– If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of OCP1 x16 Enablement Kit must be selected.
– If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of OCP2 x16 Enablement Kit must be selected.
– If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of HPE Gen4 Re-timer/-p Cable Kit must be selected.
– NVMe Bundle is supported with 8SFF CTO Server Only.
– If NVMe Bundle/ EDSFF Bundle is selected, then Second Processor must be selected.
– If 24NVMe/ 32NVMe Bundle is selected, then Tertiary Riser cannot be selected.
– For 8SFF CTO Server, 8SFF U.3 x4 Mid Tray requires selection of 32NVMe Bundle or SR932i controller.
– If 32NVMe Bundle is selected, then Qty 1 (min/max) of HPE DL380 G11 2U 8SFF x4 U.3 Mid TM Kit must be selected.
– If 32NVMe Bundle is selected, then Qty 4 of HPE DL385 Gen10+ 12Gb NVMe 2p Adapter must be selected.

HPE ProLiant DL380 Gen11 8NVMe Balanced FIO Bundle Kit P53633-B21

Notes:

– If this NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
– If this NVMe Bundle is selected, then Qty 1 of High Performance Fan Kit (P48820-B21) must be selected and defaulted.
– If 8NVMe Bundle is selected, then Qty 1 (min) of 8SFF U.3 x4 drive must be selected.
– If NVMe Bundle is selected, then 8SFF U.3 x4 Cage is defaulted.
– NVMe Bundle is supported with 8SFF CTO Server Only.
– If NVMe Bundle is selected, then Second Processor must be selected.
– If 8SFF U.3 x1 Cage is selected along with 8 OR 16 NVMe bundle, then controller must be selected.

HPE ProLiant DL380 Gen11 16NVMe Balanced FIO Bundle Kit P53634-B21

Notes:

– If NVMe bundle is selected, then defaulted Controller has to be deselected.
– If this NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
– If this NVMe Bundle is selected, then Qty 1 of High Performance Fan Kit (P48820-B21) must be selected and defaulted.
– If 16NVMe Bundle is selected, then Qty 2 (min) of 8SFF U.3 x4 drive cage must be selected.
– If NVMe Bundle is selected, then 8SFF U.3 x4 drive cage will be defaulted.

Configuration Information

- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 16NVMe/ 24NVMe Bundle is selected, then Universal Media Bay kit cannot be selected.
- If NVMe Bundle is selected, then Second Processor must be selected.
- If Tertiary Riser is selected along with 16NVMe Bundle, then 2x16 Tertiary FIO x8 Enable Kit (P53632-B21) must be selected
- If 8SFF U.3 x1 drive cage (P48813-B21) is selected along with 8 OR 16 NVMe bundle, then controller must be selected.

HPE ProLiant DL380 Gen11 24NVME Balanced I/O FIO Bundle Kit P53635-B21

Notes:

- If NVMe bundle is selected, then defaulted Controller has to be deselected.
- If NVMe Bundle is selected, then 8SFF U.3 x1 drive cage (P48813-B21) cannot be selected.
- If this NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
- If this NVMe Bundle is selected, then Qty 1 of High Performance Fan Kit (P48820-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 3 (min) of 8SFF U.3 x4 drives must be selected.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 3x16 Secondary Riser (P51083-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of OCP1 x16 Enablement Kit (P48827-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of OCP2 x16 Enablement Kit (P48828-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 2 of HPE DL385 Gen10+ 12Gb NVMe 2p Adapter (P25527-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE Gen4 Re-timer/-p Cable Kit must be selected and defaulted.
- If NVMe Bundle is selected, then 8SFF U.3 x4 drive cage will be defaulted.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 16NVMe/ 24NVMe Bundle is selected, then Universal Media Bay kit cannot be selected.
- If NVMe Bundle is selected, then Second Processor must be selected.
- If 24NVMe Bundle is selected, then Tertiary Riser cannot be selected.
- If 24NVMe Balanced or 24NVMe DIFF IO-3 Bundle is selected, then CPU1 OCP2 x8 enablement OR CPU2 OCP2 x8 enablement kit cannot be selected.
- If 24NVMe Bundle is selected, then Primary 3 x16 Cable OR Secondary 3 x16 Cable cannot be selected.

HPE ProLiant DL380 Gen11 24NVME Differential I/O OCP1/2 x8 FIO Bundle Kit P53636-B21

Notes:

- If NVMe bundle is selected, then defaulted Controller has to be deselected.
- If NVMe Bundle is selected, then 8SFF U.3 x1 drive cage (P48813-B21) cannot be selected.
- If this NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
- If this NVMe Bundle is selected, then Qty 1 of High Performance Fan Kit (P48820-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 3 (min) of 8SFF U.3 x4 drive cage must be selected.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 3x16 Primary Riser (P48803-B21) must be selected and defaulted.

Configuration Information

- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 x8x16x8 Secondary Riser (P48802-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL300 Gen11 CPU1 OCP2 x8 Enable kit (P51911-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL385 Gen10+ 12Gb NVMe 2p Adapter (P25527-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE Gen4 Re-timer/-p Cable Kit (P54874-B21) must be selected and defaulted.
- If NVMe Bundle is selected, then 8SFF U.3 x4 drive cage will be defaulted.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 16NVMe/ 24NVMe Bundle is selected, then Universal Media Bay kit cannot be selected.
- If NVMe Bundle is selected, then Second Processor must be selected.
- If Tertiary Riser is selected along with 16NVMe Bundle then 2x16 Tertiary FIO x8 Enable Kit (P53632-B21) must be selected
- If 24NVMe Diff IO-1 bundle is selected, then OCP1 x16 enablement Kit and OCP2 x16 enablement kit and CPU2 OCP2 x8 enablement Kit cannot be selected.
- If 24NVMe Bundle is selected then primary 3 x16 Cable OR Sec 3 x16 Cable cannot be selected.

HPE ProLiant DL380 Gen11 24NVME Differential I/O OCP1 x16 FIO Bundle Kit P53637-B21

Notes:

- If NVMe bundle is selected, then defaulted Controller has to be deselected.
- If NVMe Bundle is selected, then 8SFF U.3 x1 drive cage (P48813-B21) cannot be selected.
- If this NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
- If this NVMe Bundle is selected, then Qty 1 of High-Performance Fan Kit (P48820-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 3 (min) of 8SFF U.3 x4 drive cage must be selected.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 x8x16x8 Secondary Riser (P48802-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of OCP1 x16 Enablement Kit (P48827-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL385 Gen10+ 12Gb NVMe 2p Adapter (P25527-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE Gen4 Re-timer/-p Cable Kit (P54874-B21) must be selected and defaulted.
- If NVMe Bundle is selected, then 8SFF U.3 x4 drive cage will be defaulted.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 16NVMe/ 24NVMe Bundle is selected, then Universal Media Bay kit cannot be selected.
- If NVMe Bundle is selected, then Second Processor must be selected.
- If 24NVMe Bundle is selected, then Tertiary Riser cannot be selected.
- If 24NVMe Diff IO-2 bundle is selected, then OCP2 x16 enablement kit and CPU2 OCP2 enablement Kit OR CPU1 OCP2 x8 enablement Kit OR OCP2 x16 enablement cannot be selected.
- If 24NVMe Bundle is selected, then primary 3 x16 Cable OR Sec 3 x16 Cable cannot be selected.

HPE ProLiant DL380 Gen11 24NVME Differential I/O OCP1/2 x16 FIO Bundle Kit P53638-B21

Notes:

- If NVMe bundle is selected, then defaulted Controller has to be deselected.
- If NVMe Bundle is selected, then 8SFF U.3 x1 drive cage (P48813-B21) cannot be selected.

Configuration Information

- If this NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
- If this NVMe Bundle is selected, then Qty 1 of High Performance Fan Kit (P48820-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 3 (min) of 8SFF U.3 x4 drive cage must be selected.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 x8x16x8 Secondary Riser (P51083-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of OCP1 x16 Enablement Kit (P48827-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of OCP2 x16 Enablement Kit (P48828-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 2 of HPE DL385 Gen10+ 12Gb NVMe 2p Adapter (P25527-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE Gen4 Re-timer/-p Cable Kit (P54874-B21) must be selected and defaulted.
- If NVMe Bundle is selected, then 8SFF U.3 x4 drive cage will be defaulted.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 16NVMe/ 24NVMe Bundle is selected, then Universal Media Bay kit cannot be selected.
- If NVMe Bundle is selected, then Second Processor must be selected.
- If 24NVMe Bundle is selected, then Tertiary Riser cannot be selected.
- If 24NVMe Balanced or 24NVMe DIFF IO-3 Bundle is selected, then CPU1 OCP2 x8 enablement OR CPU2 OCP2 x8 enablement kit cannot be selected
- If 24NVMe Bundle is selected, then primary 3 x16 Cable OR Sec 3 x16 Cable cannot be selected.

HPE iLO Common Password FIO Setting P08040-B21

Notes: Sets common iLO password, instead of randomly generated password for each server during Factory Diagnostics.

HPE ProLiant Platform Certificate and IDevID iLO FIO Setting P42104-B21

Notes:

- Initial Device Identity (IDevID) certificates are part of a Zero Trust Architecture. This SKU instructs factory to provision IDevID on HPE iLO.
- Directs HPE manufacturing site to create, digitally sign and store a platform certificate on the server.
- Requires HPE Trusted Platform Module (TPM).

HPE Converged Infrastructure Management Software

HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU P8B26AAE

HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU E5Y35AAE

vSAN ReadyNode

- 3, 6, 8 or 16 node vSAN Clusters (3 node minimum)
- HW is optimized for vSAN
- VMware vSAN Advanced LTU bundled

Step 4: Choose additional options for Factory Integration from Core and Additional Options sections below

Core Options

Some options may not be integrated at the factory. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of an HPE approved configurator. Contact your local sales representative for additional information.

Software as a Service Management

HPE Compute Ops Management

Base SKU

HPE Compute Ops Management Enhanced 3-year Upfront ProLiant SaaS	R7A11AAE

Upgrade SKUS

HPE Compute Ops Management Enhanced 1-year Upfront ProLiant SaaS	R7A10AAE
HPE Compute Ops Management Enhanced 5-year Upfront ProLiant SaaS	R7A12AAE
HPE Compute Ops Management Advanced 1-year Upfront ProLiant SaaS	S5E58AAE
HPE Compute Ops Management Advanced 3-year Upfront ProLiant SaaS	S5E59AAE
HPE Compute Ops Management Advanced 5-year Upfront ProLiant SaaS	S5E60AAE
HPE Compute Ops Management Advanced 7-year Upfront ProLiant SaaS	S5E61AAE

HPE OneView

HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y35AAE
HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU	P8B26AAE

Notes: For customers purchasing HPE Compute Ops Management, without a hardware purchase or a BTO purchase, use this base SKU within ASQ order:

HPE Compute Ops Management Base SaaS	R6Z73AAE

For more information, visit the Compute Ops Management QuickSpecs: **https://www.hpe.com/psnow/doc/a50004263enw**
Supported Servers – CTO only. No OEM. – Complete list can be found here: Latest Supported Server List: **https://www.hpe.com/info/com-supported-servers**

HPE Unique Options

HPE ProLiant DL380 Gen11 12EDSFF Drive Cage Kit — P48808-B21

Notes:
- This is the 12EDSFF drive cage.
- This drive cages holds a maximum of 12 single thickness EDSFF drives
- Available for Factory Install Only orders and not available for standalone or upgrade ordering.

HPE ProLiant DL380 Gen11 2SFF U.3 Primary/Secondary Riser Cage Kit — P48810-B21

Notes:
- 2SFF drive cage for rear in Primary or Secondary riser position.
- This Drive cage can be selected with 8SFF CTO Server and 24SFF CTO Server Only.
- For 8SFF/ 24SFF CTO Server, Max = 2.

HPE ProLiant DL380 Gen11 2SFF U.3 HDD Stacking Drive Cage Kit — P48811-B21

Notes:
- This is a 2SFF drive cage for front or rear. For a front mount it installs into Universal Media Bay.
- This drive cage supports controller and Direct Attach. If Direct Attached then it will support NVMe Drives only
- For 8SFF CTO Server, Max = 2.

HPE ProLiant DL380 Gen11 2SFF U.3 Side-by-Side Drive Cage Kit — P48812-B21

Notes:
- This is 2SFF side-by-side drive cage for the 8LFF CTO server only.
- This Drive cage supports controller and Direct Attach. If Direct Attached then it will support NVMe drives only.
- Max = 1

Core Options

HPE ProLiant DL380 Gen11 2U 8SFF x1 Tri-Mode U.3 Drive Cage Kit P48813-B21

Notes:

- This is an 8SFF U.3 x1 front drive cage.
- This drive cage can be selected with 8SFF CTO Server Only.
- Max =3
- If Qty3 of 8SFF Front cage is selected then High-Performance Fan Kit (P48820-B21) must be selected.
- This Drive cage supports controller and Direct Attach. If Direct Attached then it will support SATA Drives only and connects to SATA port on motherboard.

HPE ProLiant DL380 Gen11 8SFF U.3 Premium Drive Cage Kit P48814-B21

Notes:

- This is an 8SFF U.3 x4 front drive cage.
- This Drive cage can be selected with 8SFF CTO Server Only.
- Max = 3
- If Qty3 is selected then High-Performance Fan Kit (P48820-B21) must be selected.
- This drive cage supports controller and Direct Attach. If Direct Attached then it will support NVMe Drives only.

HPE ProLiant DL380 Gen11 4LFF SAS/SATA 12G LP Midplane Drive Cage Kit P48809-B21

Notes:

- This is the 4LFF mid-tray drive cage.
- This drive cage holds a maximum of 4LFF drives.
- Max 16LFF SAS/SATA is possible when storage controller is selected
- Max 14LFF SATA is possible if mid-tray is direct connected to motherboard

HPE ProLiant DL380 Gen11 8SFF x1 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit P48815-B21

Notes:

- This is the 8SFF U.3 x1 mid-tray drive cage.
- This drive cage holds a maximum of 8 SAS/SATA/NVMe drives.

HPE ProLiant DL380 Gen11 2U 8SFF x4 U.3 Mid Tray Tri-Mode Drive Cage Kit P48816-B21

Notes:

- This is the 8SFF U.3 x4 mid-tray drive cage.
- This drive cage holds a maximum of 8 SAS/SATA/NVMe drives.

HPE ProLiant DL380 Gen11 2LFF Primary Riser Cage Kit P48823-B21

Notes:

- This is a 2LFF drive cage for the rear Primary Riser position.
- This Drive cage supports controller and Direct Attach. If Direct Attached then it will support SATA Drives only and connects to SATA port on motherboard.
- Max = 1
- This drive cage can be selected with 8LFF CTO Server and 12LFF CTO Server Only.

HPE ProLiant DL380 Gen11 2LFF Tertiary Riser Cage Kit P48826-B21

Notes:

- This is a 2LFF drive cage for the rear Secondary + Tertiary Riser position.
- Max = 1

HPE ProLiant DL380 Gen11 SFF Universal Media Bay Kit P50728-B21

Notes:

- This is the Universal Media Bay, it occupies an 8SFF drive cage slot on the front of the 8SFF CTO server.
- The Universal Media Bay can be selected with the 8SFF CTO Server only.

Core Options

HPE ProLiant DL380 Gen11 2LFF LP Secondary Riser Cage Kit P51095-B21

Notes:
- This is a 2LFF drive cage for the rear Primary Riser position.
- Max = 1
- This drive cage can be selected with 8LFF CTO Server and 12LFF CTO Server Only.

HPE ProLiant DL380/DL560 Gen11 2U High Performance Fan Kit P48820-B21

Notes:
- If Processor above 205W is selected then High-Performance Fan Kit is required.
- If 128GB or higher memory is selected then High-Performance Fan Kit is required.
- If quantity 3 of front drive cage is selected, then High Performance Fan Kit is required.
- If NVMe is selected, then High Performance Fan Kit is required.
- 24SFF CTO server comes with High Performance Fan Kit installed.

HPE ProLiant DL380 Gen11 Max Performance Heat Sink Kit P48817-B21

Notes:
- If Q Series Processor is selected then Max Performance Heat Sink is required.
- Max = 1

HPE ProLiant DL380/DL560 Gen11 High Performance 2U Heat Sink Kit P48818-B21

Notes:
- If Processor above 150W is selected then High-Performance Heat Sink is required.
- Number of Heat Sinks selected must match number of processor(s) selected.

HPE ProLiant DL3XX/560 Gen11 High Performance Heat Sink Kit P48905-B21

Notes: This is a low profile high performance heatsink, this is only used when storage mid-tray is selected.

HPE ProLiant DL380 Gen11 Standard Heat Sink Kit P49145-B21

Notes: Standard heatsink is for CPUs with 150W or lower TDP.

HPE ProLiant DL380/DL560 Gen11 2U Rear Serial Port Cable Kit P48824-B21

HPE ProLiant DL380 Gen11 System Insight Display Kit P48819-B21

Notes: Max = 1

HPE ProLiant DL380 Compute Gen11 2U 8-pin GPU Power Cable Kit P77896-B21

Notes: Qty1 of can support up to 5 Single-wide GPUs.

HPE Processors

Processor Option Kits

5th Generation Intel Xeon-Platinum

All SKUs below ship with processors only. Adequate fans and heatsinks must be selected.
Supports “HPE DDR5 Smart Memory – Registered (RDIMM), 5600MT/s”.

Intel Xeon-Platinum 8593Q 2.2GHz 64-core 385W Processor for HPE P68449-B21

Notes:
- XCC die
- Max 2
- Requires selection of Max Performance Heat Sink or DLC Module.

Intel Xeon-Platinum 8592+ 1.9GHz 64-core 350W Processor for HPE P67089-B21

Notes:
- XCC die
- Max 2

Core Options

Intel Xeon-Platinum 8592V 2.0GHz 64-core 330W Processor for HPE P67107-B21

Notes:
- XCC die
- Max 2

Intel Xeon-Platinum 8581V 2.0GHz 60-core 270W Processor for HPE P67109-B21

Notes:
- XCC die
- Max 1

Intel Xeon-Platinum 8580 2.0GHz 60-core 350W Processor for HPE P67088-B21

Notes:
- XCC die
- Max 2

Intel Xeon-Platinum 8570 2.1GHz 56-core 350W Processor for HPE P67087-B21

Notes:
- XCC die
- Max 2

Intel Xeon-Platinum 8568Y+ 2.3GHz 48-core 350W Processor for HPE P67086-B21

Notes:
- XCC die
- Max 2

Intel Xeon-Platinum 8562Y+ 2.8GHz 32-core 300W Processor for HPE P67085-B21

Notes:
- MCC die
- Max 2

Intel Xeon-Platinum 8558P 2.7GHz 48-core 350W Processor for HPE P67108-B21

Notes:
- XCC die
- Max 2

Intel Xeon-Platinum 8558 2.1GHz 48-core 330W Processor for HPE P67097-B21

Notes:
- XCC die
- Max 2

Intel Xeon-Platinum 8558U 2.0GHz 48-core 300W Processor for HPE P67102-B21

Notes:
- XCC die
- Max 1

Intel Xeon-Gold 6558Q 3.2GHz 32-core 350W Processor for HPE P67098-B21

Notes:
- MCC die
- Max 2
- Requires selection of Max Performance Heat Sink or DLC Module

Core Options

Intel Xeon-Gold 6554S 2.2GHz 36-core 270W Processor for HPE P67110-B21

Notes:
- XCC die
- Max 2

Intel Xeon-Gold 6548N 2.8GHz 32-core 250W Processor for HPE P67105-B21

Notes:
- MCC die
- Max 2

Intel Xeon-Gold 6548Y+ 2.5GHz 32-core 250W Processor for HPE P67082-B21

Notes:
- MCC die
- Max 2

Intel Xeon-Gold 6544Y 3.6GHz 16-core 270W Processor for HPE P67084-B21

Notes:
- MCC die
- Max 2

Intel Xeon-Gold 6542Y 2.9GHz 24-core 250W Processor for HPE P67081-B21

Notes:
- MCC die
- Max 2

Intel Xeon-Gold 6538N 2.1GHz 32-core 205W Processor for HPE P67104-B21

Notes:
- MCC die
- Max 2

Intel Xeon-Gold 6538Y+ 2.2GHz 32-core 225W Processor for HPE P67096-B21

Notes:
- MCC die
- Max 2

Intel Xeon-Gold 6534 3.9GHz 8-core 195W Processor for HPE P67083-B21

Notes:
- MCC die
- Max 2

Intel Xeon-Gold 6530 2.1GHz 32-core 270W Processor for HPE P67095-B21

Notes:
- XCC die
- Max 2

Intel Xeon-Gold 6526Y 2.8GHz 16-core 195W Processor for HPE P67080-B21

Notes:
- MCC die
- Max 2

Intel Xeon-Gold 5520+ 2.2GHz 28-core 205W Processor for HPE P67094-B21

Notes:
- MCC die
- Max 2

Core Options

Intel Xeon-Gold 5515+ 3.2GHz 8-core 165W Processor for HPE	P67079-B21
Notes: – MCC die – Max 2	
Intel Xeon-Silver 4516Y+ 2.2GHz 24-core 185W Processor for HPE	P67093-B21
Notes: – MCC die – Max 2	
Intel Xeon-Silver 4514Y 2.0GHz 16-core 150W Processor for HPE	P67092-B21
Notes: – MCC die – Max 2	
Intel Xeon-Silver 4510 2.4GHz 12-core 150W Processor for HPE	P67091-B21
Notes: – EE LCC die – Max 2 – If this Processor is selected, then 96GB 5600B Memory cannot be selected.	
Intel Xeon-Silver 4509Y 2.6GHz 8-core 125W Processor for HPE	P67090-B21
Notes: – EE LCC die – Max 2 – If this Processor is selected, then 96GB 5600B Memory cannot be selected.	
Intel Xeon-Bronze 3508U 2.1GHz 8-core 125W Processor for HPE	P67100-B21
Notes: – EE LCC die – Max 1 If this Processor is selected, then 96GB 5600B Memory cannot be selected. – Supports PCIe4.0 Only	
4th Generation Intel Xeon-Platinum	
Notes: All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.	
Intel Xeon-Platinum 9462 2.7GHz 32-core 350W Processor for HPE	P49645-B21
Notes: This is Intel High Bandwidth Memory (HBM) CPU.	
Intel Xeon-Platinum 8490H 1.9GHz 60-core 350W Processor for HPE	P49630-B21
Intel Xeon-Platinum 8480+ 2.0GHz 56-core 350W Processor for HPE	P49607-B21
Intel Xeon-Platinum 8470Q 2.1GHz 52-core 350W Processor for HPE	P49609-B21
Intel Xeon-Platinum 8470 2.0GHz 52-core 350W Processor for HPE	P49606-B21
Intel Xeon-Platinum 8470N 1.7GHz 52-core 300W Processor for HPE	P49649-B21
Intel Xeon-Platinum 8468V 2.4GHz 48-core 330W Processor for HPE	P49631-B21
Intel Xeon-Platinum 8468 2.1GHz 48-core 350W Processor for HPE	P49605-B21
Intel Xeon-Platinum 8458P 2.7GHz 44-core 350W Processor for HPE	P49632-B21
Intel Xeon-Platinum 8460Y+ 2.0GHz 40-core 300W Processor for HPE	P49604-B21
Intel Xeon-Platinum 8452Y 2.0GHz 36-core 300W Processor for HPE	P49616-B21
Intel Xeon-Platinum 8444H 2.9GHz 16-core 270W Processor for HPE	P49625-B21
4thGeneration Intel Xeon-Gold	
Notes: All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.	
Intel Xeon-Gold 6458Q 3.1GHz 32-core 350W Processor for HPE	P49608-B21
Intel Xeon-Gold 6448H 2.4GHz 32-core 250W Processor for HPE	P49622-B21

Core Options

Intel Xeon-Gold 6448Y 2.1GHz 32-core 225W Processor for HPE	P49600-B21
Intel Xeon-Gold 6444Y 3.6GHz 16-core 270W Processor for HPE	P49602-B21
Intel Xeon-Gold 6442Y 2.6GHz 24-core 225W Processor for HPE	P49599-B21
Intel Xeon-Gold 6438N 2.0GHz 32-core 205W Processor for HPE	P49638-B21
Intel Xeon-Gold 6438Y+ 2.0GHz 32-core 205W Processor for HPE	P49615-B21
Intel Xeon-Gold 6434 3.7GHz 8-core 195W Processor for HPE	P49601-B21
Intel Xeon-Gold 6430 2.1GHz 32-core 270W Processor for HPE	P49614-B21
Intel Xeon-Gold 6454S 2.2GHz 32-core 270W Processor for HPE	P49654-B21
Intel Xeon-Gold 6426Y 2.5GHz 16-core 185W Processor for HPE	P49598-B21
Intel Xeon-Gold 6414U 2.0GHz 32-core 250W Processor for HPE	P49619-B21
Notes: Single socket capable, no dual socket support.	
Intel Xeon-Gold 6421N 1.8GHz 32-core 185W Processor for HPE	P49641-B21
Intel Xeon-Gold 6418H 2.1GHz 24-core 185W Processor for HPE	P49621-B21
Intel Xeon-Gold 6416H 2.2GHz 18-core 165W Processor for HPE	P49620-B21
Intel Xeon-Gold 5415+ 2.9GHz 8-core 150W Processor for HPE	P49597-B21
Intel Xeon-Gold 5416S 2.0GHz 16-core 150W Processor for HPE	P49653-B21
Intel Xeon-Gold 5418N 1.8GHz 24-core 165W Processor for HPE	P49640-B21
Intel Xeon-Gold 5418Y 2.0GHz 24-core 185W Processor for HPE	P49612-B21
Intel Xeon-Gold 5420+ 2.0GHz 28-core 205W Processor for HPE	P49613-B21
Intel Xeon-Gold 5411N 1.9GHz 24-core 165W Processor for HPE	P49639-B21
4th Generation Intel Xeon-Silver	
Notes: All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.	
Intel Xeon-Silver 4410Y 2.0GHz 12-core 150W Processor for HPE	P49610-B21
Intel Xeon-Silver 4416+ 2.0GHz 20-core 165W Processor for HPE	P49611-B21
4th Generation Intel Xeon-Bronze	
Notes: All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.	
Intel Xeon-Bronze 3408U 1.8GHz 8-core 125W Processor for HPE	P49617-B21

Memory Selection

To streamline the configuration process for HPE ProLiant Gen11 servers and to provide the best product availability, HPE recommends memory from the list located here: **https://www.hpe.com/products/recommend**.
Best product availability is limited to US, Canada, and Latin America at this time.

Notes:

- HPE Server Memory compatibility for a specific server platform may vary or be limited within a server platform depending upon the specific configuration being requested. Because each server environment and requirements can vary, memory compatibility is based not only upon the server family, but may also be affected by the amount and type of additional hardware options installed within a specific server configuration. For this reason, some HPE memory DIMMs may be qualified for an HPE server model or family and yet occasionally not be supported with some configurations within that server family
- Maximum memory capacity and speed per processor is dependent on processor model selection or limitation.

HPE DDR5 Memory

Registered DIMMs (RDIMMs)

HPE 16GB (1x16GB) Single Rank x8 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit	P64705-B21
HPE 32GB (1x32GB) Dual Rank x8 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit	P64706-B21
HPE 64GB (1x64GB) Dual Rank x4 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit	P64707-B21

Notes: If Memory Fault Tolerance is selected then only x4 memory options can be selected.

Core Options

HPE 96GB (1x96GB) Dual Rank x4 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit	P64708-B21

Notes:
- 96GB Memory cannot be mixed with any other Memory.
- 96GB 5600 Memory cannot be selected with EE LCC (Edge Enhanced Low Core Count) die of the New 5th Generation Intel® Xeon® Scalable Processors.
- For 1 Processor, the allowed qty of 96GB 5600 Memory is 1, 6, 8, 12,16 only.
- For 2 Processor, the allowed qty of 96GB 5600 Memory is 2, 12, 16, 24, 32 only.
- If Memory Fault Tolerance is selected, then only x4 memory options can be selected.

HPE 128GB (1x128GB) Quad Rank x4 DDR5-5600 CAS-52-45-45 EC8 Registered 3DS Smart Memory Kit	P64709-B21

Notes: If Memory Fault Tolerance is selected then only x4 memory options can be selected.

HPE 16GB (1x16GB) Single Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43322-B21
HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43328-B21
HPE 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43331-B21

Notes: If Memory Fault Tolerance is selected then only x4 memory options can be selected.

HPE 96GB (1x96GB) Dual Rank x4 DDR5-4800 CAS-46-45-45 EC8 Registered Smart Memory Kit	P66675-B21

Notes: 96GB DIMMs supported on XCC and MCC processors only.

HPE 128GB (1x128GB) Quad Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit	P43334-B21
HPE 256GB (1x256GB) Octal Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit	P43337-B21
HPE 256GB (1x256GB) Octal Rank x4 DDR5-5600 CAS-52-45-45 EC8 Registered 3DS Smart Memory Kit	P64710-B21

Notes:
- Memory should be installed in even quantity of DIMMs
- 4800 MT/s memory SKUs offer a transfer rate of 4800 MT/s at 1 DIMM per channel and 4400 MT/s at 2 DIMMs per channel
- Mixing of 3DS memory and non-3DS memory is not supported
- Mixing of x4 and x8 memory is not allowed
- If 96GB or higher density memory is selected then High-Performance Fan Kit must be selected.
- 96GB memory cannot be mixed with any other memory.
- 96GB memory configuration must be either 8 or 16 only on 1 processor unit.
- 96GB memory configuration must be either 16 or 32only on 2 processor unit.

HPE DDR Blank Kit

HPE DDR4 DIMM Blank Kit	P07818-B21

Notes: DIMM Blanks are optional and not required.

HPE Optical Drives

HPE 9.5mm SATA DVD-ROM Optical Drive	726536-B21

Notes: HPE DL38X Gen11 Universal Media Bay Kit (P50728-B21) is required for this option on a SFF model. No support in 12LFF or 24SFF models.

HPE 9.5mm SATA DVD-RW Optical Drive	726537-B21

Notes: HPE DL38X Gen11 Universal Media Bay Kit (P50728-B21) is required for this option on a SFF model. No support in 12LFF or 24SFF models.

HPE Mobile USB DVD-RW Optical Drive	701498-B21

Notes: This is only supported on USB 3.0 ports.

Core Options

Media Bay Kits

HPE ProLiant DL380 Gen11 SFF Universal Media Bay Kit	P50728-B21

Notes:

- The HPE DL380 Gen11 Universal Media Bay provides front Display Port and 2xUSB 2.0; plus support for 2x SFF front drives or 2 NVME front drives (riser required) and ODD support (Not included); and can only be located in Box1 in either an 8 SFF or 8+8 SFF model.
- This is a SFF model option only.
- Not supported on 12EDSFF, 24SFF, 12FF, or 8LFF CTO servers.

HPE Hard Disk Drives

Mission Critical – 12G SAS – SFF Drives

HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Self-encrypting FIPS HDD	P28618-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Self-encrypting FIPS HDD	P28622-B21

Enterprise – 12G SAS – SFF Drives

HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD	P28352-B21
HPE 1.8TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD	P53562-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P28586-B21
HPE 600GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P53561-B21
HPE 300GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P40430-B21

Midline – 12G SAS – LFF Drives

HPE 20TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53553-B21
HPE 16TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23608-B21
HPE 12TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881781-B21
HPE 8TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834031-B21
HPE 6TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861746-B21
HPE 4TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833928-B21
HPE 2TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833926-B21

Midline – 6G SATA – LFF Drives

HPE 20TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53554-B21
HPE 16TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23449-B21
HPE 12TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881787-B21
HPE 8TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834028-B21
HPE 6TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861742-B21
HPE 4TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861683-B21
HPE 2TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861681-B21
HPE 1TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861686-B21

SSD Selection

For SSD selection guidance, please visit **https://ssd.hpe.com/**

Read Intensive – NVMe – EDSFF – Solid State Drives

HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	P61187-B21
HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	P57807-B21
HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	P57803-B21
HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	P61183-B21
HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	P57803-B21
HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	P61179-B21
HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	P57799-B21

Core Options

HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	P70392-B21
HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69234-B21
HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69234-B21
HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69237-B21
HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69239-B21
HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69546-B21
HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	P77269-B21
HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	P77271-B21
HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	P77273-B21
HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	P77275-B21
HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	P79122-B21
Mixed Use – NVMe – EDSFF – Solid State Drives	
HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	P70399-B21
HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	P61191-B21
HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	P61195-B21
HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69241-B21
HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69241-B21
HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69243-B21
HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69245-B21
HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	P77262-B21
HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	P77265-B21
HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	P77267-B21
HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	P70669-B21
HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	P70672-B21
HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	P70674-B21
Read Intensive – 24G SAS – SFF – Solid State Drives	
HPE 15.36TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49045-B21
HPE 3.84TB SAS Read Intensive SFF BC Self-encrypting FIPS 140-2 PM7 SSD	P63875-B21
HPE 7.68TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49041-B21
HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49035-B21
HPE 1.92TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49031-B21
HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49029-B21
Read Intensive – 12G SAS – SFF – Solid State Drives	
HPE 7.68TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40509-B21
HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40508-B21
HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40507-B21
HPE 960GB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40506-B21
HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49029-B21
Mixed Use – 24G SAS – SFF – Solid State Drives	
HPE 1.6TB SAS Mixed Use SFF BC Self-encrypting FIPS 140-2 PM7 SSD	P63871-B21
HPE 6.4TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49057-B21
HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49053-B21
HPE 1.6TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49049-B21
HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49047-B21
Mixed Use – 12G SAS – SFF – Solid State Drives	
HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40512-B21
HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40511-B21

Core Options

HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40510-B21
Read Intensive – 6G SATA – SFF – Solid State Drives	
HPE 480GB SATA 6G Read Intensive SFF BC PM893a SSD	P63886-B21
HPE 480GB SATA 6G Read Intensive SFF BC PM893a SSD	P63886-B21
HPE 3.84TB SATA 6G Read Intensive SFF BC PM893a SSD	P63910-B21
HPE 3.84TB SATA 6G Read Intensive SFF BC PM893a SSD	P63910-B21
HPE 7.68TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40501-B21
HPE 3.84TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40500-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40499-B21
HPE 480GB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	P58236-B21
HPE 480GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40497-B21
HPE 960GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40498-B21
HPE 240GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40496-B21
Mixed Use – 6G SATA – SFF – Solid State Drives	
HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40505-B21
HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40504-B21
HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	P58244-B21
HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40503-B21
HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40502-B21
Mixed Use – 12G SAS – LFF –Solid State Drives	
HPE 960GB SAS 12G Mixed Use LFF LPC Value SAS Multi Vendor SSD	P37009-B21
Read Intensive – 6G SATA – LFF – Solid State Drives	
HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD	P47808-B21
Read Intensive – NVMe – SFF – Solid State Drives	
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD	P70436-B21
HPE 15.36TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static SPDM Multi Vendor SSD	P69255-B21
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63841-B21
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	P50224-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD	P70434-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63837-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	P64848-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	P50222-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63833-B21
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	P64846-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	P50219-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63829-B21
HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	P64844-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	P50216-B21
HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	P64842-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61019-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61027-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61035-B21
Mixed Use – NVMe – SFF – Solid State Drives	
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PS1030 SSD	P70428-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	P63853-B21
HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P65023-B21

Core Options

HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	P50233-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PS1030 SSD	P70426-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	P63849-B21
HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P65015-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	P50230-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	P63845-B21
HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P65007-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	P50227-B21
HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P64999-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61043-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61051-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61059-B21

Hard Drive Blank Kits

HPE Gen9 LFF HDD Spade Blank Kit	807878-B21
HPE Small Form Factor Hard Drive Blank Kit	666987-B21

Hard Drive Cage Kits

HPE ProLiant DL380 Gen11 12EDSFF Drive Cage Kit	P48808-B21
Notes: Currently available as Factory Install Only and not available for standalone or upgrade ordering.	
HPE ProLiant DL380 Gen11 2U 8SFF x1 Tri-Mode U.3 Drive Cage Kit	P48813-B21
HPE ProLiant DL380 Gen11 8SFF U.3 Premium Drive Cage Kit	P48814-B21
HPE ProLiant DL380 Gen11 SFF Universal Media Bay Kit	P50728-B21
HPE ProLiant DL380 Gen11 2SFF U.3 HDD Stacking Drive Cage Kit	P48811-B21
HPE ProLiant DL380 Gen11 2SFF U.3 Side-by-Side Drive Cage Kit	P48812-B21
HPE ProLiant DL380 Gen11 2SFF U.3 Primary/Secondary Riser Cage Kit	P48810-B21
HPE ProLiant DL380 Gen11 8SFF x1 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit	P48815-B21
HPE ProLiant DL380 Gen11 2U 8SFF x4 U.3 Mid Tray Tri-Mode Drive Cage Kit	P48816-B21
HPE ProLiant DL380 Gen11 4LFF SAS/SATA 12G LP Midplane Drive Cage Kit	P48809-B21
HPE ProLiant DL380 Gen11 2LFF Primary Riser Cage Kit	P48823-B21
HPE ProLiant DL380 Gen11 2LFF LP Secondary Riser Cage Kit	P51095-B21
HPE ProLiant DL380 Gen11 2LFF Tertiary Riser Cage Kit	P48826-B21

HPE Networking

1 Gigabit Ethernet adapters

Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P51178-B21
Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P21106-B21

10 Gigabit Ethernet adapters

Notes: Unless otherwise noted, one of the below 10Gb networking adapters below can be selected as the primary networking choice when configuring a Networking Choice (NC) Configure-to-Order (CTO) chassis. The DL380 Gen11 NC CTO chassis does not come with embedded networking, hence the requirement to configure with either a FlexibleLOM or select PCIe networking adapter.

Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21

25 Gigabit Ethernet adapters

Notes: Unless otherwise noted, one of the below 10/25Gb networking adapters below can be selected as the primary networking choice when configuring a Networking Choice (NC) Configure-to-Order (CTO) chassis.

Core Options

The DL380 Gen11 NC CTO chassis does not come with embedded networking, hence the requirement to configure with either an OCP3 or select PCIe networking adapter.

Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P26264-B21
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P26262-B21
HPE Ethernet 10/25Gb 2-port Secure Network Adapter	S2A69A
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P08458-B21
Xilinx X2522-25G-PLUS Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P21109-B21
Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P42044-B21
Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE	P25960-B21

100 Gigabit Ethernet Adapters

Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE	P25960-B21

Notes:

- Only supported at 25C ambient temperature
- Only supported on x16 physical and electrical slots.
- Required to use High Performance Fan Kit (P48820-B21)
- For 8SFF CTO Server with Qty3 of 8SFF Front Cage/ 24SFF CTO Server/ 12LFF CTO Server/ EDSFF CTO Server with EDSFF Bundle, This PCIe cards can be populated in Slot 1, 4, 5, 7 only.
- For 8SFF CTO server with 3 of 8SFF Front cages, 24SFF CTO Server and 12LFF CTO Server the max Qty selected is 3.

Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE	P21112-B21

Notes:

- Only supported at 25C ambient temperature.
- Only supported on x16 physical and electrical slots.
- Required to use High Performance Fan Kit (P48820-B21).
- For 8SFF CTO Server with Qty3 of 8SFF Front Cage/ 24SFF CTO Server/ 12LFF CTO Server/ EDSFF. CTO Server with EDSFF Bundle, This PCIe cards can be populated in Slot 1, 4, 5, 7 only.
- For 8SFF CTO server with 3 of 8SFF Front cages, 24SFF CTO Server, 12LFF CTO Server and 12 EDSFF CTO Server with EDSFF bundle selected the max Qty supported is 3.

Recommended Ambient Temperature	
System Config	**P10180-B21**
8LFF	25C
24SFF	25C (3 max)
16SFF	25C
8SFF	30C

200 Gigabit Slingshot Adapters

HPE Slingshot SA210S Ethernet 200Gb 1-port PCIe NIC	R4K46A

Notes:

- Can only be selected or configured for a Cray or Slingshot Solution. Not allowed for a Non-Cray or Non-Slingshot Solution.
- Cannot have the following networking options configured within the same server: Slingshot 11 or Slingshot 22.

Core Options

Storage Offload Adapters

HPE NV60100M 100Gb 2-port Storage Offload Adapter	R8M41A

Notes: This storage offload adapter requires selection 2 each of either 100GbE QSFP28 PSM4 500m XCVR OR 100GbE QSFP28 SR4 100m XCVR transceivers OR HPE 100GbE QSFP28 to QSFP28 5m AOC.

OCP 3.0 Adapters

Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE	P51181-B21
Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE	P08449-B21
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE	P10097-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE	P26256-B21
Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE	P26269-B21
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P10115-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE	P41614-B21
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P10106-B21
Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P42041-B21
Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE	P22767-B21
Broadcom BCM57608 Ethernet 100Gb 2-port QSFP112 OCP3 Adapter for HPE	P73114-B21
Broadcom BCM57608 Ethernet 100Gb 2-port QSFP112 Adapter for HPE	P73111-B21

OCP 3.0 Enablement

HPE ProLiant DL360 Gen11 CPU1 to OCP2 x8 Enablement Kit	P51911-B21
HPE ProLiant DL3XX Gen11 OCP1 x16 Enablement Kit	P48827-B21
HPE ProLiant DL3XX Gen11 OCP2 x16 Enablement Kit	P48828-B21
HPE ProLiant DL3XX Gen11 CPU2 to OCP2 x8 Enablement Kit	P48830-B21

DL380 Gen11 OCP 1 and OCP 2 Priority Support Matrix

OCP Slot Location	1 OCP Storage Controller (OROC) + 1OCP NIC	1 OCP NIC	2 OCP NICs	1 OCP Storage Controller (OROC)	2 OCP Storage Controllers (OROC)
OCP 1	OROC	N/A	OCP NIC	OROC (Higher priority)	OROC (Higher priority)
OCP 2 (with shared NIC and WoL)	OCP NIC	NIC (higher priority)	OCP NIC (higher priority)	N/A	OROC

HPE InfiniBand

HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter	P45642-B22
HPE InfiniBand NDR200/Ethernet 200GbE 2-port QSFP112 PCIe5 x16 MCX755106AC-HEAT Adapter	P65333-B21
HPE InfiniBand NDR 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter	P45641-B21

Notes:

- High Performance Fan Kit is required (P48820-B21).
- Must be populated in x16 physical and electrical slot.
- Ambient temperature should not exceed 25C.

Core Options

Recommended Ambient Temperature	
System Config	**P31323-B21**
8LFF	25C (only to OCP2)
24SFF	Not supported
16SFF	25C (only to OCP2)
8SFF	30C (only to OCP2)

HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 OCP3 MCX653436A-HDAI Adapter P31348-B21

Recommended Ambient Temperature	
System Config	**P31323-B21**
8LFF	Not supported
24SFF	Not supported
16SFF	Not supported
8SFF	25C (only to OCP2)

Other Restrictions

1. High Performance Fan Kit is required (P48820-B21).
2. Not supported on 24SFF CTO server or 12LFF CTO server.
3. Ambient temperature should not exceed 25C.
4. OCP2 x16 Enablement Kit (P48828-B21) is required.
5. 256GB DIMMs not supported if these adapters are selected.
6. Max = 1Could observe sub-optimal performance if installed in x8 slot.

HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 MCX653105A-HDAT Adapter P23664-B21

Recommended Ambient Temperature	
System Config	**P23664-B21**
8LFF	25C
24SFF	25C
16SFF	25C
8SFF	30C

Other Restrictions

1. High Performance Fan Kit is required (P48820-B21).
2. Must be populated in x16 physical and electrical slot.
3. Ambient temperature should not exceed 25C.

If configured for a Cray or Slingshot Solution, this option is to be used as the Slingshot 10 networking card.

HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 MCX653106A-HDAT Adapter P31324-B21

Recommended System Ambient Temperature	
System Config	**P31324-B21**
8LFF	25C
24SFF	Not supported
16SFF	25C
8SFF	25C

Other Restrictions

1. High Performance Fan Kit is required (P48820-B21).
2. Not supported on 24SFF CTO server or 12LFF CTO server.
3. Must be populated in x16 physical and electrical slot.
4. Ambient temperature should not exceed 25C.

If configured for a Cray or Slingshot Solution, this option is to be used as the Slingshot 10 networking card.

Core Options

HPE 100Gb 1-port OP101 QSFP28 x16 PCIe Gen3 with Intel Omni-Path Architecture Adapter 829335-B21

Notes:

- High Performance Fan Kit is required (P48820-B21).
- Must be populated in x16 physical and electrical slot.

HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe4 x16 MCX653105A-ECAT Adapter P23665-B21

Notes: High Performance Fan Kit is required (P48820-B21).

HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe4 x16 MCX653106A-ECAT Adapter P23666-B21

Recommended Ambient Temperature		
System Config	**P23665-B21**	**P23666-B21**
8LFF	30C	25C
24SFF	30C	Not supported
16SFF	30C	25C
8SFF	30C	30C

Notes:

- High Performance Fan Kit is required (P48820-B21).
- Must be populated in x16 physical and electrical slot.
- If 2SFF drive cage is selected then Max = 2
- Max = 4

HPE I/O Expansion Options

Notes:

- The Primary Riser shipping default in the CTO server is a x8 FH, FL, x16 FH, FL and x8 FH, HL.
- For a Secondary/Tertiary riser, the second processor is required.
- x16 cards installed on x8 slots could observe sub-optimal performance.

HPE ProLiant DL380 Gen11 2U x16/x16/x16 Primary Riser Kit P48803-B21

Notes:

- Slot 1 – PCIe 5.0 x16 Full Height and Full Length
- Slot 2 – PCIe 5.0 x16 Full Height and Full Length
- Slot 3 – PCIe 5.0 x16 Full Height and Half Length
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 3x16 Primary riser must be selected and defaulted.
- If this Primary Riser is selected, then default Primary Riser is replaced with this riser.
- If Slot 1 of HPE DL380 Gen11 2U 3x16 Primary Riser Kit needs to be enabled then 3 x16 Primary Cable Kit (P56073-B21) must be selected.
- If Primary 3 x16 Cable Kit is NOT selected, then only Slot 2 and Slot 3 will be available for PCIe card selection and no PCIe cards can be selected for Slot 1.

HPE ProLiant DL380 Gen11 2U x16/x16/x16 Secondary Riser Kit P51083-B21

Notes:

- Slot 4 - PCIe 5.0 x16 Full Height and Full Length
- Slot 5 - PCIe 5.0 x16 Full Height and Full Length
- Slot 6 - PCIe 5.0 x16 Full Height and Half Length
- When 2LFF Tertiary Cage is selected then Secondary and Tertiary Riser cannot be selected.
- When 2LFF Secondary Cage is selected then Secondary Riser cannot be selected.
- If 24NVMe Bundle is selected, then Qty 1 of HPE DL380 Gen11 3x16 SEC Riser must be selected and defaulted.
- If Slot 4 of HPE DL380 Gen11 2U 3x16 Secondary Riser Kit needs to be enabled then 3 x16 Secondary Cable Kit (P56074-B21) must be selected.

Core Options

- If Secondary 3 x16 Cable Kit is NOT selected, then only Slot 5 and Slot 6 will be available and no PCIe cards can be selected for Slot4.
- If Secondary OR Tertiary Riser is selected, then Second Processor must be selected.
- Tertiary Riser and Secondary 3 x16 Riser cannot be selected together.

HPE ProLiant DL380 Gen11 2U Primary/Secondary NEBS-compliant Riser Kit P48805-B21

Notes:
- GPU and NEBS Riser cannot be selected together.
- When this riser is selected it replaces the default Primary Riser.
- When Primary and Secondary NEBS risers are selected the Tertiary Riser cannot be selected.
- NEBS risers cannot be mixed with other non-NEBS risers.

HPE ProLiant DL380 Gen11 2U Secondary/Tertiary NEBS-compliant Riser Kit P48806-B21

Notes:
- This riser requires selection of second processor.
- GPU and NEBS Riser cannot be selected together.
- When Primary and Secondary NEBS risers are selected the Tertiary Riser cannot be selected.
- NEBS risers cannot be mixed with other non-NEBS risers.
- When 24 NVMe or 32 NVMe bundles are selected the Tertiary Riser cannot be selected.

HPE ProLiant DL380 Gen11 2U x8/x16/x8 Secondary Riser Kit P48802-B21

Notes:
- Slot 4 – PCIe 5.0 x8 Full Height and Full Length
- Slot 5 – PCIe 5.0 x16 Full Height and Full Length
- Slot 6 – PCIe 5.0 x8 Full Height and Half Length
- If quantity 1 or quantity 2 of 2SFF Primary/Secondary Drive Cage is selected, then HPE DL380 Gen11 x8x16x8 secondary riser is required.
- If quantity 1 of 2SFF Primary/Secondary Drive Cage is selected, then top two slots (Slot 4 and Slot 5) of HPE DL380 Gen11 x8x16x8 Secondary Riser will be blocked by Drive Cage.
- If 2LFF Tertiary Drive Cage is selected, then Secondary and Tertiary Riser cannot be selected.
- if 2LFF Secondary Drive Cage is selected then Secondary Riser cannot be selected.
- If 24NVMe Bundle is selected, then quantity 1 of HPE DL380 Gen11 x8x16x8 secondary riser must be selected.
- If Secondary OR Tertiary Riser is selected, then Second Processor must be selected.

HPE ProLiant DL380 Gen11 2U x16/x16 Tertiary Riser Kit P48804-B21

Notes:
- This is the tertiary riser.
- Slot 7 - PCIe 5.0 x16 Full Height and Full Length
- Slot 8 - PCIe 4.0 x16 Full Height and Full Length

HPE ProLiant DL380 Gen11 x16/x16/x16 Primary Cable Kit P56073-B21
HPE ProLiant DL380 Gen11 x16/x16/x16 Secondary Cable Kit P56074-B21
HPE ProLiant DL380 Gen11 2x16 Tertiary Riser x8 Enablement FIO Bundle Kit P53632-B21

Core Options

Risers

Riser Information*							
Part number	**Description**	**Riser position**			**Bus width (Gen5 lanes)**		
		Primary	**Secondary**	**Tertiary**	**Top slot**	**Middle Slot**	**Bottom slot**
N/A	This is the default riser in the chassis	D	N	N	x8	x16	x8
P48803-B21	HPE DL380 Gen11 x16/x16/x16 Primary Riser Kit	O	N	N	x16	x16	x16[1]
P51083-B21	HPE DL380 Gen11 x16/x16/x16 Secondary Riser Kit	N	O	N	x16	x16	x16[2]
P48802-B21	HPE DL38X Gen11 x8/x16/x8 Sec Riser Kit	N	O	N	x8	x16	x8
P48804-B21	HPE DL38X Gen11 2x16 Tertiary Riser Kit	N	N	O	x16	x16[3]	
P48805-B21	HPE ProLiant DL380 Gen11 2U Primary/Secondary NEBS-compliant Riser Kit	O	N	N	x8	x16	x8
P48806-B21	HPE ProLiant DL380 Gen11 2U Secondary/Tertiary NEBS-compliant Riser Kit	N	O	N	x8	x16	x8

Notes:

- D = Default on chassis; O = Optional; N = not supported or slot/connector not present.
- [1]Requires HPE DL380 Gen11 x16/x16/x16 Primary Cable Kit (P56073-B21)
- [2]Requires HPE DL380 Gen11 x16/x16/x16 Secondary Cable Kit (P56074-B21)
- [3]PCIe Gen4 lanes.
- x16 cards installed on x8 slots could observe sub-optimal performance.

HPE Power Supplies

HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit P38995-B21

Notes: Flex Slot Platinum power supplies support power efficiency of up to 94% and include a standard C-14 power inlet connector.

HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit P03178-B21

Notes: Flex Slot Titanium power supplies support power efficiency of up to 96% and include a standard C-14 power inlet connector.

HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit P38997-B21

Notes: Flex Slot Platinum Plus power supplies support power efficiency of up to 94% and include a C-14 power inlet connector that can support HPE Power Discovery Services (blue connector).

HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit P17023-B21

Notes: Requires selection of HPE 1600W DC PSU power lug option kit OR HPE 1600W DC PSU Power Cable Kit.

HPE 1600W -48VDC Power Cable Lug Kit P36877-B21

HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit P44712-B21

Notes:

- Flex Slot Platinum power supplies support power efficiency of up to 94% and are EU Lot 9 compliant.
- Beginning on January 1st, 2024, units sold into the European Union (EU), European Economic Area (EEA), the United Kingdom, or Switzerland must include more efficient AC power supplies: 94% for multi-output and 96% for single output. HPE Flexible Slot power supplies are single-output, and part numbers 865438-B21, P03178-B21, and P44712-B21 are 96% efficient, thus meeting requirements. HPE is on target to fulfil compliant systems ahead of time and will begin enforcing these requirements in advance to satisfy requests with the current power supplies by the set deadline.

Core Options

HPE Cooling Options

HPE ProLiant DL380/DL560 Gen11 2U High Performance Fan Kit P48820-B21

Notes:

- This kit is required for specific **Ambient temperature environments**.
- High Performance fan kit consists of 6 fans, these will need to replace all the standard fans in the unit and fill all 6 fan cages.
- The 24SFF CTO server will already include 6 High Performance fans.
- The High-Performance fan kit is needed to support certain ASHRAE operating environments.
- For elevated ambient temperature support please see: **DL380 Gen11 Extended Ambient Temperature Guidelines**.

HPE ProLiant DL380 Gen11 Standard Fan Kit P49146-B21

Notes:

- Includes two standard fans.
- Not supported with 24SFF and 12EDSFF CTO Server.
- High Performance Fan Kit and Standard Fan Kit cannot be selected together.
- High Performance Fan Kit can be selected over Standard Fan Kit in all configurations.

HPE ProLiant DL380 Gen11 Max Performance Heat Sink Kit P48817-B21

Notes: This kit is required for "Q" series processors.

HPE ProLiant DL380/DL560 Gen11 High Performance 2U Heat Sink Kit P48818-B21

Notes: This kit is CPUs with TDP over 150W.

HPE ProLiant DL3XX/560 Gen11 High Performance Heat Sink Kit P48905-B21

Notes: This kit is a low-profile high performance heatsink. This heatsink is required when a mid-tray storage cage is selected.

HPE ProLiant DL380 Gen11 Standard Heat Sink Kit P49145-B21

Notes: The standard heatsink is for CPUs with TDP equal to or lower than 150W.

HPE Direct Liquid Cooling Options for HPE ProLiant DL380 Gen11

HPE ProLiant DL380 Gen11 Cold Plate Module NS204 Quick Disconnect Tube Set FIO Kit P62023-B21

Notes:

- This kit is the Direct Liquid Cooling Kit that uses the NS204i-u slot for connections
- If this option is selected the HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device(P48183-B21) cannot be selected.
- This kit contains 2 Cold Plate Modules and 1 Quick Disconnect Module.

HPE ProLiant DL3XX Gen11 Cold Plate Module FIO Kit from PCIe P62029-B21

Notes:

- This kit is the Direct Liquid Cooling Kit that uses a PCIe slot on the Primary Riser.
- If this option is selected the Primary Riser will have one less PCIe slot available for PCIe adapters. Please keep this in mind when considering total number of PCIe adapters required.
- This kit contains 2 Cold Plate Modules and 1 Quick Disconnect Module.

HPE ProLiant DL3XX Gen11 Direct Liquid Cooling 600mm FIO Hose Kit P62038-B21

Notes:

- This kit includes the 65CM tube kit for Direct Liquid Cooling.
- This kit must be selected when using the Direct Liquid Colling Kit in the NS204i-u slot (P62023-B21).

HPE ProLiant DL3XX Gen11 Direct Liquid Cooling 55cm Quick Disconnect Tube Set FIO Kit P62042-B21

Notes:

- This kit includes the 55CM tube kit for Direct Liquid Cooling.
- This kit must be selected when using the Direct Liquid Colling Kit in the Primary Riser slot (P62029-B21).

Additional Options

Some options may not be integrated at the factory. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of an HPE approved configurator. Contact your local sales representative for additional information.

HPE Computation and Graphics Accelerators

NVIDIA H100 NVL 94GB PCIe Accelerator for HPE S2D86C

Notes:

- Max =3
- This GPU is PCIe x16, so it must be populated on a x16 slot only. The “PCIe Card Capacity Limits” must account for this limitation.
- Thermal constraints for this GPU are based on ambient temperature of 25 degrees Centigrade.
- Mixing of Graphics options is not allowed.
- High Performance Fan Kit is required.
- The system memory must be at least twice the memory of all GPUs.
- When this GPU is selected then the top x16 PCIe slot (FH FL) connector on the riser kit CANNOT be utilized as the GPU occupies this space. The “PCIe Card Capacity Limits” must account for this limitation.
- If this GPU is selected, then HPE DL380/DL560 Gen11 2U GPU Power Cable Kit (P56072-B21) must be selected.
- For best performance across common workloads, HPE recommends system main memory at least twice the memory of all GPU.
- Full Length (FL) PCIe Card and Mid Tray cannot be selected together.
- GPU and NEBS Riser cannot be selected together.

NVIDIA RTX 4000 Ada Graphics Accelerator for HPE S3T54C

Notes:

- Max = 5
- When this GPU is selected then the top x16 PCIe slot (FH FL) connector on the riser kit CANNOT be utilized as the GPU occupies this space. The “PCIe Card Capacity Limits” must account for this limitation.
- Thermal constraints for this GPU are based on ambient temperature of 25 degrees Centigrade.
- Mixing of Graphics options is not allowed.
- High Performance Fan Kit is required.
- The system memory must be at least twice the memory of all GPUs.
- If this GPU is selected, then HPE DL380 Gen11 2U 8p GPU Power Cable Kit (P77896-B21) must be selected and defaulted.
- GPU and NEBS Riser cannot be selected together.

Intel Data Center GPU Max 1100 48GB Accelerator for HPE S1T66C

Notes:

- Max = 3
- This GPU is PCIe x16, so it must be populated on a x16 slot only. The “PCIe Card Capacity Limits” must account for this limitation.
- Thermal constraints for this GPU are based on ambient temperature of 25 degrees Centigrade.
- Mixing of GPU types is not allowed.
- High Performance Fan Kit is required.
- This GPU is not supported with 12LFF CTO Server and 24SFF CTO Server.
- The system memory must be at least twice the memory of all GPUs.
- When this GPU is selected then the top x16 PCIe slot (FH FL) connector on the riser kit CANNOT be utilized as the GPU occupies this space. The “PCIe Card Capacity Limits” must account for this limitation.

Additional Options

- For the DL380 Gen11 12EDSFF CTO Server, If EDSFF Bundle is selected then this GPU cannot be selected.
- If this GPU is selected, then HPE DL380/DL560 Gen11 2U GPU Power Cable Kit (P56072-B21) must be selected.
- If this GPU is selected, then High Performance Heatsink or Direct Liquid Cooling (DLC) must be selected.
- If this GPU is selected with Intel Liquid Cooled Processors (Q) then Direct Liquid Cooling (DLC) must be selected.

NVIDIA L40S 48GB PCIe Accelerator S2L70C

Notes:

- Max = 2
- Must be populated in x16 slot.
- If Qty2 of DW GPU is selected with no tertiary riser, then primary 3 x16 riser cable and secondary 3 x16 Riser Cable cannot be selected.
- Thermal constraints are based on Ambient Temp 25C.
- Mixing of GPU types is not allowed.
- For 8SFF/ 8LFF/ 12LFF/ 12EDSFF CTO Server, If GPU is selected then High-Performance Fan Kit must be selected and defaulted.
- This GPU is not supported with 12LFF CTO Server and 24SFF CTO Server.
- For 8SFF CTO Server, If Qty3 of 8SFF Front cage is selected then this GPU cannot be selected.
- For best performance across common workloads, HPE recommends system main memory at least twice the memory of all GPU.
- If doublewide GPU is selected on this riser, then the top x16 PCIe slot (FH FL) connector on this riser kit cannot be utilized as the doublewide GPU occupies this space. The “PCIe Card Capacity Limits” must account for this limitation.
- If Qty1 of 2SFF primary/secondary cage is selected, then Doublewide GPU Cannot be populated on HPE DL380 G11 2U x8/x16/x8 Sec Riser Kit.
- If Qty2 of 2SFF Primary/secondary cage is selected, then Doublewide GPU Cannot be populated on HPE DL380 G11 2U x8/x16/x8 Sec Riser Kit and Default Primary Riser.
- Full Length (FL) PCIe Card and Mid Tray cannot be selected together.
- For 12EDSFF CTO Server, If EDSFF Bundle is selected then this GPU cannot be selected.
- If this GPU is selected, then HPE DL380/DL560 Gen11 2U GPU Power Cable Kit must be selected and defaulted.
- For 8SFF CTO Server, If Qty1 of 8SFF Front cage is selected then Max of 2 GPU can be selected per Server.
- For 12EDSFF CTO Server, if no additional cage is selected then Max of 2 GPU can be selected per Server.
- For 8SFF CTO Server, If Qty2 of 8SFF Front cage is selected with NO DLC Component then this GPU is not supported.
- For 12EDSFF CTO Server, if additional cage is selected with NO DLC Component then this GPU is not supported
- For 8LFF CTO Server, If NO DLC component is selected then this GPU is not supported.
- For 8SFF CTO Server, If Qty2 of 8SFF Front cage is selected with DLC Component then Max 1 GPU can be selected per sever.
- For 12EDSFF CTO Server, if one additional 8SFF cage is selected with DLC Component then Max 1 GPU can be selected per sever.
- For 8LFF CTO Server, If DLC component is selected then Max 1 GPU can be selected per sever.
- For 8SFF CTO Server with two 8SFF cages/ 8LFF CTO Server/ 12EDSFF CTO Server with 8SFF Cage or EDSFF Bundle/ 12LFF CTO Server/ 24SFF CTO Server,

Additional Options

- If Qty1 or 2 of this GPU is selected with NO DLC Component then Secondary 3x16 cable cannot be selected
- If Qty1 of this GPU is selected then Secondary OR Tertiary Riser Must be selected. If Qty2 of this GPU is selected then Secondary AND Tertiary Riser Must be selected.
- GPU and NEBS Riser cannot be selected together.
- If Full Length (FL) GPU is selected then High-Performance HS or DLC must be selected for Processors.
- If Full Length (FL) GPU is selected with this Processor then DLC Module must be selected for Processors.
- If Doublewide GPU is selected on default Primary Riser then the top x16 PCIe slot (FH FL) connector CANNOT be utilized as the Doublewide GPU occupies this space. The “PCIe Card Capacity Limits” must account for this limitation.
- If this GPU is selected then Secondary 3x16 cable cannot be selected.
- This GPU cannot be populated on primary Riser. The “PCIe Card Capacity Limits” must account for this limitation.
- For 8SFF CTO Server with two 8SFF cages/ 8LFF CTO Server/ 12EDSFF Server with one 8SFF Cage, If Qty1 this GPU is selected with DLC Module then Tertiary Riser must be selected. GPU is populated on Tertiary Riser.

NVIDIA L40 48GB PCIe Accelerator for HPE S0K90C

Notes:

- Max = 3
- Must be populated in x16 slot.
- System memory should be 2x of GPU memory.
- Requires selection of High-Performance Fan Kit.
- This GPU requires HPE ProLiant DL380/DL560 Gen11 2U GPU Power Cable Kit - P56072-B21
- On 8SFF CTO Server, if Qty2 of 8SFF Front cage is selected without DLC component then Max of 2 GPU can be selected per Server.
- On 8SFF CTO Server, if Qty1 of 8SFF Front cage is selected then Max of 3 GPU can be selected per Server.
- On 8LFF CTO Server, if NO DLC component is selected then Max of 2 GPU can be selected per Server
- On 8LFF CTO Server, if DLC component is selected then Max of 3 GPU can be selected per Server.
- On 12LFF CTO Server, 24SFF CTO Server, or 8SFF CTO Server with Qty3 8SFF drive cages if NO DLC component is selected then Max of 1 GPU can be selected per Server
- On 12LFF CTO Server, 24SFF CTO Server, or 8SFF CTO Server with Qty3 8SFF drive cages and DLC component is selected then Max of 2 GPU can be selected per Server.
- On 12EDSFF CTO Server, if one additional 8SFF cage is selected without DLC Component then Max 2 GPU can be selected per sever.
- On 12EDSFF CTO Server, if one additional 8SFF cage is selected with DLC Component then Max 3 GPU can be selected per sever.
- On 8SFF CTO Server, if Qty2 of 8SFF Front cage is selected with DLC component then Max of 3 GPU can be selected per Server.

NVIDIA L4 24GB PCIe Accelerator for HPE S0K89C

Notes:

- Max = 8
- System memory should be 2x of GPU memory.
- Requires selection of High-Performance Fan Kit
- On 12LFF CTO Server, 24SFF CTO Server, or 8SFF CTO Server with Qty3 8SFF drive cages are selected without DLC component then Max of 5 can be selected per server

Additional Options

NVIDIA A16 64GB PCIe Non-CEC Accelerator for HPE	R8T26C

Notes:
- Max = 3
- System memory should be 2x of GPU memory.
- This GPU requires power Cable Kit (P39102-B21) to also be selected.
- This GPU requires HPE DL380/DL560 G11 2U High Perf Fan Kit P48820-B21.

Intel Data Center GPU Max 1100 48GB Accelerator for HPE	S1T66C

Notes:
- Max = 3
- This GPU is PCIe x16, so it must be populated on a x16 slot only. The “PCIe Card Capacity Limits” must account for this limitation.
- Mixing of GPU types is not allowed.
- Requires selection of High-Performance Fan Kit.
- System memory should be 2x of GPU memory.
- Quantity1 of this cable can support max of 3 double wide GPUs.
- When this GPU is selected then the top x16 PCIe slot (FH FL) connector on the riser kit CANNOT be utilized as the GPU occupies this space. The “PCIe Card Capacity Limits” must account for this limitation.
- Full Length (FL) PCIe Card and Mid Tray cannot be selected together.
- This GPU requires HPE DL380/DL560 Gen11 2U GPU Power Cable Kit (P56072-B21)
- If Qty2 of this GPU is selected, then Secondary Riser must be selected.
- For 12LFF CTO Server/ 24SFF CTO Server/ 8SFF CTO Server with front 3 8SFF Cage/ 12EDSFF CTO Server with EDSFF Bundle, if this GPU is selected then DLC Must be selected.
- If Qty3 of DW GPU is selected, then primary 3 x16 Riser cable and secondary 3 x16 Riser Cable cannot be selected.

HPE ProLiant DL300 Gen10 Plus GPU 8-pin Keyed Cable Kit	P39102-B21

Notes:
- This GPU power cable is used for NVIDIA A16.
- One power cable supports up to 3x GPUs

HPE ProLiant DL380/DL560 Gen11 2U GPU Power Cable Kit	P56072-B21

Notes:
- This GPU power cable is used for NVIDIA H100 and NVIDIA L40 GPUs.
- One power cable supports up to 3x GPUs

Additional Options

GPU Information

Notes: The listed ambient temperatures represent the maximum levels allowed without any impact on system performance (e.g., throttling). It is possible to exceed these temperatures by an additional +5°C without causing a system shutdown, but performance degradation might be expected.

HPE DL380 Gen11 Configuration						
Part number	**Card**	**Qty Supported**	**PCIe**	**8SFF**	**16SFF/8LFF**	**24SFF/12LFF**
S1T66C	Intel® Data Center GPU Max 1100	2 or 3	Gen5	3@30C(Air)	3@25C(Air) 3@30C(Air) if CPU ≤ 185W	Not Supported
R9S41C	NVIDIA H100 80GB PCIe Accelerator	2 or 3	Gen5	2@25C (Air) 3@25C (DLC)	2 @ 20C (Air) 2 @ 25C (DLC) 1 @ 25C (Air) if CPU ≤ 185W	Not Supported
S2D86C	NVIDIA H100 NVL 94GB PCIe Accelerator	1, 2 or 3	Gen5	3@27C (Air) 2@30C (Air) 3@30C (DLC)	3@18C (Air) 2@27C (Air) 3@25C (DLC)	1@25C (Air) 2@25C (DLC)
S3T54C	NVIDIA RTX 4000 Ada Graphics Accelerator for HPE	up to 5	Gen4	3@30C(Air) 3@30C(DLC) 5@27C(Air) 5@27C(DLC)	3@30C(Air) 3@30C(DLC) 5@27C(Air) 5@27C(DLC)	3@30C(Air) 3@30C(DLC) 5@27C(Air) 5@27C(DLC)
S0K90C	NVIDIA L40 48GB PCIe Accelerator	1, 2 or 3	Gen4	3@25C(Air) 2@30C(Air) 3@30C(DLC)	2@30C(Air) 3@25C(DLC) 2@30C(Air) if CPU ≤ 185W 3@25C(Air) if CPU ≤ 185W	1@25C(Air) 2@25C(DLC) 2@25C(Air) if CPU ≤ 185W
S2L70C	NVIDIA L40S 48GB PCIe Accelerator	1 or 2	Gen5	2@25C (Air) 3@25C (DLC)	2 @ 20C (Air) 2 @ 25C (DLC) 1 @ 25C (Air) if CPU ≤ 185W 3 @ 25C (DLC) if CPU ≤ 185W	Not Supported
S0K89C	NVIDIA L4 24GB PCIe Accelerator	Up to 8	Gen4	8@30C(Air) 8@30C(Air)	5@30C(Air) 8@25C(Air) 8@30C(DLC)	5@25C(Air) 8@25C(DLC)
R8T26C	NVIDIA A16 64GB PCIe Non-CEC Accelerator for HPE	1, 2 or 3	Gen4	30C	2@30C(Air) 3@30C(DLC) 3@25C(Air) if CPU≤ 185W	1@30C(Air) 2@25C(Air) 3@25C(DLC) 3@25C(Air) if CPU≤ 185W

Qty SFF Drive Cages	Cooling Method	NVIDIA A16
1 drive cage	Air Cooled + Heatsink	3
2 drive cages	Air Cooled + Heatsink	2
3 drive cages	Air Cooled + Heatsink	1
1 drive cage	Direct Liquid Cooling	3
2 drive cages	Direct Liquid Cooling	3
3 drive cages	Direct Liquid Cooling	2

Additional Options

Embedded Management

HPE iLO Common Password FIO Setting

HPE iLO Common Password FIO Setting	P08040-B21

Notes:

- Replaces iLO default randomized password by an HPE defined common password. HPE highly recommends changing this password immediately after the initial onboarding process.
- Customers who want to choose their own custom iLO default password should use the HPE Factory Express Integration Services

HPE ILO Advanced

HPE iLO Advanced Electronic License with 1yr Support on iLO Licensed Features	E6U59ABE
HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features	512485-B21
HPE iLO Advanced AKA Tracking License with 1yr Support on iLO Licensed Features	512487-B21
HPE iLO Advanced Electronic License with 3yr Support on iLO Licensed Features	E6U64ABE
HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features	BD505A
HPE iLO Advanced AKA Tracking License with 3yr Support on iLO Licensed Features	BD507A

HPE Converged Infrastructure Management Software

HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y35AAE
HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU	P8B26AAE

Notes: Licenses ship without media. The HPE OneView Media Kit can be ordered separately, or can be **downloaded**.

HPE Security

HPE Trusted Supply Chain for HPE ProLiant	P36394-B21

Notes:

- HPE Trusted Supply Chain (P36394-B21) is an optional security upgrade intended for agencies and regulated industries needing enhanced security and compliance needs. Applying this option to a DL380 Gen11 CTO server ensures it is built in the USA in a secured facility by vetted HPE personnel assigned to the manufacturing processes. A multitude of checkpoints/inspections for malicious microcode and counterfeit parts are performed throughout the server build, and additional safeguards are put in place against cyber-exploits throughout the server lifecycle. The HPE ProLiant DL380 Gen11 is re-branded as a HPE ProLiant DL380T Gen11 to denote the HPE Trusted Supply Chain security enhancements. The DL380T Gen11 is Trade Agreement Act (TAA) compliant. Learn more at **https://www.hpe.com/security**
- This option requires the selection of HPE Gen11 Intrusion Detection Kit (P48922-B21)
- This option requires the selection of either HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features (BD505A) or HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features (512485-B21)
- This option is limited to stand-alone DL380 Gen11 CTO servers only. The HPE Trusted Supply Chain configuration will not be available if the server is ordered as factory integrated into a rack
- One instance of the following Electronic License to Use is required per order (not per server): R6X85AAE
- HPE Trusted Supply Chain E-LTU
- Logistics delivery speeds and services are available and selectable within Next Gen Quoter.
- This option cannot be selected with TAA instruction SKU nor TAA CTO Models

Additional Options

HPE iLO Common Password FIO Setting	P08040-B21

Notes:
- Replaces ILO default randomized password by an HPE defined common password. HPE highly recommends changing this password immediately after the initial onboarding process.
- Customers who want to choose their own custom iLO default password should use the HPE Factory Express Integration Services

HPE Gen11 2U Bezel Kit	P50400-B21
HPE Bezel Lock Kit	875519-B21

Notes: Requires the bezel kit

HPE Boot Controllers

HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device	P48183-B21

Notes:
- This is the NS204i-u hot pluggable boot device
- Default is NVMe are internal to system and not hot pluggable
- If external accessible drives are needed please add trigger SKU P54542-B21 HPE ProLiant DL380 Gen11 NS204i-u FIO Bundle Kit. This trigger SKU allows NVMe drives to be externally accessible and hot pluggable.
- Max = 1

HPE ProLiant DL380 Gen11 NS204i-u Internal Cable Kit	P52152-B21

Notes:
- If NS204i-u Gen11 Hot Plug Boot Option Device is selected then HPE DL380 Gen11 NS204i-u Internal Cable Kit is required.
- Max = 1

HPE ProLiant DL380 Gen11 NS204i-u FIO Bundle Kit	P54542-B21

Notes:
- This SKU is required only when external accessible drives are required for the NS204i-u.
- Max = 1

HPE Storage Controllers

The Gen11 storage controller portfolio has been updated to include new technology like OCP3.0 as well as PCIe adapters. For a more detailed breakout of the available Gen11 controllers visit the storage controllers QuickSpecs site:
HPE MegaRAID Storage Controllers

HPE Tri-Mode Controllers

HPE MR416i-p Gen11 x16 Lanes 8GB Cache PCI SPDM Plug-in Storage Controller	P47777-B21
HPE MR416i-o Gen11 x16 Lanes 8GB Cache OCP SPDM Storage Controller	P47781-B21
HPE MR216i-p Gen11 x16 Lanes without Cache PCI SPDM Plug-in Storage Controller	P47785-B21
HPE MR216i-o Gen11 x16 Lanes without Cache OCP SPDM Storage Controller	P47789-B21
HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller	P58335-B21
HPE ProLiant DL320/DL380 Gen11 PCIe Gen5 Retimer Card	P48833-B21

Notes: When adding this Retimer as a field upgrade, it is recommended to update the UBM5 PIC to a minimum of version 1.10. This firmware can be downloaded at:
https://support.hpe.com/connect/s/softwaredetails?language=en_US&softwareId=MTX_23c46bfbef394b5e9353075c5e

HPE SR932i-p Gen11 x32 Lanes 8GB Wide Cache PCI SPDM Plug-in Storage Controller	P47184-B21

Notes: Requires x16 riser slot

Additional Options

Essential RAID Controllers

HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21

NVMe Adapter

HPE DL385 Gen10 Plus 12Gb NVMe 2-port Adapter	P25527-B21

HPE Cable Options

HPE ProLiant DL380 Gen11 12EDSFF CPU1/2 Cable Kit	P52153-B21
HPE ProLiant DL360 Gen11 Storage Controller Enablement Cable Kit	P48918-B21
HPE ProLiant DL380 Gen11 8SFF CPU1/2 NVMe Cable Kit	P48825-B21
HPE ProLiant DL380 Gen11 8SFF OROC1/2 x2 Cable Kit	P48829-B21
HPE ProLiant DL380 Gen11 2U Tri-Mode Premium Cable Kit	P48831-B21
HPE ProLiant DL380 Gen11 Tri-Mode Splitter Cable Kit	P48832-B21
HPE ProLiant DL380 Gen11 PCIe Gen5 Retimer Card Cable Kit	P52154-B21
HPE ProLiant DL380 Gen11 8SFF to Retimer/-P Controller Cable Kit	P54874-B21
HPE ProLiant DL380 Gen11 LFF Front Tri-Mode Cable Kit	P56995-B21

Optional Upgrades

HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit	P01366-B21
HPE Smart Storage Hybrid Capacitor with 145mm Cable Kit	P02377-B21

Notes: Provides backup power for multiple HPE storage controllers or other devices.

HPE Tape Backup

For the complete range of tape drives, autoloaders, libraries and media see:
https://www.hpe.com/us/en/storage/storeever-tape-storage.html.
For hardware and software compatibility of Hewlett Packard Enterprise tape backup products please visit the StoreEver Tape Solutions in SPOCK (requires registration/login) **https://h20272.www2.hpe.com/SPOCK/default.aspx**.
Only external drives supported
All libraries and autoloaders supported via compatible FC or SAS controller. Refer to the StoreEver Tape Solutions Compatibility Matrix link above.

HPE Storage Options

Emulex Fibre Channel HBAs

HPE SN1610E 32Gb 1-port Fibre Channel Host Bus Adapter	R2J62A
HPE SN1610E 32Gb 2-port Fibre Channel Host Bus Adapter	R2J63A
HPE SN1700E 64Gb 1-port Fibre Channel Host Bus Adapter	R7N77A
HPE SN1700E 64Gb 2-port Fibre Channel Host Bus Adapter	R7N78A

QLogic Fibre Channel HBAs

HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter	R2E08A
HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter	R2E09A
HPE SN1700Q 64Gb 1-port Fibre Channel Host Bus Adapter	R7N86A
HPE SN1700Q 64Gb 2-port Fibre Channel Host Bus Adapter	R7N87A

Additional Options

HPE Racks

- Please see the HPE Advanced Series Racks QuickSpecs for information on additional racks options and rack specifications. **HPE G2 Advanced Series Racks**
- Please see the HPE Enterprise Series Racks QuickSpecs for information on additional racks options and rack specifications. **HPE G2 Enterprise Series Racks**

HPE Power Distribution Units (PDUs)

- Please see the **HPE Basic Power Distribution Units (PDU) QuickSpecs** for information on these products and their specifications.
- Please see the **HPE Metered Power Distribution Units (PDU) QuickSpecs** for information on these products and their specifications. Please see the **HPE Intelligent Power Distribution Unit (PDU)** QuickSpecs for information on these products and their specifications.
- Please see the **HPE Metered and Switched Power Distribution Units (PDU)** QuickSpecs for information on these products and their specifications.

HPE Uninterruptible Power Systems (UPS)

- To learn more, please visit the **HPE Uninterruptible Power Systems (UPS)** web page.
- Please see the **HPE Direct Flow Three Phase Uninterruptible Power System QuickSpecs** for information on these products and their specifications.
- Please see the **HPE Line Interactive Single Phase UPS QuickSpecs** for information on these products and their specifications.

HPE Rack Options

Please see the **HPE KVM Switches web page** for information on these products and their specifications.

Easy Install Rail Kits

Easy Install rail kits contain telescoping rails which allow for in-rack serviceability.
To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative.

Notes:

- Hewlett Packard Enterprise recommends that a minimum of two people are required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation.
- HPE rail kits are designed to work with HPE racks in compliance with industry standard EIA-310-E. In the event a customer elects to purchase a third-party rack for use with an HPE rail kit, any such use is at customer's own risk. HPE makes no express or implied warranties with respect to such third-party racks and specifically disclaims any implied warranties of merchantability and fitness for a particular purpose. Furthermore, HPE has no obligation and assumes no liability for the materials, design, specifications, installation, safety, and compatibility of any such third-party racks with any rail kits, including HPE rail kits.

HPE ProLiant DL3XX Gen11 Easy Install Rail 3 Kit	P52341-B21

Notes: Does not include Cable Management Arm (CMA) (P22020-B21).

HPE DL38X Gen10 Plus 2U Cable Management Arm for Rail Kit	P22020-B21

Additional Options

HPE USB and SD Options

Notes:

- In vSphere 7.0, VMware made changes that impact the use of an SD Card/USB media as a standalone boot device and will be removing support for them after version 7.x.
- SD Card/USB media can still be used as a standalone boot option through all 7.x releases via published Customer Advisory **Usage of SD Card/USB Devices As Standalone Boot Devices Has Changed Due to System Storage Changes For VMware ESXi 7.0 (Or Later)**.
- For any major release beyond VMware ESXi 7.x, VMware will require M.2 or another local persistent device as the standalone boot option.

HPE Support Services

Installation & Startup Services

HPE ProLiant DL/ML Install Service	U4554E
HPE ProLiant DL/ML Startup Service	U4555E

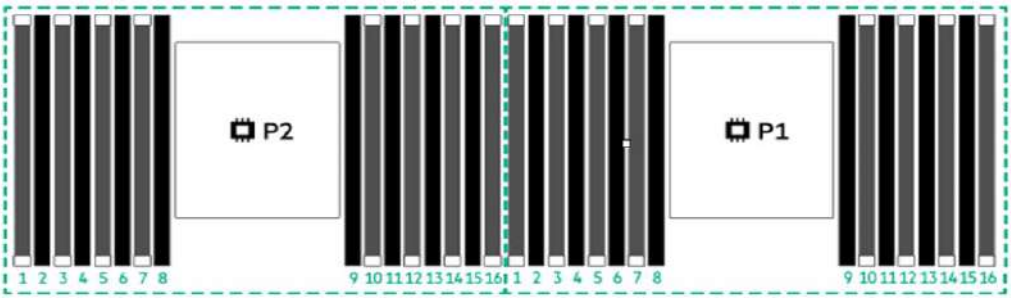
Tech Care Services

HPE 3 Year Tech Care Essential DL380 Gen11 HW Service	H93G4E
HPE 3 Year Tech Care Essential wDMR DL380 Gen11 HW Service	H93G5E
HPE 5 Year Tech Care Essential DL380 Gen11 HW Service	H93J8E
HPE 5 Year Tech Care Essential wDMR DL380 Gen11 HW Service	H93J9E

Notes: For a full listing of support services available for this server, please visit **https://www.hpe.com/services**.

Memory

Memory Population guidelines



HPE ProLiant DL380 Gen11

HPE ProLiant Gen11 16 slot per CPU DIMM population order																
DIMM population order																
DIMM slot	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 DIMM										10						
2 DIMMs[2]			3							10						
4 DIMMs[2]			3				7			10				14		
6 DIMMs			3		5		7			10				14		16
8 DIMMs[1,2]	1		3		5		7			10		12		14		16
12 DIMMs	1	2	3		5	6	7			10	11	12		14	15	16
16 DIMMs[1,2]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Notes:

- Ommited DIMM counts/socket not qualified by Intel.
- [1] Supports SGX (Software Guard Extensions)
- [2] Support Hemi (hemisphere mode).

General Memory Population Rules and Guidelines:

- DIMMs should be installed in quantities of even numbers.
- Install DIMMs only if the corresponding processor is installed.
- If only one processor is installed in a two-processor system, only half of the DIMM slots are available.
- To maximize performance, it is recommended to balance the total memory capacity between all installed processors.
- When two processors are installed, balance the DIMMs across the two processors.
- White DIMM slots denote the first slot to be populated in a channel.
- Mixing of DIMM types (UDIMM, RDIMM, and LRDIMM) is not supported.
- Mixing of x4 and x8 memory is not allowed.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- The maximum memory capacity is a function of the number of DIMM slots on the platform, the largest DIMM capacity qualified on the platform, and the number and model of installed processors qualified on the platform.
- For details on the HPE Server Memory Options Population Rules, visit:
  Server memory populations rules for HPE Gen11 servers with 4th Gen Intel Xeon Scalable processors
- To realize the performance memory capabilities listed in this document, HPE DDR5 Smart Memory is required.
- For additional information, please see the **HPE DDR5 Smart Memory QuickSpecs**.

Memory

HPE SKU P/N	P43322-B21	P43328-B21	P43331-B21
SKU Description	HPE 16GB (1x16GB) Single Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	HPE 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit
DIMM Capacity	16GB	32GB	64GB
DIMM Rank	Single Rank (1R)	Dual Rank (2R)	Dual Rank (2R)
Voltage	1.1 V	1.1 V	1.1 V
DRAM Depth [bit]	2G	2G	4G
DRAM Width [bit]	x8	x8	x4
DRAM Density	16Gb	16Gb	16Gb
CAS Latency	40-39-39	40-39-39	40-39-39
DIMM Native Speed	4800 MT/s	4800 MT/s	4800 MT/s

HPE SKU P/N	P43334-B21	P43337-B21
SKU Description	HPE 128GB (1x128GB) Quad Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit	HPE 256GB (1x256GB) Octal Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit
DIMM Capacity	128GB	256GB
DIMM Rank	Quad Rank (4R)	Octal Rank (8R)
Voltage	1.1 V	1.1 V
DRAM Depth [bit]	4G	4G
DRAM Width [bit]	x4	x4
DRAM Density	16Gb	16Gb
CAS Latency	40-39-39	40-39-39
DIMM Native Speed	4800 MT/s	4800 MT/s

Notes: The maximum memory speed is a function of the memory type, memory configuration, and processor model.
For details on the HPE Server Memory speed, visit: **https://www.hpe.com/docs/memory-speed-table**

DDR5 memory options part number decoder

Notes:

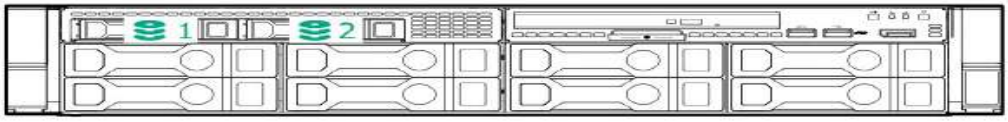
- Capacity references are rounded to the common gigabyte (GB) values.
  - 8GB = 8,192 MB
  - 16GB = 16,384 MB
  - 32GB = 32,768 MB
  - 64GB = 65,536 MB
  - 96GB = 98,304 MB
  - 128GB = 131072 MB
  - 256GB = 262144 MB
  - 512GB = 524288 MB

For more information on memory, please see the Memory QuickSpecs: **HPE DDR5 Smart Memory**

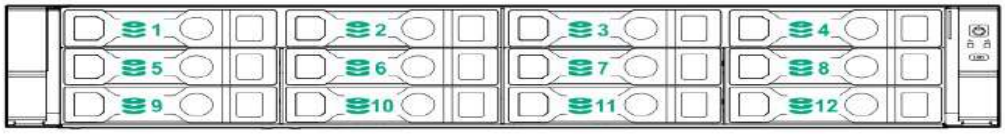
Memory Speed Table for HPE ProLiantDL380 Gen Gen11

For details on the HPE Server Memory speed, please visit: **https://www.hpe.com/docs/server-memory**

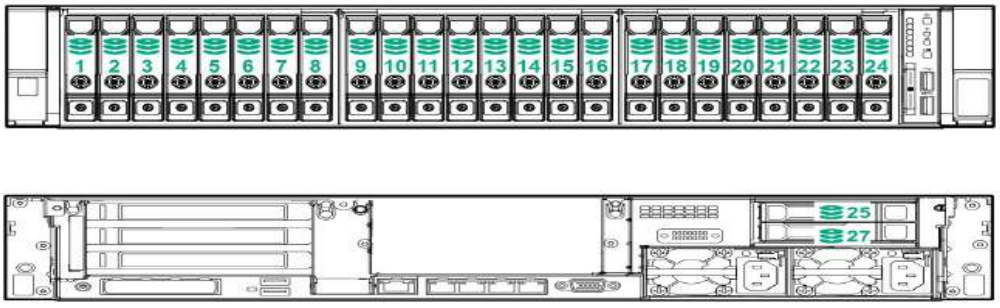
Storage



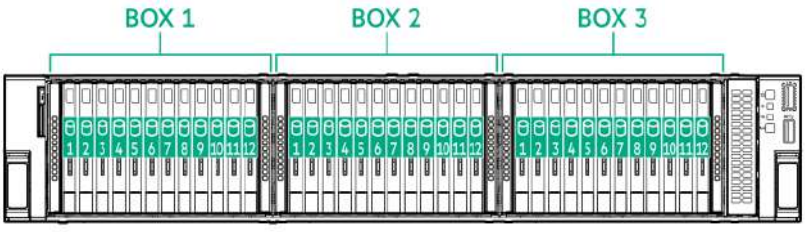
8LFF chassis with Universal media bay and optional 2SFF and optical drive shown



12LFF chassis



24SFF + rear 2 SFF drives



12EDSFF chassis

Technical Specifications

System Unit

Dimensions

- **SFF CTO servers:**
  8.75 x 44.8 x 72.7. cm / 3.44 x 17.64 x 28.62 in
- **LFF CTO servers:**
  8.75 x 44.8 x 73.25 cm / 3.44 x 17.64 x 28.84 in

Weight (approximate)

- **Maximum:** 8 SFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x RAID controller, 2x Risers installed)
  - **Maximum:** 33kg/72.75 lbs.
  - **Minimum:** 16kg/35.27 lbs.
- **Maximum:** 12LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x RAID controller, 2x Risers installed)
  - **Maximum:** 37kg/81.57 lbs.
  - **Minimum:** 18kg/39.68 lbs.

Input Requirements (per power supply)

Rated Line Voltage

- For 1800W-2200W (Titanium) Power Supply: 200-240 VAC
- For 1600W (Platinum) Power Supply: 200-240 VAC
- For 1000W (Titanium): 100 to240 VAC
- For 800W (Titanium) Power Supply: 200-240 VAC
- For 800W (Platinum) Power Supply: 100-240 VAC
- For 800W (Universal) Power Supply: 200-277 VAC

BTU Rating

Maximum

- For 1800W-2200W Power Supply: 6497 BTU/hr. (at 200 VAC), 6868 BTU/hr. (at 208 VAC), 7230 BTU/hr. (at 220 VAC), 7596 BTU/hr. (at 230VAC), 7962 BTU/hr. (at 240VAC)
- For 1600W Power Supply: 5918 BTU/hr. (at 200 VAC), 5888 BTU/hr. (at 220 VAC), 5884 BTU/hr. (at 240 VAC)
- For 1000W (Titanium) Power Supply: 3741 BTU/hr. (at 100 VAC), 3596 BTU/hr. (at 200 VAC), 3582 BTU/hr. (at 240 VAC)
- For 800W (Titanium) Power Supply: 2905 BTU/hr. (at 200 VAC), 2899 BTU/hr. (at 220 VAC), 2893 BTU/hr. (at 240 VAC)
- For 800W (Platinum) Power Supply: 3067 BTU/hr. (at 100 VAC), 2958 BTU/hr. (at 200 VAC), 2949 BTU/hr. (at 240 VAC)
- For 800W (Universal) Power Supply: 2964 BTU/hr. (at 200 VAC), 2951 BTU/hr. (at 230 VAC), 2936 BTU/hr. (at 277 VAC)

Relative Humidity (non-condensing)

- **Operating**
  8% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, non-condensing.
- **Non-operating**
  5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.

Technical Specifications

Power Supply Output

(per power supply)

Rated Steady-State Power

- For 1800W-2200W Power Supply: 1800W (at 200 VAC), 1900W (at 208 VAC), 2000W (at 220 VAC), 2100W (at 230VAC), 2200W (at 240VAC)
- For 1600W Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 1000W (Titanium) Power Supply: 1097W (at 100 VAC), 1000W (at 240 VAC), 1000W (at 240 VDC) input for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)

Maximum Peak Power

- For 1800W-2200W Power Supply: 1800W (at 200 VAC), 1900W (at 208 VAC), 2000W (at 220 VAC), 2100W (at 230VAC), 2200W (at 240VAC)
- For 1600W Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 1000W (Titanium) Power Supply: 1000W (at 100 VAC), 1000W (at 240 VAC), 1000W (at 240 VDC) input for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)

System Inlet Temperature

- **Standard Operating Temperature**
  10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft.) above sea level to a maximum of 3050 m (10,000 ft.), no direct sustained sunlight. Maximum rate of change is 20°C/hr. (36°F/hr.). The upper limit and rate of change may be limited by the type and number of options installed.

  System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).

- **Extended Ambient Operating Temperature**
  For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft.) above 900 m (2953 ft.) to a maximum of 3050 m (10,000 ft.). The approved hardware configurations for this system are listed at the URL: **DL380 Gen11 Extended Ambient Temperature Guidelines**

  For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (1.8°F per every 410 ft.) above 900 m (2953 ft.) to a maximum of 3050 m (10,000 ft.). The approved hardware configurations for this system are listed at the URL: **DL380 Gen11 Extended Ambient Temperature Guidelines**

  System performance may be reduced if operating in the extended ambient operating range or with a fan fault.

- **Non-operating**
  -30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr. (36°F/hr.).

Technical Specifications

Altitude

- **Operating**
  3050 m (10,000 ft.). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft./min).
- **Non-operating**
  9144 m (30,000 ft.). Maximum allowable altitude change rate is 457 m/min (1500 ft./min).

Acoustic Noise

Listed are the declared A-Weighted sound power levels (LwA,m) and declared average bystander position A-Weighted sound pressure levels (LpA,m) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your HPE representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.

Acoustic Noise	
Idle	
LwA,m	4.2 B Entry 4.2 B Base 4.2 B Performance
LpAm	28 dBA Entry 27 dBA Base 30 dBA Performance
Operating	
LwA,m	4.2 B Entry 4.2 B Base 4.2 B Performance
LpAm	29 dBA Entry 27 dBA Base 29 dBA Performance
Kv	0.4 B Entry 0.4 B Base 0.4 B Performance

Notes:

- The declared mean A-weighted sound power level, LwA,m, is computed as the arithmetic average of the measured.
- A-weighted sound power levels for a randomly selected sample, rounded to the nearest 0,1 B.
- The declared mean A-weighted emission sound pressure level, LpA,m, is computed as the arithmetic average of the measured A-weighted emission sound pressure levels at the bystander positions for a randomly selected sample, rounded to the nearest 1 dB.
- The statistical adder for verification, Kv, is a quantity to be added to the declared mean A-weighted sound power level, LwA,m, such that there will be a 95 % probability of acceptance, when using the verification procedures of ISO 9296, if no more than 6,5 % of the batch of new equipment, has A-weighted sound power levels greater than (LwA,m + Kv).
- The quantity, LwA,c (formerly called LwAd), can be computed from the sum of LWA,m and Kv.
- All measurements made to conform to ISO 7779 / ECMA-74 and declared to conform to ISO 9296 / ECMA-109.
- B, dB, abbreviations for bels and decibels, respectively, where 1 B = 10 dB.
- The results in this declaration apply only to the model numbers listed above when operating and tested according to the indicated modes and standards. A system with additional configuration components or increased operating functionality may increase the noise emission values.
- System under abnormal conditions may increase the noise level, persons in the vicinity of the product [cabinet] for extended periods of time should consider wearing hearing protection or using other means to reduce noise exposure.

Technical Specifications

Emissions Classification (EMC) – Regulatory Information

To view the regulatory information for your product, view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the Hewlett Packard Enterprise Support Center:
https://www.hpe.com/support/Safety-Compliance-EnterpriseProducts

Environment-friendly Products and Approach End-of-life Management and Recycling

Hewlett Packard Enterprise offers **end-of-life product return, trade-in, and recycling programs**, in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site. These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

Summary of Changes

Date	Version History	Action	Description of Change
07-Apr-2025	Version 33	Changed	Core Options section was updated. Added: Read Intensive NVMe EDSFF SSDs, Mixed Use NVMe EDSFF SSDs, Read Intensive NVMe SFF SSDs, Mixed Use NVMe SFF SSDs SKUs, COM Advanced SKUs and QuickSpecs Survey.
03-Mar-2025	Version 32	Changed	Core Options and Additional Options sections were updated.
03-Feb-2025	Version 31	Changed	Standard Features, Pre-Configured Models, Core Options and Additional Options sections were updated. OBS SKUs were removed. Intel VROC Software RAID naming changed to Hybrid RAID.
20-Jan-2025	Version 30	Changed	Additional Options section was updated.
06-Jan-2025	Version 29	Changed	Overview, Core Options and Storage sections were updated.
02-Dec-2024	Version 28	Changed	Core Options and Additional Options sections were updated. (Removed OBS items: HDDs, SSDs, iLO Licenses, and Mouse/Keyboard options).
04-Nov-2024	Version 27	Changed	Standard Features, Configuration Information and Additional Options sections were updated.
07-Oct-2024	Version 26	Changed	Standard Features, Core Options and Additional Options sections were updated.
03-Sep-2024	Version 25	Changed	Standard Features (Operating Systems and Virtualization Software Support for HPE Servers) and Pre-Configured Models sections were updated.
05-Aug-2024	Version 24	Changed	Standard Features, Core Options and Additional Options sections were updated.
15-Jul-2024	Version 23	Changed	Pre-Configured Models section was updated.
01-Jul-2024	Version 22	Changed	Standard Features, Core Options and Additional Options sections were updated.
17-Jun-2024	Version 21	Changed	Pre-Configured Models section was updated.
03-Jun-2024	Version 20	Changed	Standard Features, Configuration Information, Core Options, Additional Options and Technical Specifications sections were updated.
29-Apr-2024	Version 19	Changed	Core Options section was updated.
15-Apr-2024	Version 18	Changed	Pre-Configured Models section was updated.
01-Apr-2024	Version 17	Changed	Standard Features, Pre-Configured Models, Configuration Information, Core Options and Additional Options sections were updated.
18-Mar-2024	Version 16	Changed	Pre- Configured Models section was updated.
04-Mar-2024	Version 15	Changed	Configuration Information and Core Options sections were updated
05-Feb-2024	Version 14	Changed	Overview, Standard Features, Configuration Information, Core Options and Technical Specifications sections were updated
14-Dec-2023	Version 13	Changed	Overview, Configuration Information and Additional Options sections were updated
06-Nov-2023	Version 12	Changed	Overview, Configuration Information and Additional Options sections were updated
02-Oct-2023	Version 11	Changed	Overview, Configuration Information and Additional Options sections were updated
11-Sep-2023	Version 10	Changed	Standard Features section was updated
05-Sep-2023	Version 9	Changed	Overview, Standard Features, Configuration Information, Core Options and Memory sections were updated
24-Jul-2023	Version 8	Changed	Standard Features section was updated
10-Jul-2023	Version 7	Changed	Overview, Standard Features, Pre- Configured Models, Configuration Information and Core Options sections were updated
05-Jun-2023	Version 6	Changed	Overview, Standard Features, Pre- Configured Models, Configuration Information and Core Options sections were updated
01-May-2023	Version 5	Changed	Standard Features, Configuration Information, Core Options and Technical Specifications sections were updated.
03-Apr-2023	Version 4	Changed	Standard Features, Pre- Configured Models, Configuration Information, Core Options and Technical Specifications sections were updated.

Summary of Changes

Date	Version History	Action	Description of Change
06-Mar-2023	Version 3	Changed	Standard Features and Core Options sections were updated.
15-Feb-2023	Version 2	Changed	Standard Features section was updated
10-Jan-2023	Version 1	New	New QuickSpecs

Copyright

Shape the Future of QuickSpecs – Your Input Matters

a50004307enw - 16911 - Worldwide - V33 - 07-April-2025

Hewlett Packard Enterprise

Shape the Future of QuickSpecs – Your Input Matters

HPE Solid State Disk Drives

(SSD, M.2s and M.2 EKits)
HPE Solid State Drives (SSDs), M.2s and M.2 Enablement Kits (EKits) are based upon industry leading NAND Flash technology, which delivers exceptional performance and endurance to support a growing broad spectrum of demanding applications with varying workload performance requirements.

These storage devices offer better I/O latency & more power efficient solutions when compared with traditional rotating (HDD) media, while also fitting seamlessly into existing HPE server & storage infrastructures, and are available in a number of form factors including: Small Form Factor (SFF), Large Form Factor (LFF), Enterprise and Datacenter Standard Form Factor (EDSFF) E3.S, and M.2.

M.2 Enablement Kit

M.2

Smart Carrier NVMe (SCN)

Smart Carrier (SC)

Basic Carrier (BC)

Low Profile Converter (LPC)

E3.S Thin Carrier (EC1)

Overview

What's New?

- New Solid State Drives & Drive Option Kit(s):
  - P84244-B21 HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD
  - P84242-B21 HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD

HPE Solid State Drive Selector Tool

A web-based tool that dramatically reduces the time and complexity of selecting the right SSD for your demanding workloads. **https://ssd.hpe.com**

Dramatically reduces the time to select the right SSD for your HPE Server

- Recommends the most appropriate SSDs for specific customer workloads
- Reduces selection time and eliminates complexity; sort by server model, price, & performance
- Ideal for customers, HPE Sales, and HPE channel partners
- Simple, web-based tool; user-friendly interface

Firmware Updates

HPE Digitally Signed Firmware Prevents unauthorized access to your data by providing security and assurance that drive firmware comes from a trusted source and protects against malicious attacks. Digitally Signed Firmware is indicated by "DS" in the SKU description of older SKUs. All SSDs in the HPE main portfolio of SKU have digitally signed firmware unless otherwise noted, particularly in newer released SKU (even if DS does not appear in the description), Digitally Signed Firmware can be confirmed in the capacity/workload tables by SKU number.

For advanced data protection and encryption, customers should consider HPE Self-Encrypting Drives (SED). Read more about it here: **SED Link**.

Our Solid State product categories include Solid State Drives, or SSDs

We define enterprise-class as products that include full data path error detection and surprise power loss protection. In addition, our SSDs have HPE SmartSSD Wear Gauge support, which provides diagnostic information and reports on the health of any given drive.

HPE Enterprise SSDs are available in three categories based on the customer's application and workload level: Very Read Optimized (VRO), Read Intensive (RI), and Mixed Use (MU. These categories indicate the number of drive writes per day (DWPD) that you can expect from the drive. (DWPD is the maximum number of 4K host writes to the entire drive capacity of the SSD per day over a five-year period).

Workloads such as Read caching, Web Servers, Social Media, and Boot are more Read Performance driven. Workloads such as Business Intelligence, Big Data Analytics, Virtualization tend to be more Write Performance driven.

For best access to SSDs, HPE has enhanced its extensive SSD portfolio with a multi-vendor offering. HPE multi-vendor portfolio utilizes specific vendor SSDs which are HPE qualified and released and are then bundled into a multi-sourced SKU per capacity. Identified by Multi-Vendor (MV) in the SKU description, these multi-vendor SKUs provide the shortest lead time SSDs, preferable pricing to single sourced SKUs and are assured to meet or exceed the minimum performance specifications and power requirements published in this HPE QuickSpecs document per capacity SKU number.

HPE's multi-vendor SSD offering helps customers simplify their purchasing decisions by providing immediate availability, preferable pricing and SKU longevity on HPE certified SSDs.

HPE SATA SSDs deliver enterprise features at an affordable price in HPE servers. Entry-level pricing fuels the rapid adoption of SSDs for read-intensive workloads, with the cost per IOPS comparing favorably to HDDs.

For customers looking to step up from SATA SSDs, HPE single-port Value SAS SSDs offer a significant performance boost over SATA SSDs with roughly twice the IOPS and are typically lower in cost than

Overview

traditional SAS SSD drives.
HPE full-performance SAS SSDs allow greater I/O bandwidth for superior performance over Value SAS SSDs, providing high write performance and endurance. They are best suited for mission-critical enterprise environments with workloads high in read and writes.
For customers looking for even more performance, HPE offers a portfolio of NVMe SSDs. HPE Mainstream Performance NVMe SSDs are advanced data center drives optimized for greater performance and endurance in a cost-effective design. HPE High Performance NVMe SSDs are positioned to deliver high performance and low latency. HPE High Performance Low Latency NVMe SSDs are a category of drives that offers a combination of high throughput, low latency, and ultra-high endurance. The first HPE SSDs using 3D XPoint technology*, these SSDs are optimized to break through data access bottlenecks by providing a new data storage tier. High Performance Low Latency NVMe SSDs accelerate applications for fast caching and fast storage to increase scale per server and reduce transaction costs for latency sensitive workloads.

Using the above information along with our HPE SSD Selector Tool at **https://ssd.hpe.com** you can quickly determine what SSD solution might best meet your needs. You can also compare specific capacity, performance attributes, and server compatibility.

XXXXXX-B21 is SKU designation formed by a common six digit part number that identifies a SKU that is offered from COMPUTE but also available across multiple server family lines. Refer to the table below to find the SKU suffix that applies to the specific server product line this option can be ordered with.		
-B21	**-H21**	**-K21**
COMPUTE Server Line	**SPECIALIZED COMPUTE Server Line**	**STORAGE Line**
HPE ProLiant DL20/DL160/DL180 Servers HPE ProLiant DL320/DL340/DL360/DL380/ /DL560/DL580 Servers HPE ProLiant DL325/DL345/DL365/DL385 Servers HPE ProLiant MicroServer HPE ProLiant ML30/ML110/ML350 Servers HPE Synergy 480 Systems		HPE Apollo 4000 Systems HPE Alletra 4000 Server HPE D3000 Disk Enclosures
Disclaimer: This may not be a complete listing of applicable servers		

Standard Features

What is SSD?

An enduring data storage device utilizing NAND (negative-AND) semiconductor technology to store and access data which is volatile without the aid of an auxiliary power source.

SSD Quality

Today's businesses are seeing larger, more complex applications, coupled with an increasing amount of mission-critical and transaction processing data demand. In this environment, storage has become a critical component, significantly defining requirements for both systems reliability and performance. This is why HPE drives undergo a rigorous qualification process to ensure functionality and eliminate firmware and O/S incompatibilities.

Integration

Many issues customers have with third party drives are "simple" integration issues. When buying from another supplier, there is no guarantee that a drive has been correctly set for proper operation with ProLiant servers and storage systems. These incompatibilities can create problems in configuration, can rob your system of performance, or at their worst, can cause you to lose data. HPE drives are specifically designed and tested for flawless operation in your HPE equipment. The integration of solid state drives in HPE systems means that associated components are right for your ProLiant server.

Support Matrix

Please see the following URL for the latest list of supported servers and enclosures:
https://www.hpe.com/us/en/servers.html
Notes: Non-hot plug devices are 15mm Z-height, which restricts them to those servers that can accept a 15mm device.

Product Category

HPE Enterprise SSDs are available in three categories based on workload level: Very Read Optimized (VRO), Read Intensive (RI), and Mixed Use (MU). The categories indicate the number of drive writes per day (DWPD) that you can expect from the drive. (DWPD is the maximum number of 4K host writes to the entire drive capacity of the SSD per day over a five-year period.

Standard Features

Maximum Usage Limitations

NAND Flash devices use semiconductor technology that has a finite number of data that can be written to the device, defined as the Maximum Usage Limit, commonly called "Write Endurance". Write Endurance - is measured while running 100% random 4KiB writes across the entire SSD.
Drive Writes Per Day (DWPD) - Workload environment is based on 100% random 4KiB writes for five (5) years, which is the maximum amount of data that can be written to the device before reaching the device's write endurance limit.
HPE Solid State Drives (SSDs) are equipped with tools that can report the amount of lifetime remaining. Introducing HPE SMARTSSD Wear Gauge™. To take advantage of SMARTSSD Wear Gauge™, Smart Array Firmware version 5.0 or greater is required and HPE Array Configuration Utility (ACU) or HPE Diagnostic Utility (ADU) must be running.
Simple Network Management Protocol (SNMP) Storage Agents for both Microsoft® Windows® and Linux provide status and condition updates through traps, OS event logs and the HPE System Management Homepage: **https://www.hpe.com/us/en/product-catalog/detail/pip.hp-system-management-homepage-software.344313.html**
The HPE SMARTSSD Wear Gauge™ requires a Smart Array or Smart HBA controller listed below:

- HPE Smart Array PX1X Controller Series or newer
- HPE Smart HBA PX4X Controller Series
- HPE Dynamic Smart Array BX2Xi Controller Series or newer
- HPE Dynamic Smart Array B320i Controller

Notes: HPE Direct Connect to the HPE Smart Array B110i SATA RAID Controller is not currently supported by the above noted tool.

Data Retention

Data Retention is the period of time for retaining the data in the NAND once the maximum rated endurance level has occurred. These SSD's are rated for 3 months if no power is applied once the SSD has reached maximum rated write endurance.

Warranty

SSD & AIC Standard 3/0/0 warranty; Customer Self Repair (CSR) subject to maximum usage limitations. Maximum usage limit: This is the maximum amount of data that can be written to the drive. Drives that have reached this limit will not be eligible for warranty coverage.
Notes: In cases where an M.2 SSD is used in conjunction with a Server Cartridge the Warranty includes 3-Year Parts, 3-Year Labor, 3-Year (3/3/3) Onsite support for that option only.

Technical Specifications

SATA Capacity, Workload and Carrier Specifications

SATA Interface- (Capacity, Workload, Carrier...)											
HPE Option Kit SKU	**Long Description**	**Capacity**	**Workload Type**	**Interface Type**	**Form Factor**	**Plug Type**	**Carrier Type**	**Digitally Signed Firmware (DS)**	**Flash Type**	**Port**	
Mixed Use SATA Drives											
Mixed Use SATA Self-Encrypting Drives (SED)											
P58244-B21	HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	960	MU	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C F
Read Intensive SATA Drives											
Read Intensive SATA Self-Encrypting Drives (SED)											
P58236-B21	HPE 480GB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	480	RI	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C F
Very Read Optimized SATA Drives											

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

SATA Speeds and Feeds Specifications

SATA Interface - (Speeds & Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Through-put (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
Mixed Use SATA Drives							
Mixed Use SATA Self-Encrypting Drives (SED)							
P58244-B21	HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	8,760	5.00	516 / 494	111 / 37	71,652 / 52,194	76,811@32 / 53,103@4

Technical Specifications

P58248-B21	HPE 1.92TB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	17,520	5.00	516 / 493	111 / 37	70,786 / 52,238	78,227@Q256 / 53,217@Q4
Read Intensive SATA Drives							
P63886-B21	HPE 480GB SATA 6G Read Intensive SFF BC PM893a SSD	876	1.00	536 / 371	114 / 54	71,359 / 18,340	78,779@Q32 / 18,634@Q4
P63890-B21	HPE 480GB SATA 6G Read Intensive SFF SC PM893a SSD	876	1.00	536 / 371	114 / 54	71,359 / 18,340	78,779@Q32 / 18,634@Q4
P63910-B21	HPE 3.84TB SATA 6G Read Intensive SFF BC PM893a SSD	7,008	1.00	536 / 499	114 / 39	64,677 / 32,460	73,629@Q32 / 32,729@Q4
P63914-B21	HPE 3.84TB SATA 6G Read Intensive SFF SC PM893a SSD	7,008	1.00	536 / 499	114 / 39	64,677 / 32,460	73,629@Q32 / 32,729@Q4
Read Intensive SATA Self-Encrypting Drives (SED)							
P58236-B21	HPE 480GB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	1,324	1.50	515 / 449	111 / 38	73,183 / 45,284	79,702@128 / 47,820@4
P58240-B21	HPE 1.92TB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	5,256	1.50	519 / 495	111 / 38	71,031 / 33,182	78,175@64 / 33,930@256
Very Read Optimized SATA Drives							

SATA Power and Height Specifications

SATA Interface - (Power & Height)									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
Read Intensive SATA Drives									
Mixed Use SATA Self-Encrypting Drives (SED)									
P58244-B21	HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	1.5	3.9	3.9	3.1	4.1	2.15	4.1	7mm
Read Intensive SATA Self-Encrypting Drives (SED)									
P58236-B21	HPE 480GB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	1.5	3.5	3.5	3.15	3.75	2.15	3.75	7mm
Very Read Optimized SATA Drives									

SATA Certifications

- Prequalified certification will be listed in the HPE Selector Tool **https://ssd.hpe.com/**
- For latest vSAN Compatibility, please visit **Broadcom vSAN SSD Compatibility Guide** and enter specific HPE Part Number to confirm compatibility.
- For latest Windows OS Certification and SDDC (Software Defined Data Center) Premium AQ Certification please visit **https://www.windowsservercatalog.com/** and enter specific HPE Model Number to confirm compatibility.

SATA Capacity, Workload, Carrier Specifications MULTI VENDOR

SATA Interface- (Capacity, Workload, Carrier...) MULTI VENDOR

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
Mixed Use Multi Vendor SATA Drives											
P18432-X21	HPE 480GB SATA 6G Mixed Use SFF SC Multi Vendor SSD	480	MU	SATA	SFF	Hot Plug	SC	Yes	TLC	Single	C F
P18434-X21	HPE 960GB SATA 6G Mixed Use SFF SC Multi Vendor SSD	960	MU	SATA	SFF	Hot Plug	SC	Yes	TLC	Single	C F
P18436-X21	HPE 1.92TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	1,920	MU	SATA	SFF	Hot Plug	SC	Yes	TLC	Single	C F
P18438-X21	HPE 3.84TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	3,840	MU	SATA	SFF	Hot Plug	SC	Yes	TLC	Single	C F
P40502-B21	HPE 480GB SATA 6G Mixed Use	480	MU	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C 1

Technical Specifications

	SFF BC Multi Vendor SSD										
P40503-B21	HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	960	MU	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P40504-B21	HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	1,920	MU	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P40505-B21	HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	3,840	MU	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P47419-B21	HPE 960GB SATA 6G Mixed Use LFF SCC Multi Vendor SSD	960	MU	SATA	LFF	Hot Plug	SCC	Yes	TLC	Single	C F
Read Intensive Multi Vendor SATA Drives											
P18420-X21	HPE 240GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	240	RI	SATA	SFF	Hot Plug	SC	Yes	TLC	Single	C F
P18422-X21	HPE 480GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	480	RI	SATA	SFF	Hot Plug	SC	Yes	TLC	Single	C F
P18424-X21	HPE 960GB SATA 6G Read Intensive SFF SC Multi	960	RI	SATA	SFF	Hot Plug	SC	Yes	TLC	Single	C F

Technical Specifications

	Vendor SSD										
P18426-X21	HPE 1.92TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	1,920	RI	SATA	SFF	Hot Plug	SC	Yes	TLC	Single	C F

SATA Capacity, Workload, Carrier Specifications MULTI VENDOR

SATA Interface- (Capacity, Workload, Carrier...) MULTI VENDOR

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
Mixed Use Multi Vendor SATA Drives											
P18428-X21	HPE 3.84TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	3,840	RI	SATA	SFF	Hot Plug	SC	Yes	TLC	Single	C F
P18430-X21	HPE 7.68TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	7,680	RI	SATA	SFF	Hot Plug	SC	Yes	TLC	Single	C F
P40496-B21	HPE 240GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	240	RI	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P40497-B21	HPE 480GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	480	RI	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C 1

Technical Specifications

P40498-B21	HPE 960GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	960	RI	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P40499-B21	HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	1,920	RI	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P40500-B21	HPE 3.84TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	3,840	RI	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P40501-B21	HPE 7.68TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	7,680	RI	SATA	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P47807-B21	HPE 480GB SATA 6G Read Intensive LFF SCC Multi Vendor SSD	480	RI	SATA	LFF	Hot Plug	SCC	Yes	TLC	Single	C F
P47808-B21	HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD	960	RI	SATA	LFF	Hot Plug	LPC	Yes	TLC	Single	C F
P65272-B21	HPE 480GB SATA 6G Read Intensive SFF RW Multi	480	RI	SATA	SFF	Non Hot Plug	RW	Yes	TLC	Single	C F

	Vendor SSD										

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/**to determine server compatibility.

Multi-vendor SKUs are composed of numerous vendor manufactured SSDs within a given SATA capacity SKU. Wh ordering a particular SKU-B21 number the customer will receive a homogenous set of vendor manufactured SSI capacity that has met or exceeds the HPE qualification standards published above.

SATA Speeds and Feeds Specifications MULTI VENDOR

SATA Interface - (Speeds & Feeds) MULTI VENDOR							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Through-put (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
Mixed Use Multi Vendor SATA Drives							
P18432-X21	HPE 480GB SATA 6G Mixed Use SFF SC Multi Vendor SSD	2,628	3.0	510 / 430	125 / 52	62,000 / 29,000	72,000@Q32 / 29,000@Q4
P18434-X21	HPE 960GB SATA 6G Mixed Use SFF SC Multi Vendor SSD	5,256	3.0	516 / 480	125 / 50	61,000 / 31,000	72,000@Q32 / 31,000@Q4
P18436-X21	HPE 1.92TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	10,000	3.0	516 / 480	125 / 52	59,000 / 31,000	71,000@Q32 / 31,000@Q4
P18438-X21	HPE 3.84TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	21,024	3.0	512 / 480	140 / 76	59,000 / 32,000	69,000@Q32 / 32,500@Q32
P40502-B21	HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	2,628	3.0	510 / 430	125 / 52	62,000 / 29,000	72,000@Q32 / 29,000@Q4
P40503-B21	HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	5,256	3.0	516 / 480	125 / 50	61,000 / 31,000	72,000@Q32 / 31,000@Q4
P40504-B21	HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	10,000	3.0	516 / 480	125 / 52	59,000 / 31,000	71,000@Q32 / 31,000@Q4
P40505-B21	HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	21,024	3.0	510 / 480	140 / 76	59,000 / 32,000	70,000@Q32 / 35,000@Q4

Technical Specifications

SATA Interface - (Speeds & Feeds) MULTI VENDOR							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Through-put (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
P47419-B21	HPE 960GB SATA 6G Mixed Use LFF SCC Multi Vendor SSD	6,000	3.5	516 / 480	125 / 50	61,000 / 31,000	72,000@Q32 / 31,000@Q4
Read Intensive Multi Vendor SATA Drives							
P18420-X21	HPE 240GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	438	1.0	400 / 235	124 /61	44,000 / 16,000	45,000@Q16 / 10,500@Q1
P18422-X21	HPE 480GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	700	0.8	510 / 395	125 / 53	63,000 / 25,000	73,000@Q32 / 25,000@Q1
P18424-X21	HPE 960GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	1,400	0.8	506 / 480	125 / 53	63,000 / 29,000	73,000@Q32 / 29,000@Q4
P18426-X21	HPE 1.92TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	2,800	0.8	519 / 470	125 / 60	55,500 / 24,000	56,000@Q32 / 25,000@Q32
P18428-X21	HPE 3.84TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	5,256	0.8	503 / 480	125 / 65	63,000 / 22,500	72,000@Q32 / 23,000@Q1
P18430-X21	HPE 7.68TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	9,111	0.7	505 / 480	126 / 87	65,000 / 11,500	57,000@Q32 / 10,000@Q1
P40496-B21	HPE 240GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	438	1.0	400 / 235	124 /61	44,000 / 16,000	45,000@Q16 / 16,500@Q4
	HPE 480GB SATA						

Technical Specifications

SATA Interface - (Speeds & Feeds) MULTI VENDOR							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Through-put (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
P40500-B21	HPE 3.84TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	5,256	0.8	503 / 480	125 / 65	63,000 / 22,500	72,000@Q32 / 23,000@Q1
P40501-B21	HPE 7.68TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	9,111	0.7	505 / 480	126 / 87	65,000 / 11,500	73,000@Q32 / 11,800@Q64
P47807-B21	HPE 480GB SATA 6G Read Intensive LFF SCC Multi Vendor SSD	700	0.8	510 / 395	125 / 53	63,000 / 25,000	73,000@Q32 / 25,000@Q1
P47808-B21	HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD	1,400	0.8	506 / 480	125 / 53	63,000 / 29,000	73,000@Q32 / 29,000@Q4
P65272-B21	HPE 480GB SATA 6G Read Intensive SFF RW Multi Vendor SSD	876	1.0	515 / 449	111 / 38	68,000 / 29,000	77,000@Q32 / 29,000@Q4

SATA Power and Height Specifications MULTI VENDOR

SATA Interface - (Power & Height) MULTI VENDOR									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
Mixed Use Multi Vendor SATA Drives									
P18432-X21	HPE 480GB SATA 6G Mixed Use								

Technical Specifications

SATA Interface - (Power & Height) MULTI VENDOR									
HPE Option Kit SKU	Long Description SSD	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
P18436-X21	HPE 1.92TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	1.50	3.90	3.90	3.20	4.10	3.04	5.00	7mm
P18438-X21	HPE 3.84TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	1.50	4.50	4.50	3.66	4.39	3.17	5.00	7mm
P40502-B21	HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	1.50	3.55	3.55	3.56	4.00	2.94	5.00	7mm
P40503-B21	HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	1.50	3.90	3.90	3.10	4.10	2.81	5.00	7mm
P40504-B21	HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	1.50	3.90	3.90	3.20	4.10	3.04	5.00	7mm
P40505-B21	HPE 3.84TB SATA 6G								

Technical Specifications

SATA Interface - (Power & Height) MULTI VENDOR									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
	Mixed Use								
	LFF SCC Multi Vendor SSD	1.50	3.90	3.90	3.10	4.10	2.81	5.00	
Read Intensive Multi Vendor SATA Drives									
P18420-X21	HPE 240GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	1.50	3.05	3.05	3.00	3.50	2.10	5.00	7mm
P18422-X21	HPE 480GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	1.50	3.50	3.50	3.15	3.75	2.54	5.00	7mm
P18424-X21	HPE 960GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	1.50	4.05	4.05	3.10	4.00	2.66	5.00	7mm
P18426-X21	HPE 1.92TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	1.50	4.10	4.10	3.16	4.00	3.15	5.00	7mm
P18428-X21	HPE 3.84TB SATA 6G								

Technical Specifications

SATA Interface - (Power & Height) MULTI VENDOR									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
X21	7.68TB								
	SATA 6G Read Intensive SFF SC Multi Vendor SSD	1.54	2.99	2.99	2.46	3.55	2.99	3.55	7mm
P40496-B21	HPE 240GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	1.50	3.05	3.05	3.00	3.50	2.10	5.00	7mm
P40497-B21	HPE 480GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	1.50	3.50	3.50	3.15	3.75	2.54	5.00	7mm
P40498-B21	HPE 960GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	1.50	4.05	4.05	3.10	4.00	2.66	5.00	7mm
P40499-B21	HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	1.50	4.10	4.10	3.16	4.00	3.15	5.00	7mm
P40500-	HPE								

Technical Specifications

SATA Interface - (Power & Height) MULTI VENDOR									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
P40501-B21	HPE 7.68TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	1.54	2.99	2.99	2.46	3.55	2.99	3.55	7mm
P47807-B21	HPE 480GB SATA 6G Read Intensive LFF SCC Multi Vendor SSD	1.50	3.50	3.50	3.15	3.75	2.54	5.00	7mm
P47808-B21	HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD	1.50	4.05	4.05	3.10	4.00	2.66	5.00	7mm
P65272-B21	HPE 480GB SATA 6G Read Intensive SFF RW Multi Vendor SSD	1.50	3.50	3.50	3.15	3.75	2.45	5.00	7mm

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

Multi-vendor SKUs are composed of numerous vendor manufactured SSDs within a given SATA capacity SKU. When ordering a particular SKU-B21 number the customer will receive a homogenous set of vendor manufactured SSDs in that capacity that has met or exceeds the HPE qualification standards published above.

SATA Certifications MULTI VENDOR

- Prequalified certification will be listed in the HPE Selector Tool **https://ssd.hpe.com/.**
- For latest vSAN Compatibility, please visit **Broadcom vSAN SSD Compatibility Guide** and enter specific HPE Part Number to confirm compatibility.
- For latest Windows OS Certification and SDDC (Software Defined Data Center) Premium AQ Certification please visit **https://www.windowsservercatalog.com/** and enter specific HPE Model Number to confirm compatibility.

SAS Capacity, Workload, Carrier Specifications

SAS Interface - (Capacity, Workload, Carrier...)

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
Mixed Use SAS Drives											
P49048-B21	HPE 1.6TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	1,600	MU	SAS	SFF	Hot Plug	SC	Yes	TLC	Dual	C F
P49052-B21	HPE 3.2TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	3,200	MU	SAS	SFF	Hot Plug	SC	Yes	TLC	Dual	C F
P49056-B21	HPE 6.4TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	6,400	MU	SAS	SFF	Hot Plug	SC	Yes	TLC	Dual	C F
P49047-B21	HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD	800	MU	SAS	SFF	Hot Plug	BC	Yes	TLC	Dual	C
P49049-B21	HPE 1.6TB SAS 24G Mixed Use SFF BC Multi	1,600	MU	SAS	SFF	Hot Plug	BC	Yes	TLC	Dual	C

Technical Specifications

SAS Interface - (Capacity, Workload, Carrier...)											
HPE Option Kit SKU	**Long Description**	**Capacity**	**Workload Type**	**Interface Type**	**Form Factor**	**Plug Type**	**Carrier Type**	**Digitally Signed Firmware (DS)**	**Flash Type**	**Port**	
	Multi Vendor SSD										
P49053-B21	HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	3,200	MU	SAS	SFF	Hot Plug	BC	Yes	TLC	Dual	C
P49057-B21	HPE 6.4TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	6,400	MU	SAS	SFF	Hot Plug	BC	Yes	TLC	Dual	C
Mixed Use SAS Self-Encrypting Drives (SED)											
P63871-B21	HPE 1.6TB SAS Mixed Use SFF BC Self-encrypting FIPS 140-2 PM7 SSD	1,600	MU	SAS	SFF	Hot Plug	BC	Yes	TLC	Dual	C F
Read Intensive SAS Drives											
P49028-B21	HPE 960GB SAS 12G Read Intensive SFF SC Multi Vendor SSD	960	RI	SAS	SFF	Hot Plug	SC	Yes	TLC	Dual	C F
P49030-B21	HPE 1.92TB SAS 12G Read Intensive SFF SC Multi Vendor	1,920	RI	SAS	SFF	Hot Plug	SC	Yes	TLC	Dual	C F

Technical Specifications

SAS Interface - (Capacity, Workload, Carrier...)

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
	Vendor SSD										
P49039-B21	HPE 7.68TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	7,680	RI	SAS	SFF	Hot Plug	SC	Yes	TLC	Dual	C F
P49044-B21	HPE 15.36TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	15,360	RI	SAS	SFF	Hot Plug	SC	Yes	TLC	Dual	C F
P49029-B21	HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD	960	RI	SAS	SFF	Hot Plug	BC	Yes	TLC	Dual	C
P49031-B21	HPE 1.92TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	1,920	RI	SAS	SFF	Hot Plug	BC	Yes	TLC	Dual	C
P49035-B21	HPE 3.84TB SAS 24G Read Intensive SFF BC Multi	3,840	RI	SAS	SFF	Hot Plug	BC	Yes	TLC	Dual	C

Technical Specifications

SAS Interface - (Capacity, Workload, Carrier...)											
HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
	Multi Vendor SSD										
P49045-B21	HPE 15.36TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	15,360	RI	SAS	SFF	Hot Plug	BC	Yes	TLC	Dual	C
Read Intensive SAS Self-Encrypting Drives (SED)											
P63875-B21	HPE 3.84TB SAS Read Intensive SFF BC Self-encrypting FIPS 140-2 PM7 SSD	3,840	RI	SAS	SFF	Hot Plug	BC	Yes	TLC	Dual	C F

Notes:
B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.
Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

SAS Speeds and Feeds Specifications

SAS Interface - (Speeds & Feeds)							
HPE Option Kit SKU	Long Description	Lifetime Writes (TB)	Endurance DWPD	MAX Seq Reads / Max Seq	Random Read Avg. /	Random Read / Random	MAX Random Read / MAX

Technical Specifications

SAS Interface - (Speeds & Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
P49048-B21	HPE 1.6TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	8,760	3	1,080 / 1,030	185 / 95	115,000 / 120,000	173,000@Q64 / 120,000@Q16
P49052-B21	HPE 3.2TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	17,121	3	1,080 / 1,030	165 / 95	110,000 / 120,000	173,000@Q64 / 130,000@Q16
P49056-B21	HPE 6.4TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	34,241	3	1,080 / 1,030	195 / 95	105,000 / 120,000	173,000@Q64 / 130,000@Q16
P49047-B21	HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD	4,380	3	1,090 / 1,040	94 / 34	150,000 / 135,000	174,000@Q64 / 120,000@Q16
P49049-B21	HPE 1.6TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	8,760	3	2,030 / 1,950	90 / 27	150,000 / 165,000	155,000@Q64 / 165,000@Q16
P49053-B21	HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	17,121	3	2,030 / 1,950	97 / 29	145,000 / 160,000	155,000@Q64 / 160,000@Q16
P49057-B21	HPE 6.4TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	32,241	3	1,080 / 1,035	108 / 32	135,000 / 125,000	173,000@Q64 / 130,000@Q16
Mixed Use SAS Self-Encrypting Drives (SED)							
P63871-B21	HPE 1.6TB SAS Mixed Use SFF BC Self-	8,760	3.00	2,047 / 2,046	78 / 23	184,642 / 317,376	308,406@Q64 / 325,959@Q128

Technical Specifications

SAS Interface - (Speeds & Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
P49034-B21	HPE 3.84TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	6,848	1	1,080 / 1,030	175 / 95	110,000 / 78,000	173,000@Q64 / 78,000@Q4
P49039-B21	HPE 7.68TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	13,697	1	1,080 / 1,030	190 / 95	105,000 / 55,000	173,000@Q64 / 56,000@Q4
P49044-B21	HPE 15.36TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	27,393	1	1,080 / 1,030	185 / 95	100,000 / 63,000	173,000@Q64 / 64,000@Q16
P49029-B21	HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD	1,712	1	2,030 / 1,280	90 / 26	155,000 / 65,000	174,000@Q64 / 65,000@Q4
P49031-B21	HPE 1.92TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	3,424	1	2,030 / 1,950	90 / 29	150,000 / 100,000	155,000@Q32 / 100,000@Q4
P49035-B21	HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	7,008	1	2,030 / 1,950	97 / 27	145,000 / 114,000	155,000@Q32 / 100,000@Q4
P49041-B21	HPE 7.68TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	14,016	1	2,030 / 1,950	97 / 29	145,000 / 140,000	155,000@Q64 / 140,000@Q16
P49045-B21	HPE 15.36TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	27,393	1	2,030 / 1,950	97 / 26	150,000 / 140,000	174,000@Q64 / 145,000@Q16
Read Intensive SAS Self-Encrypting Drives (SED)							
P63875-B21	HPE 3.84TB SAS Read Intensive SFF BC Self-encrypting FIPS 140-2 PM7 SSD	7,008	1.00	2,047 / 2,037	77 / 23	186,622 / 159,779	308,508@Q64 / 160,497@Q128

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

Technical Specifications

SAS Interface - (Power & Height)									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
Mixed Use SAS Drives									
P49048-B21	HPE 1.6TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	3.83	6.59	6.59	6.55	9.60	6.59	9.60	15mm
P49052-B21	HPE 3.2TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	3.74	6.95	6.95	6.60	10.16	6.95	10.16	15mm
P49056-B21	HPE 6.4TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	3.69	7.63	7.63	7.70	9.82	7.63	9.82	15mm
P49047-B21	HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD	4.66	6.47	6.47	8.28	8.56	6.47	8.56	15mm
P49049-B21	HPE 1.6TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	6.11	8.00	8.00	8.84	13.61	8.00	13.61	15mm
P49053-B21	HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	6.27	8.56	8.56	9.00	16.89	8.56	16.89	15mm
P49057-B21	HPE 6.4TB SAS 24G Mixed Use SFF BC	6.12	8.77	8.77	10.49	17.64	8.77	17.64	15mm

Technical Specifications

SAS Interface - (Power & Height)									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
	SFF BC Multi Vendor SSD								
Mixed Use SAS Self-Encrypting Drives (SED)									
P63871-B21	HPE 1.6TB SAS Mixed Use SFF BC Self-encrypting FIPS 140-2 PM7 SSD	5.00	10.56	13.80	9.75	14.99	14.80	16.00	15mm
Read Intensive SAS Drives									
P49028-B21	HPE 960GB SAS 12G Read Intensive SFF SC Multi Vendor SSD	3.67	6.68	6.68	6.76	8.35	6.68	8.35	15mm
P49030-B21	HPE 1.92TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	3.69	6.74	6.74	6.47	9.57	6.74	9.57	15mm
P49034-B21	HPE 3.84TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	3.42	7.00	7.00	6.63	9.19	7.00	9.19	15mm
P49039-B21	HPE 7.68TB SAS 12G Read Intensive SFF SC	4.04	7.92	7.92	7.36	10.26	7.92	10.26	15mm

Technical Specifications

SAS Interface - (Power & Height)									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
	Intensive SFF SC Multi Vendor SSD								
P49029-B21	HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD	6.19	7.81	7.81	8.42	10.34	7.81	10.34	15mm
P49031-B21	HPE 1.92TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	6.17	7.96	7.96	8.64	13.66	7.96	13.66	15mm
P49035-B21	HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	6.33	8.94	8.94	9.00	16.82	8.94	16.82	15mm
P49041-B21	HPE 7.68TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	6.10	8.90	8.90	10.10	17.29	8.90	17.29	15mm
P49045-B21	HPE 15.36TB SAS 24G Read Intensive	6.64	8.94	8.94	12.40	17.62	8.94	17.62	15mm

Technical Specifications

SAS Interface - (Power & Height)									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
	Read Intensive SFF BC Self-encrypting FIPS 140-2 PM7 SSD								

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

SAS Certifications

- Prequalified certification will be listed in the HPE Selector Tool **https://ssd.hpe.com/.**
- For latest vSAN Compatibility, please visit **Broadcom vSAN SSD Compatibility Guide** and enter specific HPE Part Number to confirm compatibility.
- For latest Windows OS Certification and SDDC (Software Defined Data Center) Premium AQ Certification please visit **https://www.windowsservercatalog.com/**and enter specific HPE Model Number to confirm compatibility.

Value SAS Capacity, Workload, Carrier Specifications MULTI VENDOR

Value SAS Interface- (Capacity, Workload, Carrier...) MULTI VENDOR											
HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
Mixed Use Multi Vendor Value SAS Drives											
P37009-B21	HPE 960GB SAS 12G Mixed Use LFF LPC Value SAS Multi Vendor SSD	960	MU	Value SAS	LFF	Hot Plug	LPC	Yes	TLC	Single	C F
P37011-B21	HPE 1.92TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor	1,920	MU	Value SAS	SFF	Hot Plug	SC	Yes	TLC	Single	C F

Technical Specifications

	SSD										
P40510-B21	HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	960	MU	Value SAS	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P40511-B21	HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	1,920	MU	Value SAS	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P40512-B21	HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	3,840	MU	Value SAS	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
Read Intensive Multi Vendor Value SAS Drives											
P36999-B21	HPE 1.92TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	1,920	RI	Value SAS	SFF	Hot Plug	SC	Yes	TLC	Single	C F
P37001-B21	HPE 3.84TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	1,920	RI	Value SAS	SFF	Hot Plug	SC	Yes	TLC	Single	C F
P40506-B21	HPE 960GB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	960	RI	Value SAS	SFF	Hot Plug	BC	Yes	TLC	Single	C 1

Technical Specifications

Value SAS Interface- (Capacity, Workload, Carrier...) MULTI VENDOR

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
Read Intensive Multi Vendor Value SAS Drives											
P40507-B21	HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	1,920	RI	Value SAS	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P40508-B21	HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	3,840	RI	Value SAS	SFF	Hot Plug	BC	Yes	TLC	Single	C 1
P40509-B21	HPE 7.68TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	7,680	RI	Value SAS	SFF	Hot Plug	BC	Yes	TLC	Single	C 1

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

Multi-vendor SKUs are composed of numerous vendor manufactured SSDs within a given SATA capacity SKU. Wh ordering a particular SKU-B21 number the customer will receive a homogenous set of vendor manufactured SSD capacity that has met or exceeds the HPE qualification standards published above.

Value SAS Speeds and Feeds Specifications MULTI VENDOR

Value SAS Interface - (Speeds & Feeds) MULTI VENDOR

HPE Option Kit SKU	Long Description	Lifetime Writes (TB)	Endurance DWPD	MAX Seq Reads / Max Seq Writes Through-put (MiB/s)	Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)	Random Read / Random Writes IOPS (4KiB, Q=16)	MAX Random Read / MAX Random Write IOPS (4KiB)

Technical Specifications

Mixed Use Multi Vendor Value SAS Drives							
P37009-B21	HPE 960GB SAS 12G Mixed Use LFF LPC Value SAS Multi Vendor SSD	5,200	3.0	820 / 650	122 / 34	105,000 / 42,322	160,000@Q64 / 51,000@Q32
P37011-B21	HPE 1.92TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	10,000	3.0	820 / 650	134 / 38	96,000 / 51,000	160,000@Q64 / 51,000@Q256
P40510-B21	HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	5,200	3.0	790 / 635	130 / 35	105,000 / 42,322	155,000@Q32 / 42,322@Q16
P40511-B21	HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	10,000	3.0	820 / 635	140 / 38	96,000 / 51,000	155,000@Q32 / 51,000@Q256
P40512-B21	HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	21,000	3.0	820 / 650	129 / 34	105,000 / 51,000	160,000@Q32 / 51,000@Q256
Read Intensive Multi Vendor Value SAS Drives							
P36999-B21	HPE 1.92TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	3,500	1.00	820 / 620	122 / 34	108,713 / 41,000	160,000@Q64 / 41,000@Q4
P37001-B21	HPE 3.84TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	7,000	1.00	820 / 650	129 / 35	100,000 / 41,000	160,000@Q64 / 42,000@Q128
P40506-B21	HPE 960GB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	1,700	1.00	820 / 650	121 / 34	105,000 / 41,000	160,000@Q32 / 41,000@Q4
P40507-B21	HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	3,500	1.00	820 / 620	122 / 34	108,713 / 41,000	160,000@Q64 / 41,000@Q4
Read Intensive Multi Vendor Value SAS Drives							
P40508-B21	HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	7,000	1.00	820 / 650	129 / 35	100,000 / 41,000	160,000@Q64 / 42,000@Q128
P40509-B21	HPE 7.68TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	14,000	1.00	820 / 695	129 / 38	108,9550 / 41,550	160,000@Q256 / 41,789@Q16

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

Multi-vendor SKUs are composed of numerous vendor manufactured SSDs within a given SAS capacity SKU. When ordering a particular SKU-B21 number the customer will receive a homogenous set of vendor manufactured SSDs in that capacity that has met or exceeds the HPE qualification standards published above.

Value SAS Power and Height Specifications MULTI VENDOR

Value SAS Interface - (Power & Height) MULTI VENDOR									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
Mixed Use Multi Vendor Value SAS Drives									
P37009-B21	HPE 960GB SAS 12G Mixed Use LFF LPC Value SAS Multi Vendor SSD	4.71	5.04	4.95	8.13	5.78	5.04	9.00	15mm
P37011-B21	HPE 1.92TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	4.88	6.08	5.35	8.21	6.25	6.08	9.00	15mm
P40510-B21	HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	4.71	5.04	4.95	8.13	5.78	5.04	9.00	15mm
P40511-B21	HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	4.88	6.08	5.35	8.21	6.25	6.08	9.00	15mm
P40512-B21	HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	4.99	6.26	5.79	8.23	6.57	6.26	9.00	15mm
Read Intensive Multi Vendor Value SAS Drives									
P36999-B21	HPE 1.92TB SAS 12G Read Intensive	4.60	6.33	5.12	7.66	6.62	6.33	9.00	15mm

Technical Specifications

	SFF SC Value SAS Multi Vendor SSD								
P37001-B21	HPE 3.84TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	4.99	6.52	5.79	8.03	7.26	6.52	9.00	15mm
P40506-B21	HPE 960GB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	4.49	5.10	5.00	7.60	5.98	5.10	9.00	15mm
P40507-B21	HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	4.60	6.33	5.12	7.66	6.62	6.33	9.00	15mm
P40508-B21	HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	4.99	6.52	5.79	8.03	7.26	6.52	9.00	15mm
P40509-B21	HPE 7.68TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	4.69	7.69	5.70	8.45	6.91	7.69	9.00	15mm

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

Multi-vendor SKUs are composed of numerous vendor manufactured SSDs within a given SAS capacity SKU. When ordering a particular SKU-B21 number the customer will receive a homogenous set of vendor manufactured SSDs in that capacity that has met or exceeds the HPE qualification standards published above.

Value SAS Certifications MULTI VENDOR

- Prequalified certification will be listed in the HPE Selector Tool **https://ssd.hpe.com/.**
- For latest vSAN Compatibility, please visit **Broadcom vSAN SSD Compatibility Guide** and enter specific HPE Part Number to confirm compatibility.
- For latest Windows OS Certification and SDDC (Software Defined Data Center) Premium AQ Certification please visit **https://www.windowsservercatalog.com/** and enter specific HPE Model Number to confirm compatibility.

PCIe/NVMe Capacity, Workload, Carrier Specifications

PCIe/NVMe Interface - SKUs (Capacity, Workload, Carrier...)

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
NVMe High Performance and Mainstream Mixed Use Drives											
P50225-B21	HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735a SSD	1,600	MU	NVMe	SFF	Hot Plug	SCN	Yes	TLC	Dual	(
P50227-B21	HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	1,600	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	(
P50230-B21	HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	3,200	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	(
P50233-B21	HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	6,400	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	(
P63845-B21	HPE 1.6TB NVMe Gen4 High Performance	1,600	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	(

Technical Specifications

PCIe/NVMe Interface - SKUs (Capacity, Workload, Carrier...)											
HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
	Performance Mixed Use SFF BC U.3 CM7 SSD										
P63849-B21	HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	3,200	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	
P70426-B21	HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PS1030 SSD	3,200	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P70428-B21	HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PS1030 SSD	6,400	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P63853-B21	HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	6,400	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	
P64999-B21	HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	800	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P65007-	HPE 1.6TB	1,600	MU	NVMe	SFF	Hot	BC	Yes	TLC	Single	

Technical Specifications

PCIe/NVMe Interface - SKUs (Capacity, Workload, Carrier...)											
HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
	Multi Vendor SSD										
P65015-B21	HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	3,200	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P65023-B21	HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	6,400	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
NVMe High Performance and Mainstream Read Intensive Drives											
P50216-B21	HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	1,920	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	
P50219-B21	HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	3,840	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	
P50222-B21	HPE 7.68TB NVMe Gen4 High Performance Read	7,680	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	

Technical Specifications

PCIe/NVMe Interface - SKUs (Capacity, Workload, Carrier...)

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
	NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD										
P63829-B21	HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	1,920	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	
P63833-B21	HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	3,840	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	
P63837-B21	HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	7,680	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	
P63841-B21	HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	15,360	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	
P70434-B21	HPE 7.68TB NVMe Gen4 High	7,680	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	

Technical Specifications

PCIe/NVMe Interface - SKUs (Capacity, Workload, Carrier...)

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
P70436-B21	HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD	15,360	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Dual	
P64842-B21	HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	960	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P64844-B21	HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	1,920	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P64846-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	3,840	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P64848-B21	HPE 7.68TB NVMe Gen4 Mainstream Performance	7,680	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	

Technical Specifications

PCIe/NVMe Interface - SKUs (Capacity, Workload, Carrier...)											
HPE Option Kit SKU	**Long Description**	**Capacity**	**Workload Type**	**Interface Type**	**Form Factor**	**Plug Type**	**Carrier Type**	**Digitally Signed Firmware (DS)**	**Flash Type**	**Port**	
P69255-B21	HPE 15.36TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static SPDM Multi Vendor SSD	15,360	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P84244-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD	3,840	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P84242-B21	HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD	7,680	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
NVMe High Performance Self-Encrypting Drives (SED) and Federal Information Processing Standards (FIPS SSDs											
P61019-B21	HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	1,920	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P61027-B21	HPE 3.84TB NVMe Gen4	3,840	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	

Technical Specifications

PCIe/NVMe Interface - SKUs (Capacity, Workload, Carrier...)											
HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
	encrypting FIPS 140-3 CM7 SSD										
P61035-B21	HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	7,680	RI	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P61043-B21	HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	1,600	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P61051-B21	HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	3,200	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	
P61059-B21	HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	6,400	MU	NVMe	SFF	Hot Plug	BC	Yes	TLC	Single	

PCIe/NVMe Speeds and Feeds Specifications

Technical Specifications

PCIe/NVMe Interface - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
NVMe High Performance and Mainstream Mixed Use Drives							
P50225-B21	HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735a SSD	8,760	3.00	7,100 / 2,500	70 / 19	220,000 / 270,000	1,250,000@256 / 280,000@64
P50227-B21	HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	8,760	3.00	7,100 / 2,500	70 / 19	220,000 / 270,000	1,250,000@Q256 / 280,000@Q64
P50230-B21	HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	17,520	3.00	7,100 / 4,200	70 / 19	225,000 / 310,000	1,350,000@Q256 / 320,000@Q64
P50233-B21	HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	35,040	3.00	7,100 / 4,200	79 / 19	200,000 / 310,000	1,350,000@Q256 / 320,000@Q64
P63845-B21	HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	8,760	3.00	7,155 / 3,409	67 / 11	221,887 / 318,295	1,242,113Q128 / 318,187@Q16
P63849-B21	HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	17,520	3.00	7,118 / 6,818	67 / 11	225,305 / 582,238	1,334,274@Q256 / 654,401@Q256
P63853-B21	HPE 6.4TB NVMe Gen4 High	35,040	3.00	7,117 / 6,831	67 / 11	226,351 / 538,037	1,286,234@Q256 / 592,261@Q32

Technical Specifications

PCIe/NVMe Interface - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	Long Description	Lifetime Writes (TB)	Endurance DWPD	MAX Seq Reads / Max Seq Writes Throughput (MiB/s)	Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)	Random Read / Random Writes IOPS (4KiB, Q=16)	MAX Random Read / MAX Random Write IOPS (4KiB)
	High Performance Mixed Use SFF BC U.3 CM7 SSD						
P70426-B21	HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PS1030 SSD	20,031	3.43	7,066 / 6,373	61 / 15	250,180 / 657,811	922,894@256 / 714,198@256
P70428-B21	HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PS1030 SSD	40,062	3.43	7,066 / 6,345	60 / 14	251,921 / 732,734	903,765@256 / 794,791@256
P64999-B21	HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	4,380	3.0	6,200 / 1,383	72 / 16	189,142 / 158,900	543,727@256 / 159,907@4
P65007-B21	HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	8,760	3.0	6,200 / 2,731	72 / 16	202,668 / 283,846	812,698@256 / 283,568@16
P65015-	HPE 3.2TB	17,520	3.0	6,200 / 4,300	73 / 16	209,431 /	930,000@Q256 /

Technical Specifications

PCIe/NVMe Interface - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
	Performance						
	Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD						
NVMe High Performance and Mainstream Read Intensive Drives							
P50216-B21	HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	3,504	1.00	7,100 / 2,500	70 / 19	220,000 / 125,000	1,250,000@Q256 / 130,000@Q4
P50219-B21	HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	7,008	1.00	7,100 / 4,200	70 / 19	225,000 / 140,000	1,350,000@Q256 / 170,000@Q4
P50222-B21	HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	14,016	1.00	7,100 / 4,200	79 / 19	200,000 / 175,000	1,350,000@Q256 / 180,000@Q4
P50224-B21	HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	28,032	1.00	7,100 / 4,200	79 / 19	200,000 / 175,000	1,350,000@Q256 / 185,000@Q4
P63829-B21	HPE 1.92TB NVMe Gen4	3,504	1.00	7,160 / 3,421	67 / 11	222,075 / 161,441	1,198,665@Q256 / 161,460Q4

Technical Specifications

PCIe/NVMe Interface - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
	SFF BC U.3 CM7 SSD						
P63837-B21	HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	14,016	1.00	7,165 / 6,831	67 / 11	225,888 / 298,739	1,202,924@Q128 / 316,613@Q32
P63841-B21	HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	28,032	1.00	7,162 / 6,832	67 / 11	227,113 / 312,673	1,225,944@Q128 / 326,121@Q32
P70434-B21	HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD	19,622	1.40	7,066 / 6,347	61 / 16	252,232 / 411,445	944,867@256 / 413,020@16
P70436-B21	HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD	40,366	1.44	7,066 / 6,412	61 / 15	252,285 / 390,850	994,678@256 / 395,203@16
P64842-B21	HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	1,752	1.0	6,200 / 1,395	72 / 17	189,027 / 71,425	543,737@256 / 71,429@Q4

Technical Specifications

PCIe/NVMe Interface - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
P64844-B21	HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	3,504	1.0	6,200 / 2,681	73 / 17	202,698 / 133,123	811,976@256 / 133,753@4
P64846-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	7,008	1.0	6,200 / 3,969	72 / 17	209,990 / 180,000	984,200@256 / 180,000@4
P64848-B21	HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	14,016	1.0	6,200 / 3,870	76 / 17	196,951 / 190,000	950,000@Q256 / 190,000@4
P69255-B21	HPE 15.36TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static SPDM Multi Vendor SSD	28,032	1.0	6,730 / 5,947	70 / 16	220,577 / 267,851	1,098,870@256 / 274,294@16
P84244-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD	7,008	1.0	6,631 / 5,276	70 / 15	218,219 / 187,779	1,099,379@256 / 192,70@16
P84242-B21	HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive	14,016	1.0	6,648 / 5,946	70 / 16	220,004 / 242,195	1,106,077@256 / 241,897@16

Technical Specifications

PCIe/NVMe Interface - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
	Read Intensive SFF BC U.3 SPDM 7500 SSD						
NVMe High Performance Self-Encrypting Drives (SED) and Federal Information Processing Standards (FIPS) SFF SSDs							
P61019-B21	HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	3,504	1.00	7,160 / 3,421	67 / 11	222,075 / 161,441	1,198,665@Q256 / 161,460Q4
P61027-B21	HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	7,008	1.00	7,151 / 6,813	67 / 11	225,439 / 307,155	1,207,140@Q256 / 332,212@Q32
P61035-B21	HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	14,016	1.00	7,165 / 6,831	67 / 11	225,888 / 298,739	1,202,924@Q128 / 316,613@Q32
P61043-B21	HPE 1.6TB NVMe Gen4 High	8,760	3.00	7,155 / 3,409	67 / 11	221,887 / 318,295	1,242,113Q128 / 318,187@Q16

Technical Specifications

PCIe/NVMe Interface - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
	BC U.3 Self-encrypting FIPS 140-3 CM7 SSD						
P61059-B21	HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	35,040	3.00	7,117 / 6,831	67 / 11	226,351 / 538,037	1,286,234@Q256 / 592,261@Q32
Notes: B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines. Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.							

PCIe/NVMe Power & Height Specifications

PCIe/NVMe Interface - (Power & Height)									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
NVMe High Performance and Mainstream Mixed Use Drives									
P50225-B21	HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735a	4.40	15.10	14.10	13.90	14.20	13.50	15.10	15mm

Technical Specifications

PCIe/NVMe Interface - (Power & Height)									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
B21	NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD								
P50233-B21	HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	4.20	17.60	15.30	14.80	18.70	15.50	18.70	15mm
P63845-B21	HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	3.41	15.60	12.66	12.94	13.28	13.22	18.00	15 mm
P63849-B21	HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	3.53	16.58	18.80	13.60	20.18	18.04	22.00	15 mm
P63853-B21	HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	3.61	17.76	19.18	14.17	21.90	19.57	24.00	15 mm
P70426-B21	HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3	3.96	13.12	15.70	11.22	14.43	15.90	16.01	15 mm

Technical Specifications

PCIe/NVMe Interface - (Power & Height)									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
	SFF BC U.3								
	PS1030 SSD								
P64999-B21	HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	5.00	10.06	8.28	10.64	8.70	8.35	13.00	15mm
P65007-B21	HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	5.00	11.94	11.58	10.96	11.75	10.62	16.00	15mm
P65015-B21	HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	5.00	12.65	12.38	11.31	14.80	11.79	17.00	15mm
P65023-B21	HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	5.00	12.75	14.32	12.10	17.92	13.55	21.00	15mm
NVMe High Performance and Mainstream Read Intensive Drives									
P50216-B21	HPE 1.92TB NVMe Gen4	4.30	15.10	14.10	13.90	14.20	13.50	15.10	15mm

Technical Specifications

PCIe/NVMe Interface - (Power & Height)									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
P50219-B21	HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	4.20	17.30	16.20	14.50	18.70	16.60	18.70	15mm
P50222-B21	HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	4.30	17.80	16.20	14.90	19.00	16.60	19.00	15mm
P50224-B21	HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	4.30	18.60	16.80	16.60	20.00	16.90	20.00	15mm
P63829-B21	HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	3.60	15.53	12.54	13.02	13.49	12.80	18.00	15 mm
P63833-B21	HPE 3.84TB NVMe Gen4 High Performance Read Intensive	3.71	16.79	18.37	13.74	20.16	17.88	22.00	15 mm

Technical Specifications

PCIe/NVMe Interface - (Power & Height)									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
	Intensive SFF BC U.3 CM7 SSD								
P63841-B21	HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	3.97	18.78	20.94	15.02	22.61	20.33	25.00	15 mm
P70434-B21	HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD	4.17	15.14	20.61	12.65	15.66	20.98	21.12	15 mm
P70436-B21	HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD	4.48	16.85	21.21	13.82	16.49	21.33	21.74	15 mm
P64842-B21	HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	5.00	8.96	8.00	9.60	8.42	8.50	13.00	15mm
P64844-	HPE 1.92TB	5.00	9.50	11.28	10.00	11.33	10.25	16.00	15mm

Technical Specifications

PCIe/NVMe Interface - (Power & Height)									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
	Multi Vendor SSD								
P64846-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	5.00	10.56	13.00	10.82	14.80	11.48	17.00	15mm
P64848-B21	HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	5.00	11.50	13.96	12.10	15.28	13.25	21.00	15mm
P69255-B21	HPE 15.36TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static SPDM Multi Vendor SSD	5.00	13.40	13.40	12.40	15.40	13.10	15.60	15MM
P84244-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD	5.00	9.30	9.50	9.50	11.60	9.20	11.90	15mm

Technical Specifications

PCIe/NVMe Interface - (Power & Height)									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
	SPDM 7500								
	SSD								
NVMe High Performance Self-Encrypting Drives (SED) and Federal Information Processing Standards (FIPS) SFF SSDs									
P61019-B21	HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	3.60	15.53	12.54	13.02	13.49	12.80	18.00	15 mm
P61027-B21	HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	3.71	16.79	18.37	13.74	20.16	17.88	22.00	15 mm
P61035-B21	HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	3.62	17.53	19.69	14.14	21.68	19.58	24.00	15 mm
P61043-B21	HPE 1.6TB NVMe Gen4 High Performance Mixed Use	3.41	15.60	12.66	12.94	13.28	13.22	18.00	15 mm

Technical Specifications

PCIe/NVMe Interface - (Power & Height)									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
	High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD								
P61059-B21	HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	3.61	17.76	19.18	14.17	21.90	19.57	24.00	15 mm

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines**.**

Please use HPE Selector Tool **https://ssd.hpe.com/**to determine server compatibility.

NVMe Certifications

- Prequalified certification will be listed in the HPE Selector Tool **https://ssd.hpe.com/.**
- For latest vSAN Compatibility, please visit **Broadcom vSAN SSD Compatibility Guide** and enter specific HPE Part Number to confirm compatibility.
- For latest Windows OS Certification and SDDC (Software Defined Data Center) Premium AQ Certification please visit **https://www.windowsservercatalog.com/**and enter specific HPE Model Number to confirm compatibility.

PCIe/NVMe EDSFF E3.S Capacity, Workload, Carrier Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Capacity, Workload, Carrier...)										
HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Capacity, Workload, Carrier...)

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port
	E3S EC1 CD8P SSD									
P69243-B21	HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	3,200	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P69245-B21	HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	6,400	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P77262-B21	HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	1,600	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P77265-B21	HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	3,200	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P77267-B21	HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM	6,400	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Capacity, Workload, Carrier...)

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port	
	Performance Read Intensive E3S EC1 CD8P SSD	1,920	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single	
P69237-B21	HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	3,840	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single	
P69239-B21	HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	7,680	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single	
P69546-B21	HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	15,360	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single	
P77269-B21	HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	1,920	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single	
P77271-B21	HPE 3.84TB NVMe Gen5 Mainstream										

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Capacity, Workload, Carrier...)										
HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port
	PE1010 SSD									
P77273-B21	HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	7,680	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P77275-B21	HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	15,360	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
NVMe Main Performance Very Read Optimized EDSFF E3.S SSDs										
P63930-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	3,840	VRO	NVMe	E3.S	Hot Plug	EC1	Yes	QLC	Single
P63934-B21	HPE 7.68TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	7,680	VRO	NVMe	E3.S	Hot Plug	EC1	Yes	QLC	Single

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Capacity, Workload, Carrier...)										
HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port
	Optimized E3S EC1 EDSFF P5430 SSD									
P79065-B21	HPE 30.72TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	30,720	VRO	NVMe	E3.S	Hot Plug	EC1	Yes	QLC	Single
NVMe High Performance Mixed Use EDSFF E3.S SSDs										
P61191-B21	HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	3,200	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P61195-B21	HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	6,400	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P70399-B21	HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	3,200	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P70401-B21	HPE 6.4TB NVMe Gen5 High									

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Capacity, Workload, Carrier...)										
HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port
B21	NVMe Gen5									
	High Performance Mixed Use E3S EC1 PS1030 SSD	12,800	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
NVMe High Performance Read Intensive EDSFF E3.S SSDs										
P57799-B21	HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	3,840	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P57803-B21	HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	7,680	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P57807-B21	HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	15,360	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P61179-B21	HPE 3.84TB NVMe Gen5									

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Capacity, Workload, Carrier...)										
HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Port
	SPDM CM7 SSD									
P61183-B21	HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	7,680	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P61187-B21	HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	15,360	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P70392-B21	HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	3,840	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P70395-B21	HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	7,680	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P70397-B21	HPE 15.36TB NVMe Gen5									

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Capacity, Workload, Carrier...)										
HPE Option Kit SKU	**Long Description**	**Capacity**	**Workload Type**	**Interface Type**	**Form Factor**	**Plug Type**	**Carrier Type**	**Digitally Signed Firmware (DS)**	**Flash Type**	**Port**
NVMe High Performance Self-Encrypting Drives (SED) and Federal Information Processing Standards (FIPS SSDs										
P70674-B21	HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	7,680	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P79122-B21	HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	15,360	RI	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P70669-B21	HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	3,200	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single
P70672-B21	HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	6,400	MU	NVMe	E3.S	Hot Plug	EC1	Yes	TLC	Single

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

PCIe/NVMe EDSFF E3.S Speeds and Feeds Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
NVMe Main Performance Mixed Use EDSFF E3.S SSDs							
P69241-B21	HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	8,760	3.00	11,837 / 3,429	75 / 15	199,703 / 314,566	1,289,951@Q256 / 315,178@QQ16
P69243-B21	HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	17,520	3.00	11,837 / 5,425	75 / 15	206,818 / 424,436	1,262,557@Q256 / 423,326@Q16
P69245-B21	HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	35,040	3.00	11,837 / 5,426	75 / 15	208,152 / 417,995	1,306,127@Q256 / 417,056@Q16
P77262-B21	HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	11,855	4.06	11,536 / 4,173	56 / 10	262,149 / 383,174	1,304,501@256 / 382,283@16
P77265-B21	HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	23,535	4.03	11,038 / 6,416	55 / 10	267,089 / 557,402	1,301,776@256 / 561,142@16
P77267-B21	HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	47,304	4.05	11,502 / 5,851	56 / 10	268,651 / 544,111	1,327,381@256 / 545,439@32

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
NVMe Main Performance Read Intensive EDSFF E3.S SSDs							
P69234-B21	HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	3,504	1.00	11,837 / 3,423	75 / 15	199,342 / 160,036	1,296,099@Q256 / 160,396@Q4
P69237-B21	HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	7,008	1.00	11,837 / 5,426	73 / 15	207,244 / 211,371	1,300,978@Q256 / 211,905@Q16
P69239-B21	HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	14,016	1.00	11,837 / 5,400	73 / 15	207,936 / 214,770	1,280,513@Q256 / 218,309@Q16
P69546-B21	HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	28,032	1.00	11,837 / 5,316	95 / 15	160,484 / 210,452	1,296,764@256 / 212,280@16
P77269-B21	HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF	5,011	1.43	11,654 / 4,109	56 / 10	261,725 / 176,961	1,308,969@256 / 177,226@4

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
P77273-B21	HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	19,622	1.40	11,019 / 5,816	56 / 10	267,826 / 225,842	1,322,295@256 / 226,065@32
P77275-B21	HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	40,086	1.43	11,498 / 6,109	56 / 10	268,651 / 242,563	1,317,146@256 / 243,361@4
NVMe Main Performance Very Read Optimized EDSFF E3.S SSDs							
P63930-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	3,860	0.55	5,316 / 908	100 / 16	134,391 / 59,452	541,934.1@Q256 / 63,638.9@Q32
P63934-B21	HPE 7.68TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	8,040	0.57	6,965 / 1,750	100 / 14	144,842 / 109,023	804,975.3@Q256 / 116,139.2@Q128
P63938-B21	HPE 15.36TB NVMe Gen4 Mainstream	14,340	0.51	7,119 / 2,922	101 / 15	148,022 / 135,419	958,736.8@Q256 / 144,081.1@Q256

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
	Optimized E3S EC1 EDSFF P5430 SSD						
NVMe High Performance Mixed Use EDSFF E3.S SSDs							
P61191-B21	HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	17,520	3	13,852 / 6,802	70 / 15	215,995 / 599,050	1,159,100@Q128 / 649,489@Q16
P61195-B21	HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	35,040	3	13,852 / 6,864	70 / 15	216,271 / 527,456	1,199,553@Q128 / 574,490@Q16
P70399-B21	HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	19,914	3.41	14,123 / 7,936	57 / 12	266,442 / 708,847	1,198,444@Q256 / 719,249@Q256
P70401-B21	HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	40,062	3.43	14,125 / 8,289	57 / 12	267,387 / 798,941	1,215,819@Q256 / 822,954@Q256
P70403-B21	HPE 12.8TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	81,526	3.49	14,125 / 8,050	57 / 12	268,034 / 847,716	1,218,330@Q256 / 894,439@Q256
NVMe High Performance Read Intensive EDSFF E3.S SSDs							
P57799-	HPE 3.84TB	7,008	1	13,821 / 5,850	73 / 19	220,626 /	1,040,714@Q128

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
	E3S EC1 EDSFF SPDM PM1743 SSD						
P57807-B21	HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	28,032	1	13,800 / 7,276	82 / 19	197,931 / 359,542	1,060,146@Q128 / 363,570@Q16
P61179-B21	HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	7,008	1	13,852 / 6,868	70 / 15	215,993 / 325,008	1,202,413@Q128 / 342,962@Q16
P61183-B21	HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	14,016	1	13,852 / 6,860	70 / 14	215,951 / 302,927	1,175,981@Q128 / 321,298@Q16
P61187-B21	HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	28,032	1	12,520 / 5,337	92 / 14	165,451 / 273,611	1,174,204@Q128 / 276,715@Q16
P70392-B21	HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	9,461	1.35	14,123 / 7,903	57 / 12	266,362 / 310,939	1,220,136@Q256 / 320,418@Q256
P70395-	HPE 7.68TB	18,922	1.35	14,126 / 8,258	57 / 12	267,567 /	1,187,283@Q256

Technical Specifications

PCIe/NVMe EDSFF E3.S - SKUs (Speeds and Feeds)							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
NVMe High Performance Self-Encrypting Drives (SED) and Federal Information Processing Standards (FIPS) E3S SSDs							
P70674-B21	HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	14,016	1	13,852 / 6,860	70 / 14	215,951 / 302,927	1,175,981@Q128 / 321,298@Q16
P79122-B21	HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	28,032	1	12,520 / 5,337	92 / 14	165,451 / 273,611	1,174,204@Q128 / 276,715@Q16
P70669-B21	HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	17,520	3	13,852 / 6,802	70 / 15	215,995 / 599,050	1,159,100@Q128 / 649,489@Q16
P70672-B21	HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	35,040	3	13,852 / 6,864	70 / 15	216,271 / 527,456	1,199,553@Q128 / 574,490@Q16
Notes: B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines. Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.							

PCIe/NVMe EDSFF E3.S Power & Height Specifications

Technical Specifications

PCIe/NVMe EDSFF E3.S - (Power & Height)									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
NVMe Main Performance Mixed Use EDSFF E3.S SSDs									
P69241-B21	HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	3.98	15.94	13.19	17.34	13.91	13.68	17.76	7.5 mm
P69243-B21	HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	4.03	18.08	15.20	17.55	17.75	18.70	19.07	7.5 mm
P69245-B21	HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	4.23	20.57	16.74	19.83	19.75	20.63	21.05	7.5 mm
P77262-B21	HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	4.39	14.21	12.48	14.07	12.69	12.64	14.23	7.5 mm
P77265-B21	HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	4.31	15.12	14.59	14.02	15.20	15.04	15.23	7.5 mm
P77267-B21	HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF	4.40	15.32	15.42	14.91	15.18	15.10	15.60	7.5 mm

Technical Specifications

PCIe/NVMe EDSFF E3.S - (Power & Height)									
HPE Option Kit SKU	Long Description EDSFF	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
	SPDM PE1030 SSD								
NVMe Main Performance Read Intensive EDSFF E3.S SSDs									
P69234-B21	HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	3.96	15.91	13.31	17.25	13.80	13.45	17.60	7.5 mm
P69237-B21	HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	4.08	17.97	14.93	17.57	17.75	18.37	18.73	7.5 mm
P69239-B21	HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	4.10	20.53	16.83	19.50	19.90	20.12	20.94	7.5 mm
P69546-B21	HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	4.40	23.17	18.82	20.95	23.28	21.58	23.74	7.5 mm
P77269-B21	HPE 1.92TB NVMe Gen5 Mainstream Performance	4.39	14.28	12.88	14.19	12.90	12.46	14.29	7.5 mm

Technical Specifications

PCIe/NVMe EDSFF E3.S - (Power & Height)									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
P77271-B21	HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	4.31	15.19	15.23	14.05	15.28	15.21	15.30	7.5 mm
P77273-B21	HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	4.40	15.39	15.26	15.06	15.31	15.57	15.77	7.5 mm
P77275-B21	HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	4.75	17.08	16.77	17.20	16.78	16.98	17.23	7.5 mm
NVMe Main Performance Very Read Optimized EDSFF E3.S SSDs									
P63930-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1	4.15	10.03	10.18	10.04	9.37	9.65	10.50	7.7mm

Technical Specifications

PCIe/NVMe EDSFF E3.S - (Power & Height)									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
	Optimized E3S EC1 EDSFF P5430 SSD								
P63938-B21	HPE 15.36TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	4.12	14.33	15.95	12.47	20.52	16.90	21.00	7.7mm
P79065-B21	HPE 30.72TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	4.63	14.97	20.14	13.58	21.65	20.22	21.74	7.7mm
NVMe High Performance Mixed Use EDSFF E3.S SSDs									
P61191-B21	HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	4.05	22.14	19.74	19.57	20.73	18.97	24	7.5mm
P61195-B21	HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7	4.13	23.65	20.52	22.31	23.24	21.26	24	7.5mm

Technical Specifications

PCIe/NVMe EDSFF E3.S - (Power & Height)									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
	PS1030 SSD								
P70401-B21	HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	4.40	21.23	20.47	17.30	21.02	20.84	21.57	7.5 mm
P70403-B21	HPE 12.8TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	4.90	23.42	22.93	19.85	22.87	23.13	23.46	7.5 mm
NVMe High Performance Read Intensive EDSFF E3.S SSDs									
P57799-B21	HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	4.4	22.3	20.8	19.9	21.0	18.7	22.3	7.7mm
P57803-B21	HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	4.5	22.6	20.7	20.4	21.2	19.0	22.6	7.7mm
P57807-	HPE	4.9	23.5	22.5	20.9	24.6	21.1	24.6	7.7mm

Technical Specifications

PCIe/NVMe EDSFF E3.S - (Power & Height)									
HPE Option Kit SKU	Long Description EDSFF	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
	SPDM PM1743 SSD								
P61179-B21	HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	4.03	22.26	19.6	19.61	20.71	19.04	24	7.5mm
P61183-B21	HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	4.07	23.62	21.51	22.15	23.36	21.26	24	7.5mm
P61187-B21	HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	4.41	24.38	23.21	23.32	23.75	22.23	25	7.5mm
P70392-B21	HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1	4.40	18.04	16.85	15.40	17.22	16.49	18.07	7.5 mm

Technical Specifications

PCIe/NVMe EDSFF E3.S - (Power & Height)									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
	Intensive E3S EC1 PS1010 SSD								
P70397-B21	HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	4.90	23.35	22.90	19.84	22.93	23.08	23.38	7.5 mm
NVMe High Performance Self-Encrypting Drives (SED) and Federal Information Processing Standards (FIPS) E3S SSDs									
P70674-B21	HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	4.07	23.62	21.51	22.15	23.36	21.26	24	7.5mm
P79122-B21	HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	4.41	24.38	23.21	23.32	23.75	22.23	25	7.5mm
P70669-B21	HPE 3.2TB NVMe Gen5 High	4.05	22.14	19.74	19.57	20.73	18.97	24	7.5mm

Technical Specifications

PCIe/NVMe EDSFF E3.S - (Power & Height)

HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
P70672-B21	HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	4.13	23.65	20.52	22.31	23.24	21.26	24	7.5mm

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

1. Please use HPE Selector Tool **https://ssd.hpe.com/**to determine server compatibility.

NVMe EDSFF E3.S Certifications

- Prequalified certification will be listed in the HPE Selector Tool **https://ssd.hpe.com/.**
- For latest vSAN Compatibility, please visit **Broadcom vSAN SSD Compatibility Guide** and enter specific HPE Part Number to confirm compatibility.
- For latest Windows OS Certification and SDDC (Software Defined Data Center) Premium AQ Certification please visit **https://www.windowsservercatalog.com/** and enter specific HPE Model Number to confirm compatibility.

M.2 Enablement Kits Capacity, Workload, Carrier Specifications

M.2 Enablement Kits - (Capacity, Workload, Carrier...)

HPE Option KIT SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Server Gen Suppo (Selec Platfor
878783-X21	HPE Universal SATA 6G AIC HHHL M.2 SSD Enablement Kit	N/A	N/A	SATA	M.2e	Non Hot Plug	N/A	Yes	N/A	Gen9,10

Notes:

878783-X21 enablement Kit is an Add-In-Card, for installation inside of the server, that can be configured to be either Single or Dual with choice of any SATA 2280 M.2 in the HPE M.2 portfolio. See SATA M.2s in Tables above.

Speeds and Feeds information should be taken from the M.2 drives used within the enablement kits. See SATA M.2s

in tables above and below.

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Use HPE Selector Tool **https://ssd.hpe.com/**to determine server compatibility.

M.2 Enablement Kits Speeds and Feeds Specifications

SATA Interface - (Speeds & Feeds)

HPE Option Kit SKU	Long Description	Lifetime Writes (TB)	Endurance DWPD	MAX Seq Reads / Max Seq Writes Through-put (MiB/s)	Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)	Random Read / Random Writes IOPS (4KiB, Q=16)	MAX Random Read / MAX Random Write IOPS (4KiB)
878783-X21	HPE Universal SATA 6G AIC HHHL M.2 SSD Enablement Kit	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/**to determine server compatibility.

M.2 Enablement Kits Power and Height Specifications

M.2 Enablement Kits - (Power & Height)

HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
878783-X21	HPE Universal SATA 6G AIC HHHL M.2 SSD Enablement Kit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Half Height/ Half Length

Notes:

Power information should be taken from the M.2 drives used within the enablement kits. See SATA M.2s in tables above and below.

878783-X21 enablement Kit is an Add-In-Card, for installation inside of the server, that can be configured to be either Single or Dual with choice of any SATA 2280 M.2 in the HPE M.2 portfolio. See SATA M.2s in Tables above and below.

Speeds and Feeds information should be taken from the M.2 drives used within the enablement kits. See SATA M.2s in tables above and below.

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

M.2 Enablement Kits Certifications

- Prequalified certification will be listed in the HPE Selector Tool **https://ssd.hpe.com/.**
- For latest vSAN Compatibility, please visit **Broadcom vSAN SSD Compatibility Guide** and enter specific HPE Part Number to confirm compatibility.
- For latest Windows OS Certification and SDDC (Software Defined Data Center) Premium AQ Certification please visit **https://www.windowsservercatalog.com/** and enter specific HPE Model Number to confirm compatibility.

M.2 Capacity, Workload, Carrier Specifications

M.2s- (Capacity, Workload, Carrier...)

HPE Option Kit SKU	Long Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Serve Gen Suppo (Selec Platfor
Read Intensive SATA M.2s										
P47818-B21	HPE 480GB SATA 6G Read Intensive M.2 Multi Vendor SSD	480	RI	SATA	M.2	Non Hot Plug	N/A	Yes	TLC	Gen10,1 Plus, 11

M.2 Speeds and Feeds Specifications

M.2s- (Speeds & Feeds)

HPE Option Kit SKU	Long Description	Lifetime Writes (TB)	Endurance DWPD	MAX Seq Reads / Max Seq Writes Throughput (MiB/s)	Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)	Random Read / Random Writes IOPS (4KiB, Q=16)	MAX Random Read / MAX Random Write IOPS (4KiB)
Read Intensive SATA M.2s							
P47818-B21	HPE 480GB SATA 6G Read Intensive M.2 Multi Vendor SSD	1,324	1.50	510 / 400	125 / 45	64,000 / 38,000	74,500@Q632 / 39,500@Q256

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

M.2 Power and Height Specifications

Technical Specifications

M.2s- (Power & Height)									
Read Intensive SATA M.2s									
P47818-B21	HPE 480GB SATA 6G Read Intensive M.2 Multi Vendor SSD	1.20	4.00	4.00	2.75	4.10	2.30	4.10	2280 M.2
Notes: B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.									

M.2s Certifications

- Prequalified certification will be listed in the HPE Selector Tool **https://ssd.hpe.com/**.
- For latest vSAN Compatibility, please visit **Broadcom vSAN SSD Compatibility Guide** and enter specific HPE Part Number to confirm compatibility.
- For latest Windows OS Certification and SDDC (Software Defined Data Center) Premium AQ Certification please visit **https://www.windowsservercatalog.com/**and enter specific HPE Model Number to confirm compatibility.

M.2 Capacity, Workload, Carrier Specifications

M.2s- (Capacity, Workload, Carrier...)										
HPE Option Kit SKU	**Long Description**	**Capacity**	**Workload Type**	**Interface Type**	**Form Factor**	**Plug Type**	**Carrier Type**	**Digitally Signed Firmware (DS)**	**Flash Type**	**Serve Gen Suppo (Selec Platfo**
P69543-B21	HPE 480GB NVMe Gen4 Mainstream Performance Read Intensive M.2 PM9A3 SSD	480	RI	NVMe	M.2	Non Hot Plug	N/A	Yes	TLC	Gen10 F 11
P40513-B21	HPE 480GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	480	RI	NVMe	M.2	Non Hot Plug	N/A	Yes	TLC	Gen10,1 Plus, 11
P40514-B21	HPE 960GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	960	RI	NVMe	M.2	Non Hot Plug	N/A	Yes	TLC	Gen10,1 Plus, 11
P40515-B21	HPE 1.92TB NVMe Gen3 Mainstream Performance Read Intensive	1,920	RI	NVMe	M.2	Non Hot Plug	N/A	Yes	TLC	Gen10,1 Plus, 11

	M.2 Multi Vendor SSD									
P80318-B21	HPE 480GB NVMe Gen4 Mainstream Performance Read Intensive M.2 2280 PE9010 SSD	480	RI	NVMe	M.2	Non Hot Plug	N/A	Yes	TLC	Gen10 F 11, 12
P80321-B21	HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive M.2 2280 PE9010 SSD	960	RI	NVMe	M.2	Non Hot Plug	N/A	Yes	TLC	Gen10 F 11, 12
P80324-B21	HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive M.2 2280 PE9010 SSD	1,920	RI	NVMe	M.2	Non Hot Plug	N/A	Yes	TLC	Gen10 F 11, 12
P80327-B21	HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive M.2 2280 Self-encrypting PE9010 SSD	960	RI	NVMe	M.2	Non Hot Plug	N/A	Yes	TLC	Gen10 F 11, 12

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines.

Multi-vendor SKUs are composed of numerous vendor manufactured SSDs within a given NVMe M.2 capacity SKU. When ordering a particular SKU-B21 number the customer will receive a homogenous set of vendor manufacture SSDs in that capacity that has met or exceeds the HPE qualification standards published above.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

M.2 Speeds and Feeds Specifications MULTI VENDOR

Technical Specifications

M.2s- (Speeds & Feeds) MULTI VENDOR							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
P69543-B21	HPE 480GB NVMe Gen4 Mainstream Performance Read Intensive M.2 PM9A3 SSD	876	1.0	1,500/ 380	75 / 50	106,393 / 20,000	135,000@Q256 / 20,000@Q256
P40513-B21	HPE 480GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	876	1.0	1,500/ 380	80 / 50	106,393 / 20,000	135,000@Q256 / 20,000@Q256
P40514-B21	HPE 960GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	1,752	1.0	4,900 / 1,350	80 / 17	170,000 / 88,000	535,000@Q256 / 88,000@4
P40515-B21	HPE 1.92TB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	3,504	1.0	4,900 / 2,400	80 / 17	185,000 / 130,000	740,000@Q256 / 130,000@4
P80318-B21	HPE 480GB NVMe Gen4 Mainstream Performance Read Intensive M.2 2280 PE9010 SSD	893	1.12	7,020 / 1,007	57 / 26	227,730 / 38,082	693,583@Q256 / 38,285@Q64
P80321-B21	HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive M.2 2280 PE9010 SSD	1,799	1.12	7,103 / 2,027	57 / 14	242,097 / 73,900	1,097,749@Q256 / 72,317@Q1
P80324-B21	HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive	3,264	1.02	7,022 / 2,416	57 / 12	247,129 / 92,641	1,125,900@Q256 / 92,758@Q64

Technical Specifications

M.2s- (Speeds & Feeds) MULTI VENDOR							
HPE Option Kit SKU	**Long Description**	**Lifetime Writes (TB)**	**Endurance DWPD**	**MAX Seq Reads / Max Seq Writes Throughput (MiB/s)**	**Random Read Avg. / Random Write Avg. Latency uSec (4KiB,Q1)**	**Random Read / Random Writes IOPS (4KiB, Q=16)**	**MAX Random Read / MAX Random Write IOPS (4KiB)**
	Read Intensive M.2 2280 PE9010 SSD						
P80327-B21	HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive M.2 2280 Self-encrypting PE9010 SSD	1,799	1.12	7,103 / 2,027	57 / 14	242,097 / 73,900	1,097,749@Q256 / 72,317@Q1

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines**.**

Multi-vendor SKUs are composed of numerous vendor manufactured SSDs within a given NVMe M.2 capacity SKU. When ordering a particular SKU-B21 number the customer will receive a homogenous set of vendor manufactured SSDs in that capacity that has met or exceeds the HPE qualification standards published above.

Please use HPE Selector Tool **https://ssd.hpe.com/**to determine server compatibility.

M.2 Power and Height Specifications MULTI VENDOR

M.2s- (Power & Height) MULTI VENDOR									
HPE Option Kit SKU	**Long Description**	**Power Idle Time (Watts)**	**Power Random Read (Watts)**	**Power Random Write (Watts)**	**Power Sequential Read (Watts)**	**Power Sequential Write (Watts)**	**Power Random R/W (Watts)**	**Power MAX (Watts)**	**z-Height**
P69543-B21	HPE 480GB NVMe Gen4 Mainstream Performance	2.23	3.50	3.50	3.42	3.70	3.50	3.70	2280 M.2

Technical Specifications

M.2s- (Power & Height) MULTI VENDOR									
HPE Option Kit SKU	Long Description	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
	M.2 Multi Vendor SSD								
P40514-B21	HPE 960GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	2.90	6.00	5.50	7.30	5.50	6.00	7.30	2280 M.2
P40515-B21	HPE 1.92TB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	2.90	6.50	6.90	7.80	7.80	6.90	7.80	22110 M.2
P80318-B21	HPE 480GB NVMe Gen4 Mainstream Performance Read Intensive M.2 2280 PE9010 SSD	2.05	4.16	3.37	4.13	3.34	3.3	4.2	2280 M.2
P80321-B21	HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive M.2 2280 PE9010 SSD	2.13	5.61	4.85	6.03	4.81	4.65	6.3	2280 M.2
P80324-B21	HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive M.2 2280 PE9010 SSD	2.24	6.67	6.23	7.45	6.53	5.42	7.82	2280 M.2
P80327	HPE 960GB								

Technical Specifications

M.2s- (Power & Height) MULTI VENDOR									
HPE Option Kit SKU	Long Description M.2 2280	Power Idle Time (Watts)	Power Random Read (Watts)	Power Random Write (Watts)	Power Sequential Read (Watts)	Power Sequential Write (Watts)	Power Random R/W (Watts)	Power MAX (Watts)	z-Height
	Self-encrypting PE9010 SSD								

Notes:

B21 SKU suffix may be replaced with -H21 and/or -K21 to support across different server family lines**.**

Multi-vendor SKUs are composed of numerous vendor manufactured SSDs within a given NVMe M.2 capacity SKU. When ordering a particular SKU-B21 number the customer will receive a homogenous set of vendor manufactured SSDs in that capacity that has met or exceeds the HPE qualification standards published above.

Please use HPE Selector Tool **https://ssd.hpe.com/** to determine server compatibility.

M.2s Certifications MULTI VENDOR

- Prequalified certification will be listed in the HPE Selector Tool **https://ssd.hpe.com/**.
- For latest vSAN Compatibility, please visit **Broadcom vSAN SSD Compatibility Guide** and enter specific HPE Part Number to confirm compatibility.
- For latest Windows OS Certification and SDDC (Software Defined Data Center) Premium AQ Certification please visit **https://www.windowsservercatalog.com** and enter specific HPE Model Number to confirm compatibility.

Carrier Key Decoder

HPE Solid State Drives (SSDs) utilize a wide variety of carriers, which houses the SSD and also enables a specific chassis fit to support a broad range of HPE server and storage products.

The table below summarizes the various form factors, plug types, and carrier attributes.

SATA/SAS - SFF/LFF - SSD					
Form Factor	Smart or Non-Smart	Hot Plug or Non-Hot Plug	Carrier Name (Abbreviation)	Carrier Abbreviation	Size/Form Factor
SFF Carrier (2.5")	Smart	Hot Plug	Smart Carrier (SC)	SC	SFF
	Non-Smart		Basic Carrier (BC)	BC	SFF
LFF Carrier (3.5")	Smart	Hot Plug	Smart Carrier Converter (SCC)	SCC	LFF
	Non-Smart		Low Profile Converter (LPC)	LPC	LFF
No Carrier	Non-Smart	Non-Hot Plug	Raw No Carrier (RW)	RW	SFF/LFF

NVMe - SFF/AIC SSD					
Form Factor	Smart or Non-Smart	Hot Plug or Non-Hot Plug	Carrier Name (Abbreviation)	Carrier Abbreviation	Size/Form Factor
SFF Carrier (2.5")	Smart	Hot Plug	Smart Carrier NVMe (SCN)	SCN	SFF

			Smart Carrier (SC)	SC	SFF
	Non-Smart		Basic Carrier (BC)	BC	SFF
		Non-Hot Plug	Raw No Carrier (RW)	RW	SFF
NVMe Add-in-Card	Non-Smart	Non-Hot Plug	NVMe Add-in-Card (AIC)	AIC	HHHL
SATA/NVMe - M.2 & Enablement Kits					
Form Factor	**Smart or Non-Smart**	**Hot Plug or Non-Hot Plug**	**Carrier Name (Abbreviation)**	**Carrier Abbreviation**	**Size/Form Factor**
SATA M.2 2280	Smart	Hot Plug	Smart Carrier M.2 (SCM)	SCM	SFF
	Non-Smart	Non-Hot Plug	Raw Standalone M.2 (N/A)	N/A	M.2
NVMe M.2 2280	Non-Smart	Non-Hot Plug	Raw Standalone M.2 (N/A)	N/A	M.2
NVMe - EDSFF SSD					
EDSFF E3.S	Smart	Hot Plug	E3.S 1T Thin Carrier (EC1)	EC1	E3.S
EDSFF E3.S	Smart	Hot Plug	E3.S 2T Thick Carrier (EC2)	EC2	E3.S

SAS, SATA, NVMe SSD SKU Decoders

The following charts are provided to assist in decoding the SSD short & long product descriptions; additional details can also be found within the Carrier Key Decoder & the Previous To Current Workload Naming Conversion tables within this document. Please contact product management for any questions.

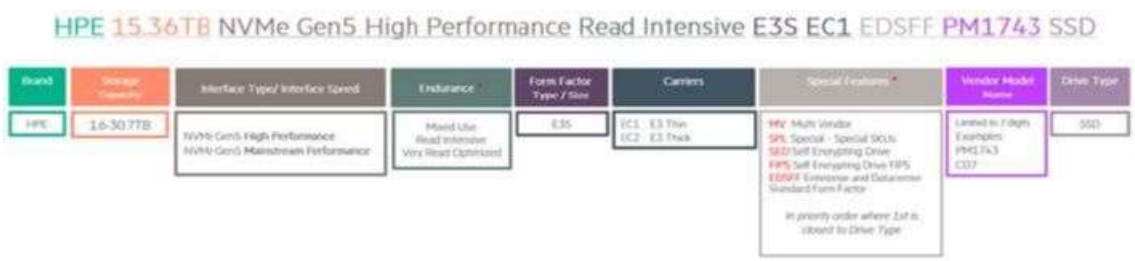
SATA/ SAS/ NVMe SSD SKU Decoder Long Name

Notes: If the description exceeds character count:

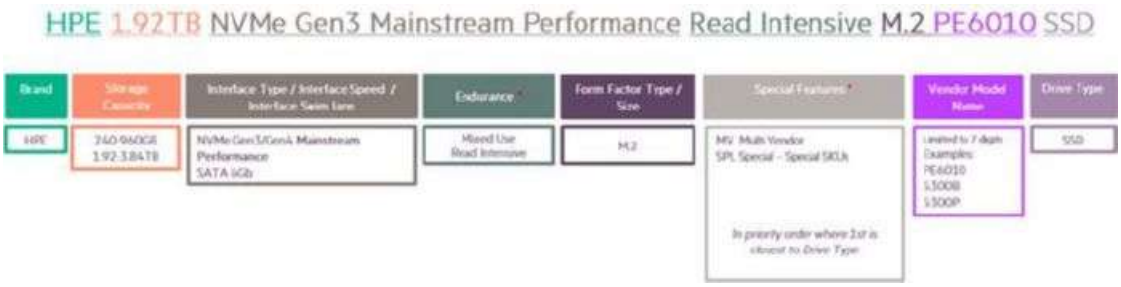
Abbreviate Special Features starting from lowest priority item

Drop form factor from the description

Abbreviate Endurance with the exception Very Read Optimized



NVMe EDSFF E3.S SSD SKU Decoder Long



M.2 SSDs SKU Decoder Long Name

M.2 SATA SSD Enablement Kits SKU Decoder Long Name

Environment friendly Products and Approach End-of life Management and Recycling

Hewlett Packard Enterprise offers end-of-life **product return, trade-in, and recycling programs,** in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE Directive (2012/19/EU) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the **Hewlett Packard Enterprise web site.** These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

Summary of Changes

Date	Version History	Action	Description of Change
02-Sep-2025	**Version 69**	Changed	Overview section was updated.
		Added	HPE NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD SKUs. (P84242-B21 and P84244-B21).
07-Jul-2025	**Version 68**	Changed	Update VMware to Broadcom vSAN
		Removed	SKUs from "What´s New" Table on Page2: P79065-B21, P80318-B21, P80321-B21, P80324-B21.
02-Jun-2025	**Version 67**	Changed	30TB P5430, V2 MV M.2, and SED M.2 added and following SKUs were removed: P79122-B21, P51460-B21, P51459-B21, P51461-B21, P51455-B21, P51458-B21
07-Apr-2025	**Version 66**	Changed	15TB FIPS CM7 added.
18-Feb-2025	**Version 65**	Changed	Survey added
03-Feb-2025	**Version 64**	Changed	PE1010/PE1030 added & Obsolete SKUs were removed
02-Dec-2024	**Version 64**	Changed	Overview & What´s New Section was updated
03-Sep-2024	**Version 63**	Changed	FIPS CM7 SFF/E3S added. Update VSAN and Windows Server Hyperlink
01-Jul-2024	**Version 62**	Changed	PS1010/PS1030 SFF/E3S added. CD8P E3S added.
03-Jun-2024	**Version 61**	Changed	U.3ST SPDM MV SFF added
06-May-2024	**Version 60**	Changed	E3S P5430 added.
04-Mar-2024	**Version 59**	Changed	PM9A3 M.2 added.
05-Feb-2024	**Version 58**	Changed	New drive models added. Obsolete SKUs have been removed.
08-Jan-2024	**Version 57**	Changed	Added PM893a and FIPS PM7. Updated NVMe Main U.3ST Power specs
04-Dec-2023	**Version 56**	Changed	SFF and E3.S CM7 added. Updated SATA/SAS/VSAS/NVMe/M.2 MV Specifications
05-Sep-2023	**Version 55**	Changed	MV NVMe main V2 added, Consolidate duplicate SATA data
05-Jun-2023	**Version 54**	Changed	Micron 5400 1.92TB SED added. E3.S VMware restriction removed
03-Apr-2023	**Version 53**	Changed	Kioxia and Samsung EDSFF E3.S Added
10-Jan-2023	**Version 52**	Changed	Micron 5400 SED added. Technical Specifications revised and updated
05-Dec-2022	**Version 51**	Changed	New drive models added. Technical Specifications revised and updated
01-Aug-2022	**Version 50**	Changed	New drive models added. Technical Specifications revised and updated
05-Jul-2022	**Version 49**	Changed	New drive models added. Technical Specifications revised and updated
04-Apr-2022	**Version 48**	Changed	Overview updated. New drive models added. Technical Specifications revised and updated
07-Feb-2022	**Version 47**	Changed	Technical Specifications section was updated
10-Jan-2022	**Version 46**	Changed	Technical Specifications section was updated
06-Dec-2021	**Version 45**	Changed	Technical Specifications section was updated
01-Nov-2021	**Version 44**	Changed	Technical Specifications section was updated
04-Oct-2021	**Version 43**	Changed	Technical Specifications section was updated
07-Sep-2021	**Version 42**	Changed	Technical Specifications section was updated
07-Jun-2021	**Version 41**	Changed	Tables were fixed and updated
04-May-2021	**Version 40**	Changed	Technical Specifications section was updated
06-Apr-2021	**Version 39**	Changed	Tables were fixed and updated
01-Feb-2021	**Version 38**	Changed	Technical Specifications section was updated
07-Dec-2020	**Version 37**	Changed	Technical Specifications section was updated
05-Oct-2020	**Version 36**	Changed	Technical Specifications section was updated
17-Aug-2020	**Version 35**	Changed	Technical Specifications and Overview Sections were updated
13-Jul-2020	**Version 34**	Changed	Technical Specifications section was updated

Summary of Changes

18-May-2020	**Version 33**	Changed	Tables were fixed and updated
27-Apr-2020	**Version 32**	Changed	Technical Specifications section was updated
03-Feb-2020	**Version 31**	Changed	Technical Specifications section was updated
16-Dec-2019	**Version 30**	Changed	Format Revised
02-Dec-2019	**Version 29**	Changed	New drive models added. Technical Specifications revised and updated
07-Oct-2019	**Version 28**	Changed	New drive models added. Technical Specifications revised and updated
Date	**Version History**	**Action**	**Description of Change**
05-Aug-2019	**Version 27**	Changed	Technical Specifications section was updated
01-Jul-2019	**Version 26**	Changed	Technical Specifications section was updated
03-Jun-2019	**Version 25**	Changed	New drive models added. Technical Specifications revised and updated
02-Apr-2019	**Version 24**	Changed	New drive models added. Technical Specifications revised and updated
07-Jan-2019	**Version 23**	Changed	Technical Specifications section was updated
03-Dec-2018	**Version 22**	Changed	New drive models added. Technical Specifications revised and updated
15-Oct-2018	**Version 21**	Changed	Technical Specifications Section was updated
01-Oct-2018	**Version 20**	Changed	New drive models added. Technical Specifications revised and updated
06-Aug-2018	**Version 19**	Changed	New drive models added. Technical Specifications revised and updated
02-Jul-2018	**Version 18**	Changed	Overview and SKU description were updated
04-Jun-2018	**Version 17**	Changed	New drive models added. Technical Specifications revised and updated
02-Apr-2018	**Version 16**	Changed	New drive models added, Technical Specifications revised and updated
05-Mar-2018	**Version 15**	Changed	Technical Specifications revised and updated, images revised
05-Feb-2018	**Version 14**	Changed	Format Revised and new drive models added
04-Dec-2017	**Version 13**	Changed	New drive model was added Technical Specifications were revised
02-Oct-2017	**Version 12**	Changed	Technical Specifications were revised
25-Sep-2017	**Version 11**	Changed	New drive models were added Technical Specifications were revised The title was changed to HPE Solid State Disk Drives (SSD & Add-In Cards)
14-Aug-2017	**Version 10**	Changed	Technical Specifications were revised
07-Aug-2017	**Version 9**	Changed	Technical Specifications were revised
17-Jul-2017	**Version 8**	Changed	Technical Specifications were revised
28-Jun-2017	**Version 7**	Changed	Technical Specifications were revised
12-Jun-2017	**Version 6**	Changed	Technical Specifications were revised
06-Jun-2017	**Version 5**	Changed	Technical Specifications were revised
17-Mar-2017	**Version 4**	Changed	SSD Selection verbiage was revised
10-Mar-2017	**Version 3**	Changed	Edits to tables and various verbiage
17-Feb-2017	**Version 2**	Changed	Technical Specifications were revised
13-Feb-2017	**Version 1**	New	New QuickSpecs

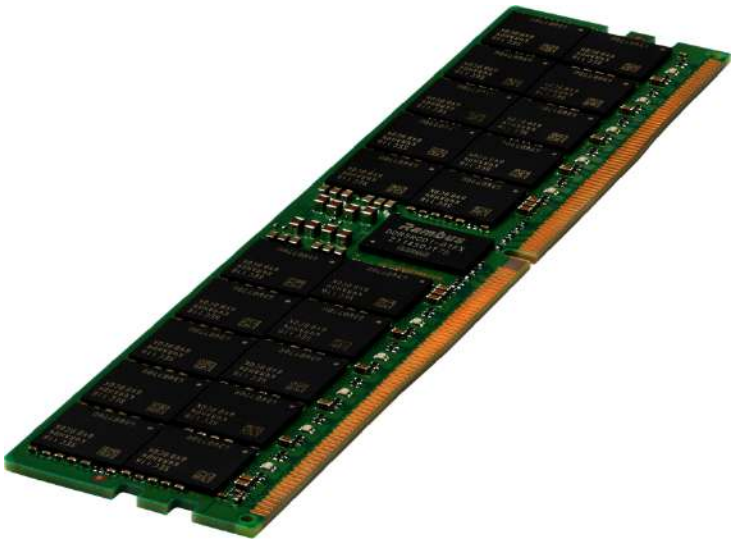
Copyright

a00001288enw - 15831 - Worldwide - V69 - 02-September-2025

Folha de dados

HPE DDR5 Smart Memory

HPE 64GB (1x64GB) Dual Rank x4 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit (P64707-B21)



Quais são as novidades?

- Kit de memória inteligente registrada HPE 16 GB (1x16 GB) categoria simples x8 DDR5-6400 CAS-46-45-45 EC8
- Kit de memória inteligente registrada HPE 32 GB (1x32 GB) categoria dupla x8 DDR5-6400 CAS-46-45-45 EC8
- Kit de memória inteligente registrada HPE 64 GB (1x64 GB) categoria dupla x4 DDR5-6400 CAS-46-45-45 EC8
- Kit de memória inteligente registrada HPE 96 GB (1x96 GB) categoria dupla x4 DDR5-6400 CAS-46-45-45 EC8
- Kit de memória inteligente registrada HPE 128 GB (1x128 GB) categoria dupla x4 DDR5-6400 CAS-52-52-52 EC8

Visão geral

Seu servidor foi configurado com a memória de que precisa para operar conforme sua função se expande ao longo do tempo? A memória inteligente HPE DDR5 foi projetada para pequenas e médias empresas e clientes empresariais com uma necessidade considerável de desempenho e capacidade, juntamente com o desejo de gerenciar o custo total de propriedade. A memória inteligente HPE DDR5 permite a otimização da memória total do servidor, é executada em velocidade máxima de taxa de transferência e está entre as memórias de maior eficiência energética disponíveis. Além de desempenho e eficiência, a memória inteligente HPE DDR5 oferece também confiabilidade. Somente os módulos DRAM da mais alta qualidade são selecionados dos principais fornecedores. A qualidade da DRAM é mais importante do que nunca, visto que tendências de data center, como virtualização de servidor, computação em nuvem e o uso de aplicativos para banco de dados grandes, aumentaram a necessidade de maior capacidade de memória com maior disponibilidade. A memória inteligente HPE DDR5 passa por rigorosos processos de qualificação e testes que resultam na disponibilidade de recursos de desempenho de memória

– Kit de smart memory 3DS registrada HPE 256 GB (1x 256 GB) categoria quádrupla x4 DDR5-6400 CAS-60-52-52 EC8

apenas com servidores HPE.

Recursos

Alto desempenho

A HPE DDR5 Smart Memory de 6400 MT/s oferece melhorias na largura de banda em comparação com os módulos de memória DDR4 de 5600 MT/s.

A HPE DDR5 Smart Memory oferece aprimoramentos na latência a 6400 MT/s em comparação com os módulos de memória DDR4 de 5600 MT/s.

Alta confiabilidade

A Hewlett Packard Enterprise testa e qualifica os módulos Smart Memory HPE DDR5 em todas as plataformas de servidor HPE para oferecer o mais alto nível de integridade de sinal.

A memória inteligente HPE DDR5 evita a substituição desnecessária de DIMM e reduz o tempo de inatividade do servidor com tecnologia avançada de detecção de erros de memória.

A HPE usa materiais da mais alta qualidade em sua memória do servidor DDR5, reduzindo os problemas que possam afetar a integridade do sinal e aumentando a confiabilidade do sistema.

A memória do servidor da HPE, com desempenho acima dos padrões da indústria, permite que os clientes aumentem o desempenho de seus servidores sem precisar aumentar a quantidade de memória adquirida.

Especificações técnicas	HPE 64GB (1x64GB) Dual Rank x4 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit
Product Number	P64707-B21
Tipo de DIMM	RDIMM
Capacidade de DIMM	16 GB, 32 GB, 64 GB, 96 GB, 128 GB, 256 GB
Categ DIMM	Categ. dupla
Velocidade nativa de DIMM	5600 MT/s
Tensão	1,1 V
Plataforma compatível	Para obter mais informações sobre plataformas convencionais HPE Compute, consulte as especificações

Serviços HPE

Não importa onde você esteja na sua jornada de transformação, você pode contar com o conhecimento especializado da HPE Services quando, onde e como necessário. Desde a estratégia e o planejamento até a implantação, operações contínuas e outros, nossos especialistas ajudam você a alcançar seus objetivos digitais.

Advisory & Professional services

Os especialistas podem ajudar você a traçar um caminho para a nuvem híbrida e otimizar suas operações.

Serviços gerenciados

A HPE cuida das suas operações de TI, fornecendo um controle unificado, para que você se concentre na inovação.

Serviços de suporte

Otimize todo o seu ambiente de TI e incentive a inovação. Gerencie tarefas operacionais diárias de TI ao mesmo tempo em que libera tempo e recursos valiosos.

— **HPE Complete Care Service:** um serviço modular criado para ajudar a otimizar todo o seu ambiente TI e atingir os resultados de TI e metas comerciais acordados. Todos os serviços são prestados por uma equipe atribuída de especialistas da HPE.

— **HPE Tech Care Service:** a experiência de suporte operacional para produtos HPE. Este serviço oferece acesso a especialistas de produtos específicos, uma experiência digital conduzida por IA e orientação técnica geral para ajudar a reduzir os riscos e buscar a melhor forma de fazer as coisas.

— **Serviços de multifornecedor HPE:** Único ponto de responsabilidade para gerenciamento de suporte local para hardware e software de produtos de vários fornecedores. Os especialistas da HPE ajudam a gerenciar as tecnologias e plataformas do seu ambiente de TI para tecnologias da HPE e que não são da HPE, agindo como um único ponto de contato para suas necessidades operacionais de TI.

Serviços de ciclo de vida

Atenda às necessidades específicas do seu projeto de implantação de TI com gerenciamento de projeto e serviços de implantação personalizados.

HPE Education Services

Treinamentos e certificações criados para profissionais de TI e de negócios de todos os setores. Crie planos de estudo para dominar melhor um assunto específico. Opções flexíveis de aprendizagem contínua, para que você possa escolher os melhores horários de treinamento para os seus negócios.

A **retenção de mídia com defeito** é opcional e permite reter unidades de disco ou SSD/flash elegíveis substituídos pela HPE devido a defeitos.

HPE GreenLake

Plataforma da borda à nuvem HPE GreenLake é a oferta de TI como serviço líder do setor, que traz a experiência da nuvem para aplicativos e dados em qualquer lugar — data centers, multiclouds e bordas — com um modelo operacional unificado, totalmente gerenciado num modelo de pagamento conforme o uso.

Se você estiver à procura de outros serviços, como **soluções de financiamento de TI**, veja-os aqui.

Para informações técnicas adicionais, modelos e opções disponíveis, faça referência ao QuickSpecs

Visite HPE.com

Chat ao vivo

Peças e materiais: A HPE irá oferecer reposição de peças e materiais suportados pela HPE necessários para manter o hardware coberto.

Peças e componentes que tenham atingido a vida útil suportada máxima e/ou as limitações de uso máximo definidas no manual operacional do fabricante, nas especificações rápidas do produto ou na folha de especificações técnicas do produto não serão fornecidos, reparados ou substituídos como parte desses serviços.

A imagem do produto pode ser diferente do produto real.

PSN1014786690BRPT, outubro, 2025.

HEWLETT PACKARD ENTERPRISE

hpe.com

Folha de dados

HPE SATA Mixed Use Solid State Drives

HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD (P40505-B21)

Quais são as novidades?

- Oferecendo capacidades de armazenamento de 480 GB, 960 GB, 1,92 TB e 3,84 TB em modelos selecionados de SSDs SATA.

Visão geral

Precisa acelerar o desempenho e entregar recursos empresariais a um preço acessível?

As unidades de estado sólido (SSDs) de uso misto (MU) SATA HPE oferecem recursos empresariais a um preço acessível. As SSDs MU SATA HPE são feitas para oferecer maior desempenho e resistência para aplicativos que exigem uma combinação mais equilibrada de alto desempenho de IOPS de leitura e gravação aleatórias, como banco de dados, virtualização, computação em nuvem e aplicativos transacionais. O Firmware assinado digitalmente HPE evita acessos não autorizados aos seus dados, com a garantia de que o firmware da unidade vem de uma fonte confiável. Você também pode monitorar a vida útil da SSD com o HPE SmartSSD Wear Gauge para determinar se alguma unidade corre risco de falha.

Recursos

Alto desempenho, confiabilidade excepcional e eficiência para resultados de negócios mais rápidos

As unidades de estado sólido de uso misto SATA HPE são ideais para análise de Big Data, computação em nuvem, arquivamento ativo, aplicativos de bancos de dados e armazenamento de dados.

Alcance IOPS mais alto para melhorar o desempenho do seu data center.

Mantêm a precisão dos dados com detecção completa de erro de caminho de dados

Escolha de um amplo portfólio de soluções aprimoradas em uma grande variedade de capacidades.

Suporte a SATA 6 Gb/s

Os SSDs multifornecedor da HPE oferecem ciclos de vida útil de SKU mais longos e disponibilidade imediata em SSDs SATA.

A HPE aprimorou seu extenso portfólio de SSD com uma oferta de SKU de SSD multifornecedor que permite ciclos de vida de SKU estendidos, fornecimento imediatamente disponível e SSDs SATA com preços especiais.

A oferta de SSD multifornecedor da HPE garante que a SSD SATA escolhida forneça ao menos o nível de desempenho divulgado ou mais.

As Unidades de Estado Sólido da Hewlett Packard Enterprise são rigorosamente testadas por 3,35 milhões de horas em ambientes variados para alcançar os padrões de qualidade de que você precisa.

Especificações técnicas	HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD
Product Number	P40505-B21
Gravações para toda a vida útil	22.000
Resistência DWPD (Drive Writes Per Day, gravações na unidade por dia)	3
IOPS de leitura	IOPS de leitura aleatória (4 KiB, Q=16) = 59.000 IOPS de leitura aleatória máxima (4 KiB) = 70.000@Q32
IOPS de gravação	IOPS de gravação aleatória (4 KiB, Q=16) = 32.000 IOPS de gravação aleatória máxima (4 KiB) 35.000@Q4
Potência (Watts)	4,39
Tipo de plugue	Com hot plug
Altura	7 mm
Plataforma compatível	Para obter mais informações sobre plataformas convencionais HPE Compute, consulte as especificações
Dimensões do produto (métrico)	21,92 x 22,86 x 14,61 cm
Peso	0,5 kg
Garantia	As unidades de estado sólido HPE e os cartões complementares têm uma garantia padrão de 3/0/0 autorreparo pelo cliente (CSR) sujeito a limitações de uso máximo. O limite de uso máximo é a quantidade máxima de dados que podem ser gravados na unidade. Unidades que atingiram esse limite não estarão qualificadas para a cobertura da garantia.

[1] Testes em laboratório interno da HPE. A quantidade de 3,35 milhões de horas de teste é derivada da combinação de planos de teste de qualificação de unidade, especificamente responsabilidade de execução de HDDQ com especificação do fornecedor, responsabilidade de execução de HDDQ com especificação da HPE, especificação de teste de RDT-Demonstração de confiabilidade, especificação de teste de integração de CSI e requisitos de teste-piloto.

Serviços HPE

Não importa onde você esteja na sua jornada de transformação, você pode contar com o conhecimento especializado da HPE Services quando, onde e como necessário. Desde a estratégia e o planejamento até a implantação, operações contínuas e outros, nossos especialistas ajudam você a alcançar seus objetivos digitais.

Advisory & Professional services

Os especialistas podem ajudar você a traçar um caminho para a nuvem híbrida e otimizar suas operações.

Serviços gerenciados

A HPE cuida das suas operações de TI, fornecendo um controle unificado, para que você se concentre na inovação.

Serviços de suporte

Otimize todo o seu ambiente de TI e incentive a inovação. Gerencie tarefas operacionais diárias de TI ao mesmo tempo em que libera tempo e recursos valiosos.

— **HPE Complete Care Service:** um serviço modular criado para ajudar a otimizar todo o seu ambiente TI e atingir os resultados de TI e metas comerciais acordados. Todos os serviços são prestados por uma equipe atribuída de especialistas da HPE.

— **HPE Tech Care Service:** a experiência de suporte operacional para produtos HPE. Este serviço oferece acesso a especialistas de produtos específicos, uma experiência digital conduzida por IA e orientação técnica geral para ajudar a reduzir os riscos e buscar a melhor forma de fazer as coisas.

— **Serviços de multifornecedor HPE:** Único ponto de responsabilidade para gerenciamento de suporte local para hardware e software de produtos de vários fornecedores. Os especialistas da HPE ajudam a gerenciar as tecnologias e plataformas do seu ambiente de TI para tecnologias da HPE e que não são da HPE, agindo como um único ponto de contato para suas necessidades operacionais de TI.

Serviços de ciclo de vida

Atenda às necessidades específicas do seu projeto de implantação de TI com gerenciamento de projeto e serviços de implantação personalizados.

HPE Education Services

Treinamentos e certificações criados para profissionais de TI e de negócios de todos os setores. Crie planos de estudo para dominar melhor um assunto específico. Opções flexíveis de aprendizagem contínua, para que você possa escolher os melhores horários de treinamento para os seus negócios.

A **retenção de mídia com defeito** é opcional e permite reter unidades de disco ou SSD/flash elegíveis substituídos pela HPE devido a defeitos.

HPE GreenLake

Plataforma da borda à nuvem HPE GreenLake é a oferta de TI como serviço líder do setor, que traz a experiência da nuvem para aplicativos e dados em qualquer lugar — data centers, multiclouds e bordas — com um modelo operacional unificado, totalmente gerenciado num modelo de pagamento conforme o uso.

Se você estiver à procura de outros serviços, como **soluções de financiamento de TI**, veja-os aqui.

Para informações técnicas adicionais, modelos e opções disponíveis, faça referência ao QuickSpecs

Visite HPE.com

Chat ao vivo

Peças e materiais: A HPE irá oferecer reposição de peças e materiais suportados pela HPE necessários para manter o hardware coberto.

Peças e componentes que tenham atingido a vida útil suportada máxima e/ou as limitações de uso máximo definidas no manual operacional do fabricante, nas especificações rápidas do produto ou na folha de especificações técnicas do produto não serão fornecidos, reparados ou substituídos como parte desses serviços.

A imagem do produto pode ser diferente do produto real.

PSN1013333583BRPT, outubro, 2025.

HEWLETT PACKARD ENTERPRISE

hpe.com

Data sheet

HPE SATA Read Intensive Solid State Drives

HPE 7.68TB SATA 6G Read Intensive SFF BC Multi Vendor SSD (P40501-B21)

What's new

- Offering 480 GB, 960 GB, 1.92 TB, 3.84 TB, and 7.68 TB storage capacities on selected models of SATA SSDs.

Overview

Do you need to accelerate the performance and deliver enterprise features at an affordable price?

HPE SATA Read Intensive (RI) Solid State Drives (SSDs) deliver enterprise features at an affordable price. HPE SATA RI SSDs deliver great performance for workloads high in reads such as boot/swap, web servers, and read caching. HPE SSDs are backed by over 3.35 million hours of testing and qualification [1] ensuring reliable, high performing drives. HPE Digitally Signed Firmware prevents unauthorized access to your data by providing the assurance that drive firmware comes from a trusted source. You can also monitor the lifespan of your SSD with HPE SmartSSD Wear Gauge to determine if any drives are at risk of failure.

Features

High Performance, Exceptional Reliability, and Efficiency for Faster Business Results

HPE SATA Read Intensive Solid State Drives are ideal for big data analytics, cloud computing, active archiving, database applications, and data warehousing.

HPE SSDs achieve higher IOPs to enhance the performance of your data center.

HPE SSDs maintain data accuracy with full data-path error detection.

Choose from a broad portfolio of enhanced solutions in a wide variety of capacities.

Support 6 Gb/s SATA

HPE Multi Vendor SSDs Offer Longer SKU Lifecycles and Immediate Availability on SATA SSDs

HPE enhanced its extensive SSD portfolio with a Multi Vendor SSD SKU offering that allows for extended SKU lifecycles, immediately available supply and preferably priced SATA SSDs.

HPE Multi Vendor SSD SKU offering ensures the SATA SSD selected, delivers the minimum level of performance published, or better.

Hewlett Packard Enterprise Solid State Drives are rigorously tested 3.35 million hours in various environments to achieve the quality standards you need.

Technical specifications	HPE 7.68TB SATA 6G Read Intensive SFF BC Multi Vendor SSD
Product Number	P40501-B21
Lifetime writes	9,111
Endurance DWPD (Drive Writes Per Day)	0.65
Read IOPS	Random Read IOPS (4KiB, Q=16)=65,000 Max Random Read IOPS (4KiB)=76,000@Q32
Write IOPS	Random Write IOPS (4KiB, Q=16)= 11,500 Max Random Write IOPS (4KiB)=11,800@Q64
Power (Watts)	2.76
Plug type	Hot Pluggable
Height	7 mm
Platform supported	HPE Compute Mainstream Platforms, see QuickSpecs for more information
Product dimensions	21.92 x 22.86 x 14.61 cm
Weight	0.5 kg
Warranty	HPE Solid State Drives and Add-In Cards have a standard 3/0/0 warranty Customer Self Repair (CSR) subject to maximum usage limitations. Maximum usage limit is the maximum amount of data that can be written to the drive. Drives that have reached this limit will not be eligible for warranty coverage

[1] HPE internal lab testing. 3.35 million hour test quant is derived from a combination of drive qualification test plans, specifically HDDQ spec-supplier responsibility to perform, HDDQ spec-HPE responsibility to perform, Reliability Demonstration Test (RDT) spec, CSI integration test spec and pilot test requirements.

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

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.

Image may differ from the actual product.

PSN1013333457WWEN, October, 2025.

HEWLETT PACKARD ENTERPRISE

hpe.com

Data sheet

HPE NVMe Mainstream Performance Read Intensive U.3 Static Solid State Drives

HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD (P64846-B21)

What's new

- Offering 960 GB, 1.92 TB, 3.84 TB, 7.68 TB, and 15.36 TB storage capacities on selected HPE NVMe Mainstream Performance SFF SSDs.

Overview

Do you need to accelerate the performance of your read intensive applications?

HPE NVMe Mainstream Performance Read Intensive U.3 Static Solid State Drives are best suited for applications requiring a strong blend of high read IOPS, low latency, and high endurance at a strong price point. NVMe SSDs communicate directly to applications via the PCIe bus to boost I/O bandwidth and reduce latency.

HPE NVMe Mainstream Performance RI SSDs are advanced data center drives customized for greater performance and endurance in a cost-effective design. As an upgrade path from SATA SSDs, they are designed to utilize the high bandwidth of PCIe Gen4 in select servers for workloads such as read caching, social media, and bulk storage that require outstanding IOPS per watt and cost per IOPS.

Features

High Performance, Exceptional Reliability, and Efficiency for Faster Business Results

HPE NVMe Mainstream Performance Read Intensive U.3 Static Solid State Drives are ideal for Big Data analytics, cloud computing, high performance compute, business intelligence, database applications and virtualization.

Achieve higher IOPS to enhance the performance of your data center.

Maintain data accuracy with full data-path error detection.

Choose from a broad portfolio of enhanced solutions in a wide variety of capacities.

High Performance and High Resiliency

HPE NVMe Mainstream Performance Read Intensive U.3 Static Solid State Drives deliver higher performance for server-storage solutions to better meet the challenges within high performance workloads.

Technical specifications	HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD
Product Number	P64846-B21
Lifetime writes	7,008
Endurance DWPD (Drive Writes Per Day)	1
Read IOPS	Random Read IOPS (4KiB, Q=16)= 209,990 MAX Random Read IOPS (4KiB)= 984,200@256
Write IOPS	Random Write IOPS (4KiB, Q=16) = 180,000 MAX Random Write IOPS (4KiB)= 180,000@4
Power (Watts)	14.80
Plug type	Hot Pluggable
Height	15 mm
Platform supported	HPE Compute Mainstream Platforms, see QuickSpecs for more information
Product dimensions	21.92 x 22.86 x 14.61 cm
Weight	0.5 kg
Warranty	HPE Solid State Drives and Add-In Cards have a standard 3/0/0 warranty Customer Self Repair (CSR) subject to maximum usage limitations. Maximum usage limit is the maximum amount of data that can be written to the drive. Drives that have reached this limit will not be eligible for warranty coverage.

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

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.

Image may differ from the actual product.

PSN1014773245WWEN, October, 2025.

HEWLETT PACKARD ENTERPRISE

hpe.com

Data sheet

HPE NVMe Mainstream Performance Read Intensive U.3 Static Solid State Drives

HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD (P64848-B21)

What's new

- Offering 960 GB, 1.92 TB, 3.84 TB, 7.68 TB, and 15.36 TB storage capacities on selected HPE NVMe Mainstream Performance SFF SSDs.

Overview

Do you need to accelerate the performance of your read intensive applications?

HPE NVMe Mainstream Performance Read Intensive U.3 Static Solid State Drives are best suited for applications requiring a strong blend of high read IOPS, low latency, and high endurance at a strong price point. NVMe SSDs communicate directly to applications via the PCIe bus to boost I/O bandwidth and reduce latency.

HPE NVMe Mainstream Performance RI SSDs are advanced data center drives customized for greater performance and endurance in a cost-effective design. As an upgrade path from SATA SSDs, they are designed to utilize the high bandwidth of PCIe Gen4 in select servers for workloads such as read caching, social media, and bulk storage that require outstanding IOPS per watt and cost per IOPS.

Features

High Performance, Exceptional Reliability, and Efficiency for Faster Business Results

HPE NVMe Mainstream Performance Read Intensive U.3 Static Solid State Drives are ideal for Big Data analytics, cloud computing, high performance compute, business intelligence, database applications and virtualization.

Achieve higher IOPS to enhance the performance of your data center.

Maintain data accuracy with full data-path error detection.

Choose from a broad portfolio of enhanced solutions in a wide variety of capacities.

High Performance and High Resiliency

HPE NVMe Mainstream Performance Read Intensive U.3 Static Solid State Drives deliver higher performance for server-storage solutions to better meet the challenges within high performance workloads.

Technical specifications	HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD
Product Number	P64848-B21
Lifetime writes	14,016
Endurance DWPD (Drive Writes Per Day)	1
Read IOPS	Random Read IOPS (4KiB, Q=16)= 196,951 MAX Random Read IOPS (4KiB)= 950,000@Q256
Write IOPS	Random Write IOPS (4KiB, Q=16) = 190,000 MAX Random Write IOPS (4KiB)= 190,000@4
Power (Watts)	15.28
Plug type	Hot Pluggable
Height	15 mm
Platform supported	HPE Compute Mainstream Platforms, see QuickSpecs for more information
Product dimensions	21.92 x 22.86 x 14.61 cm
Weight	0.5 kg
Warranty	HPE Solid State Drives and Add-In Cards have a standard 3/0/0 warranty Customer Self Repair (CSR) subject to maximum usage limitations. Maximum usage limit is the maximum amount of data that can be written to the drive. Drives that have reached this limit will not be eligible for warranty coverage.

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

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.

Image may differ from the actual product.

PSN1014773355WWEN, October, 2025.

HEWLETT PACKARD ENTERPRISE

hpe.com

Folha de dados

NVIDIA Accelerators for HPE

NVIDIA L4 24GB PCIe Accelerator for HPE (S0K89C)

Visão geral

Você precisa de mais desempenho para treinamento e inferência de inteligência artificial (IA), computação de alto desempenho (HPC) ou gráficos? Os aceleradores NVIDIA® para HPE ajudam a resolver os desafios científicos, industriais e de negócios mais importantes do mundo com IA e HPC. Visualize conteúdo complexo para criar produtos de ponta, contar histórias envolventes e reimaginar as cidades do futuro. Extraia novos insights de conjuntos de dados massivos. Os servidores Hewlett Packard Enterprise com aceleradores NVIDIA são projetados para a era da computação flexível, fornecendo aceleração inigualável em todas as escalas.

Recursos

Desenvolva e implante IA em qualquer escala

Crie novos modelos de IA com treinamento supervisionado ou não supervisionado para IA generativa, visão computacional, modelos de linguagem grandes (LLM), descoberta científica e modelagem de mercado financeiro com aceleradores NVIDIA e sistemas HPE Cray.

Obtenha inferência em tempo real para visão computacional, processamento de linguagem natural, detecção de fraude, manutenção preditiva e imagens médicas com aceleradores NVIDIA e servidores HPE ProLiant Compute.

Os aceleradores NVIDIA para HPE melhoram o desempenho computacional, reduzindo drasticamente o tempo de conclusão de tarefas paralelas e oferecendo soluções mais rápidas.

Servidores HPE qualificados e certificados pela NVIDIA

Os aceleradores NVIDIA para HPE passam por qualificação térmica, mecânica, de energia e de integridade de sinal para validar se o acelerador está totalmente funcional no servidor. As configurações qualificadas da NVIDIA são compatíveis com uso em produção.

Os servidores HPE certificados pela NVIDIA são testados para validar o desempenho de várias GPUs e vários nós para um conjunto diversificado de cargas de trabalho para disponibilizar excelente desempenho de aplicativos, capacidade de gerenciamento, segurança e capacidade de expansão.

Gerenciamento do HPE Integrated Lights-Out (iLO)

O software de gerenciamento de servidor HPE iLO permite configurar, monitorar e atualizar com segurança e sem problemas os aceleradores NVIDIA para HPE de qualquer lugar do mundo.

O HPE iLO é uma tecnologia integrada que ajuda a simplificar a configuração do servidor e do acelerador, o monitoramento da integridade, a energia e o controle térmico, utilizando o Root of Trust de silício da HPE.

Especificações técnicas	NVIDIA L4 24GB PCIe Accelerator for HPE
Product Number	S0K89C
Plataforma compatível	Plataformas HPE de computação convencionais
Número de aceleradores por placa	1
Tamanho de memória por placa	GDDR6 de 24 GB
Largura de banda de memória para placa	300 GB/s
Aplicativos de acelerador	IA, vídeo, estações de trabalho virtuais e aplicativos gráficos na empresa, na nuvem e na borda.
Características da arquitetura	A GPU NVIDIA L4 Tensor Core oferece uma plataforma versátil para acelerar aplicativos de processamento de Deep Learning, gráficos e vídeo na nuvem e na borda. É um cartão de slot único de meia altura (perfil baixo), meio comprimento com 24 GB de memória GDDR6, conectividade PCIe Gen4 x16 em um envelope de potência máxima de 72 W resfriado passivamente. A NVIDIA L4 fornece desempenho revolucionário de multiprecisão para acelerar o treinamento e a inferência de deep learning e machine learning, transcodificação de vídeo, efeitos de áudio e vídeo de IA, renderização, análise de dados, estações de trabalho virtuais, desktop virtual e outras cargas de trabalho.
Sistema	Compatível com HPE DL380 Gen10 Plus, HPE DL360 Gen10 Plus, HPE Apollo 4200 Gen10 Plus, servidor de armazenamento HPE Alletra 4110/4120/4140, HPE DL360 Gen11, HPE DL380 Gen11, HPE DL380a Gen11, HPE ML350 Gen11, HPE DL385 Gen11, HPE DL365 Gen11, HPE DL345 Gen11, HPE DL325 Gen11, HPE DL320 Gen11, HPE DL145 Gen11, HPE ML110 Gen11, servidor HPE Edge e930t Gen11, servidor de expansão vertical HPE 3200, HPE Superdome Flex 280, HPE DL360 Gen12, HPE DL380 Gen12, HPE ML350 Gen12, HPE DL380a Gen12, HPE DL320 Gen12, HPE DL340 Gen12, HPE DL345 Gen12 e HPE DL325 Gen12
Dimensões do produto (métrico)	16,85 x 6,89 x 1,87 cm
Peso	0.27 kg
Garantia	Para detalhes sobre a Garantia Limitada das Opções Qualificadas HPE, visite: cobertura de 3 ano para peças, 0 ano para mão de obra e 0 ano de suporte no local. Para obter mais informações sobre garantia, acesse http://h20564.www2.hpe.com/hpsc/wc/public/home

Serviços HPE

Não importa onde você esteja na sua jornada de transformação, você pode contar com o conhecimento especializado da HPE Services quando, onde e como necessário. Desde a estratégia e o planejamento até a implantação, operações contínuas e outros, nossos especialistas ajudam você a alcançar seus objetivos digitais.

Advisory & Professional services

Os especialistas podem ajudar você a traçar um caminho para a nuvem híbrida e otimizar suas operações.

Serviços gerenciados

A HPE cuida das suas operações de TI, fornecendo um controle unificado, para que você se concentre na inovação.

Serviços de suporte

Otimize todo o seu ambiente de TI e incentive a inovação. Gerencie tarefas operacionais diárias de TI ao mesmo tempo em que libera tempo e recursos valiosos.

— **HPE Complete Care Service:** um serviço modular criado para ajudar a otimizar todo o seu ambiente TI e atingir os resultados de TI e metas comerciais acordados. Todos os serviços são prestados por uma equipe atribuída de especialistas da HPE.

— **HPE Tech Care Service:** a experiência de suporte operacional para produtos HPE. Este serviço oferece acesso a especialistas de produtos específicos, uma experiência digital conduzida por IA e orientação técnica geral para ajudar a reduzir os riscos e buscar a melhor forma de fazer as coisas.

— **Serviços de multifornecedor HPE:** Único ponto de responsabilidade para gerenciamento de suporte local para hardware e software de produtos de vários fornecedores. Os especialistas da HPE ajudam a gerenciar as tecnologias e plataformas do seu ambiente de TI para tecnologias da HPE e que não são da HPE, agindo como um único ponto de contato para suas necessidades operacionais de TI.

Serviços de ciclo de vida

Atenda às necessidades específicas do seu projeto de implantação de TI com gerenciamento de projeto e serviços de implantação personalizados.

HPE Education Services

Treinamentos e certificações criados para profissionais de TI e de negócios de todos os setores. Crie planos de estudo para dominar melhor um assunto específico. Opções flexíveis de aprendizagem contínua, para que você possa escolher os melhores horários de treinamento para os seus negócios.

A **retenção de mídia com defeito** é opcional e permite reter unidades de disco ou SSD/flash elegíveis substituídos pela HPE devido a defeitos.

HPE GreenLake

Plataforma da borda à nuvem HPE GreenLake é a oferta de TI como serviço líder do setor, que traz a experiência da nuvem para aplicativos e dados em qualquer lugar — data centers, multiclouds e bordas — com um modelo operacional unificado, totalmente gerenciado num modelo de pagamento conforme o uso.

Se você estiver à procura de outros serviços, como **soluções de financiamento de TI**, veja-os aqui.

Para informações técnicas adicionais, modelos e opções disponíveis, faça referência ao QuickSpecs

Visite HPE.com

Chat ao vivo

Peças e materiais: A HPE irá oferecer reposição de peças e materiais suportados pela HPE necessários para manter o hardware coberto.

Peças e componentes que tenham atingido a vida útil suportada máxima e/ou as limitações de uso máximo definidas no manual operacional do fabricante, nas especificações rápidas do produto ou na folha de especificações técnicas do produto não serão fornecidos, reparados ou substituídos como parte desses serviços.

A imagem do produto pode ser diferente do produto real.

PSN1014731952BRPT, outubro, 2025.

HEWLETT PACKARD ENTERPRISE

hpe.com

Folha de dados

NVIDIA Accelerators for HPE

NVIDIA L40 48GB PCIe Accelerator for HPE (S0K90C)

Visão geral

Você precisa de mais desempenho para treinamento e inferência de inteligência artificial (IA), computação de alto desempenho (HPC) ou gráficos? Os aceleradores NVIDIA® para HPE ajudam a resolver os desafios científicos, industriais e de negócios mais importantes do mundo com IA e HPC. Visualize conteúdo complexo para criar produtos de ponta, contar histórias envolventes e reimaginar as cidades do futuro. Extraia novos insights de conjuntos de dados massivos. Os servidores Hewlett Packard Enterprise com aceleradores NVIDIA são projetados para a era da computação flexível, fornecendo aceleração inigualável em todas as escalas.

Recursos

Desenvolva e implante IA em qualquer escala

Crie novos modelos de IA com treinamento supervisionado ou não supervisionado para IA generativa, visão computacional, modelos de linguagem grandes (LLM), descoberta científica e modelagem de mercado financeiro com aceleradores NVIDIA e sistemas HPE Cray.

Obtenha inferência em tempo real para visão computacional, processamento de linguagem natural, detecção de fraude, manutenção preditiva e imagens médicas com aceleradores NVIDIA e servidores HPE ProLiant Compute.

Os aceleradores NVIDIA para HPE melhoram o desempenho computacional, reduzindo drasticamente o tempo de conclusão de tarefas paralelas e oferecendo soluções mais rápidas.

Servidores HPE qualificados e certificados pela NVIDIA

Os aceleradores NVIDIA para HPE passam por qualificação térmica, mecânica, de energia e de integridade de sinal para validar se o acelerador está totalmente funcional no servidor. As configurações qualificadas da NVIDIA são compatíveis com uso em produção.

Os servidores HPE certificados pela NVIDIA são testados para validar o desempenho de várias GPUs e vários nós para um conjunto diversificado de cargas de trabalho para disponibilizar excelente desempenho de aplicativos, capacidade de gerenciamento, segurança e capacidade de expansão.

Gerenciamento do HPE Integrated Lights-Out (iLO)

O software de gerenciamento de servidor HPE iLO permite configurar, monitorar e atualizar com segurança e sem problemas os aceleradores NVIDIA para HPE de qualquer lugar do mundo.

O HPE iLO é uma tecnologia integrada que ajuda a simplificar a configuração do servidor e do acelerador, o monitoramento da integridade, a energia e o controle térmico, utilizando o Root of Trust de silício da HPE.

Especificações técnicas	NVIDIA L40 48GB PCIe Accelerator for HPE
Product Number	S0K90C
Plataforma compatível	Plataformas de computação convencionais HPE Plataformas de computação especializadas HPE
Número de aceleradores por placa	1
Tamanho de memória por placa	GDDR6 de 48 GB
Largura de banda de memória para placa	864 GB/s
Aplicativos de acelerador	Gráficos neurais, virtualização, computação e recursos de IA para cargas de trabalho de data center aceleradas por GPU.
Características da arquitetura	O acelerador de GPU NVIDIA L40 é uma solução gráfica PCIe Gen4 de altura total, comprimento total (FHFL) e dois slots de 10,5 polegadas baseada na mais recente arquitetura NVIDIA Ada Lovelace. A placa é resfriada passivamente e tem capacidade máxima de 300 W de potência. A NVIDIA L40 oferece suporte ao mais recente traçado de raio acelerado por hardware, recursos revolucionários de IA, sombreamento avançado e recursos de simulação eficientes para uma ampla variedade de gráficos e casos de uso de computação em implantações de data center e servidor de borda. Isso inclui NVIDIA Omniverse™, jogos em nuvem, renderização em lote, estações de trabalho virtuais, treinamento em deep learning e cargas de trabalho de inferência.
Sistema	Compatível com HPE DL380 Gen10 Plus, HPE XL675d Gen10 Plus, HPE DL380 Gen11, HPE DL380a Gen11, HPE DL385 Gen11, HPE ML350 Gen11, HPE DL320 Gen11, HPE DL560 Gen11
Dimensões do produto (métrico)	26,67 x 10,49 x 3,85 cm
Peso	1.05 kg
Garantia	Para detalhes sobre a Garantia Limitada das Opções Qualificadas HPE, visite: cobertura de 3 ano para peças, 0 ano para mão de obra e 0 ano de suporte no local. Para obter mais informações sobre garantia, acesse http://h20564.www2.hpe.com/hpsc/wc/public/home

Serviços HPE

Não importa onde você esteja na sua jornada de transformação, você pode contar com o conhecimento especializado da HPE Services quando, onde e como necessário. Desde a estratégia e o planejamento até a implantação, operações contínuas e outros, nossos especialistas ajudam você a alcançar seus objetivos digitais.

Advisory & Professional services

Os especialistas podem ajudar você a traçar um caminho para a nuvem híbrida e otimizar suas operações.

Serviços gerenciados

A HPE cuida das suas operações de TI, fornecendo um controle unificado, para que você se concentre na inovação.

Serviços de suporte

Otimize todo o seu ambiente de TI e incentive a inovação. Gerencie tarefas operacionais diárias de TI ao mesmo tempo em que libera tempo e recursos valiosos.

— **HPE Complete Care Service:** um serviço modular criado para ajudar a otimizar todo o seu ambiente TI e atingir os resultados de TI e metas comerciais acordados. Todos os serviços são prestados por uma equipe atribuída de especialistas da HPE.

— **HPE Tech Care Service:** a experiência de suporte operacional para produtos HPE. Este serviço oferece acesso a especialistas de produtos específicos, uma experiência digital conduzida por IA e orientação técnica geral para ajudar a reduzir os riscos e buscar a melhor forma de fazer as coisas.

— **Serviços de multifornecedor HPE:** Único ponto de responsabilidade para gerenciamento de suporte local para hardware e software de produtos de vários fornecedores. Os especialistas da HPE ajudam a gerenciar as tecnologias e plataformas do seu ambiente de TI para tecnologias da HPE e que não são da HPE, agindo como um único ponto de contato para suas necessidades operacionais de TI.

Serviços de ciclo de vida

Atenda às necessidades específicas do seu projeto de implantação de TI com gerenciamento de projeto e serviços de implantação personalizados.

HPE Education Services

Treinamentos e certificações criados para profissionais de TI e de negócios de todos os setores. Crie planos de estudo para dominar melhor um assunto específico. Opções flexíveis de aprendizagem contínua, para que você possa escolher os melhores horários de treinamento para os seus negócios.

A **retenção de mídia com defeito** é opcional e permite reter unidades de disco ou SSD/flash elegíveis substituídos pela HPE devido a defeitos.

HPE GreenLake

Plataforma da borda à nuvem HPE GreenLake é a oferta de TI como serviço líder do setor, que traz a experiência da nuvem para aplicativos e dados em qualquer lugar — data centers, multiclouds e bordas — com um modelo operacional unificado, totalmente gerenciado num modelo de pagamento conforme o uso.

Se você estiver à procura de outros serviços, como **soluções de financiamento de TI**, veja-os aqui.

Para informações técnicas adicionais, modelos e opções disponíveis, faça referência ao QuickSpecs

Visite HPE.com

Chat ao vivo

Peças e materiais: A HPE irá oferecer reposição de peças e materiais suportados pela HPE necessários para manter o hardware coberto.

Peças e componentes que tenham atingido a vida útil suportada máxima e/ou as limitações de uso máximo definidas no manual operacional do fabricante, nas especificações rápidas do produto ou na folha de especificações técnicas do produto não serão fornecidos, reparados ou substituídos como parte desses serviços.

A imagem do produto pode ser diferente do produto real.

PSN1014732200BRPT, outubro, 2025.

HEWLETT PACKARD ENTERPRISE

hpe.com

Folha de dados

HPE Flexible Slot Power Supplies

HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit (P44712-B21)

Quais são as novidades?

- Nova fonte de alimentação HPE Flex Slot de 1800 W - 2200 W com 96% de eficiência, entrada de 200-240 Vca, com certificação 80 Plus Titanium.[2]
- Fonte de alimentação HPE Flex Slot de 1000W com 96% de eficiência, entrada de 100-240 Vca, com certificação 80 PLUS Titanium.
- Fonte de alimentação HPE Flex Slot de 800 W com 96% de eficiência, entrada de 200-240V CA e certificação 80 PLUS Titanium.
- Opção de fontes de alimentação HPE

Visão geral

Como aumentar a eficiência energética do data center sem afetar o desempenho da TI? As Fontes de alimentação HPE de slot flexível oferecem até 96% de eficiência energética, com fontes de alimentação com certificação 80 Plus Titanium que reduzem os requisitos de energia do servidor e diminuem o desperdício e os custos de energia no data center [1]. Seu formato físico é 25% menor que as gerações anteriores, deixando mais espaço para adicionar opções de servidor, melhorando o desempenho dos servidores. O acesso hot-plug rápido e sem ferramentas simplifica e melhora a capacidade de manutenção. Suporte a servidores HPE ProLiant Gen10, Gen10 Plus e Gen11, sistemas HPE Apollo Gen10 e Gen10 Plus selecionados e servidores de armazenamento de dados HPE Alletra 4100, simplificando sua estratégia de peças sobressalentes e reduzindo ainda mais os custos do data center.

Flex Slot de -48 Vcc, fornecendo saída de 800 W ou 1600 W.

- Fonte de alimentação HPE Flex Slot de 1600W com 94% de eficiência, entrada de 200-240 CA.
- Fonte de alimentação HPE Flex Slot universal de 800 W oferece as opções de entrada de 277 V CA e 380 Vcc.

Recursos

Melhore a eficiência do data center sem afetar o desempenho da TI

As fontes de alimentação de slot flexível HPE oferecem até 96% de eficiência energética, com opções com certificação 80 Plus Titanium que reduzem os requisitos de energia do servidor e diminuem o desperdício de energia no data center.

As fontes de alimentação com 96% de eficiência cumprem os requisitos de eficiência do regulamento da Comissão da União Europeia (UE) 2019/424 (EU Lote 9).

O formato físico da fonte de alimentação é 25% menor do que as fontes de alimentação de slot comum HPE da geração anterior, deixando mais espaço para adicionar opções de servidor e melhorar o desempenho dos servidores.

O acesso hot-plug rápido e sem ferramentas simplifica e melhora a capacidade de manutenção.

Suporte a servidores HPE ProLiant Gen10, Gen10 Plus e Gen11, sistemas HPE Apollo Gen10 e Gen10 Plus selecionados e servidores de armazenamento de dados HPE Alletra 4100, simplificando sua estratégia de peças sobressalentes e reduzindo ainda mais os custos do data center.

Especificações técnicas	HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit
Product Number	P44712-B21
Voltage de entrada	200 V - 240 V CA
Potência	1800 W - 2200 W [2]
Eficiência	96%
Dimensões do produto (métrico)	6,80 x 4,04 x 22,53 cm
Garantia	As fontes de alimentação HPE serão cobertas pelo mesmo nível de serviço e pelo mesmo período de cobertura que os do servidor, exceto se a vida útil máxima suportada e/ou a limitação de utilização máxima tenham sido excedidas.

[1] Classificações de eficiência com base em testes realizados pelo Ecova conforme os requisitos do programa 80PLUS. Para mais informações, acesse: www.80plus.com

[2] 1600 W de saída máxima no Gen10 e Gen10 Plus.

Serviços HPE

Não importa onde você esteja na sua jornada de transformação, você pode contar com o conhecimento especializado da HPE Services quando, onde e como necessário. Desde a estratégia e o planejamento até a implantação, operações contínuas e outros, nossos especialistas ajudam você a alcançar seus objetivos digitais.

Advisory & Professional services

Os especialistas podem ajudar você a traçar um caminho para a nuvem híbrida e otimizar suas operações.

Serviços gerenciados

A HPE cuida das suas operações de TI, fornecendo um controle unificado, para que você se concentre na inovação.

Serviços de suporte

Otimize todo o seu ambiente de TI e incentive a inovação. Gerencie tarefas operacionais diárias de TI ao mesmo tempo em que libera tempo e recursos valiosos.

— **HPE Complete Care Service:** um serviço modular criado para ajudar a otimizar todo o seu ambiente TI e atingir os resultados de TI e metas comerciais acordados. Todos os serviços são prestados por uma equipe atribuída de especialistas da HPE.

— **HPE Tech Care Service:** a experiência de suporte operacional para produtos HPE. Este serviço oferece acesso a especialistas de produtos específicos, uma experiência digital conduzida por IA e orientação técnica geral para ajudar a reduzir os riscos e buscar a melhor forma de fazer as coisas.

— **Serviços de multifornecedor HPE:** Único ponto de responsabilidade para gerenciamento de suporte local para hardware e software de produtos de vários fornecedores. Os especialistas da HPE ajudam a gerenciar as tecnologias e plataformas do seu ambiente de TI para tecnologias da HPE e que não são da HPE, agindo como um único ponto de contato para suas necessidades operacionais de TI.

Serviços de ciclo de vida

Atenda às necessidades específicas do seu projeto de implantação de TI com gerenciamento de projeto e serviços de implantação personalizados.

HPE Education Services

Treinamentos e certificações criados para profissionais de TI e de negócios de todos os setores. Crie planos de estudo para dominar melhor um assunto específico. Opções flexíveis de aprendizagem contínua, para que você possa escolher os melhores horários de treinamento para os seus negócios.

A **retenção de mídia com defeito** é opcional e permite reter unidades de disco ou SSD/flash elegíveis substituídos pela HPE devido a defeitos.

HPE GreenLake

Plataforma da borda à nuvem HPE GreenLake é a oferta de TI como serviço líder do setor, que traz a experiência da nuvem para aplicativos e dados em qualquer lugar — data centers, multiclouds e bordas — com um modelo operacional unificado, totalmente gerenciado num modelo de pagamento conforme o uso.

Se você estiver à procura de outros serviços, como **soluções de financiamento de TI**, veja-os aqui.

Para informações técnicas adicionais, modelos e opções disponíveis, faça referência ao QuickSpecs

Visite HPE.com

Chat ao vivo

Peças e materiais: A HPE irá oferecer reposição de peças e materiais suportados pela HPE necessários para manter o hardware coberto.

Peças e componentes que tenham atingido a vida útil suportada máxima e/ou as limitações de uso máximo definidas no manual operacional do fabricante, nas especificações rápidas do produto ou na folha de especificações técnicas do produto não serão fornecidos, reparados ou substituídos como parte desses serviços.

A imagem do produto pode ser diferente do produto real.

PSN1014686531BRPT, outubro, 2025.

HEWLETT PACKARD ENTERPRISE

hpe.com

HPE Services

Data sheet

HPE Installation Service

HPE Lifecycle Services

The HPE Installation Service provides for the basic installation of HPE equipment, software products, as well as HPE supported products from other vendors that are sold by Hewlett Packard Enterprise or by HPE authorized resellers. HPE Installation Service is part of a suite of HPE deployment services that are designed to give you the peace of mind that comes from knowing your HPE and HPE supported products have been installed by an HPE specialist in accordance with the manufacturer's product documentation.

Service benefits

— Installation by an HPE authorized technical specialist
— Verification prior to installation that all service prerequisites are met
— Delivery of the service at a mutually scheduled time convenient to your organization
— Allows your IT resources to stay focused on their core tasks and priorities
— Full coverage during the warranty period for products that require installation by an HPE authorized technical specialist

Service feature highlights

— Service planning
— Service deployment
— Installation verification tests (IVTs)

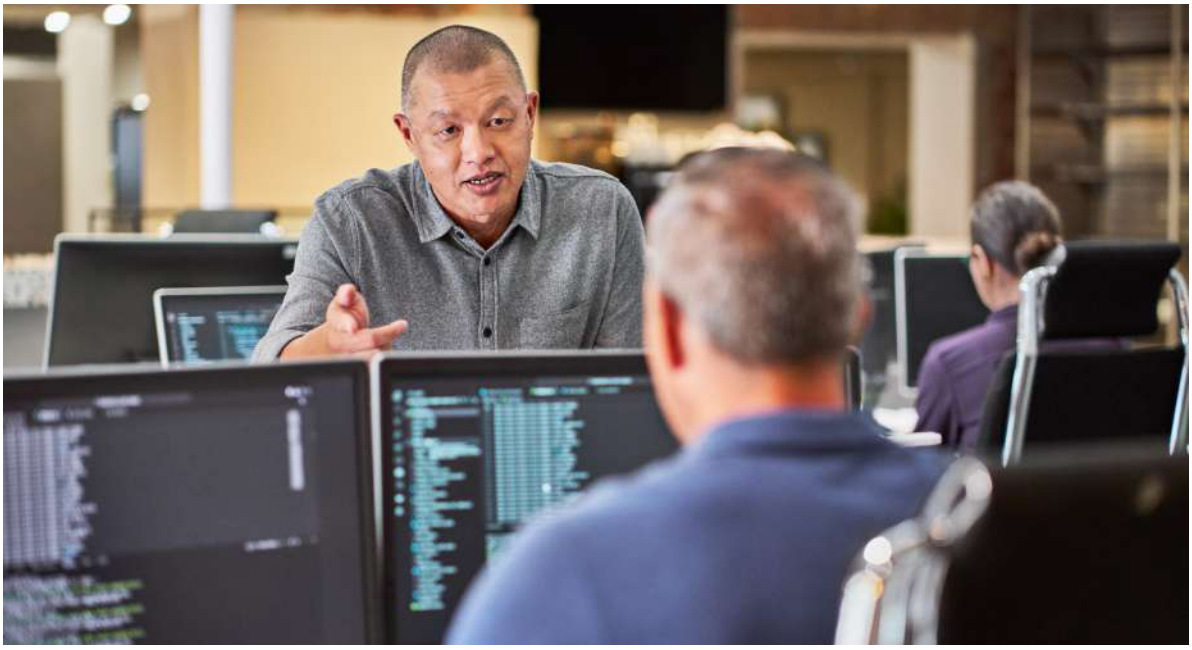


Table 1. Service features

Feature	Delivery specifications
Service planning	An HPE service specialist will plan all the necessary activities with the Customer, including the identification of any prerequisites, and schedule the delivery of the service at a time mutually agreed upon by HPE and the Customer, which shall be during local HPE standard business hours, excluding HPE holidays, unless otherwise agreed by HPE. Any services provided outside of HPE standard business hours may be subject to additional charges. The HPE service specialist will verify with the Customer that all service prerequisites have been met prior to delivery of the service.
Service deployment for all products	Service deployment activities for all products may include one or more of the following: — Removing the product from the packaging, visually inspecting for damage, and replacing or repairing, at HPE's discretion, any HPE components that were damaged in shipping — Installing the product according to the manufacturer's product documentation — Consolidating all packaging materials in a nearby location to be designated by the Customer, and notifying the Customer that the materials are ready for disposal by the Customer — Providing basic information to the Customer, including how to place a support call to HPE
Service deployment for all hardware products	Service deployment activities for all hardware products may include: — Installing hardware options (extra memory, drives, and such) purchased on the same order and intended to go into the system box, or installing add-on options for an existing system — Installing the product into a previously installed rack, if applicable — Installing the necessary cables, if applicable — Physically connecting the equipment to the LAN, as appropriate — Installing selected HPE supplied service tools
Service deployment for software products	Service deployment activities for software may include: — For systems supplied with factory-installed operating system software; verifying that the system correctly presents the initial operating-system screen to the Customer — Installation and configuration of firmware or drivers included with the hardware product and necessary to enable basic device operation
Service deployment for factory racked and storage solutions	Service deployment activities for factory-racked server and storage solutions may include installation of the factory-racked solution, connection of the solution to the external power source, and functional testing to make sure there was no damage during shipping. Connection to external peripherals and network components will be performed if data cables were installed and labeled in the factory.
Service deployment for HPE BladeSystem	Service deployment activities for HPE BladeSystem may include installation of the HPE BladeSystem enclosure along with all blades, HPE supported Ethernet interconnect options, and relevant power options purchased on the same order and intended to go into the enclosure unit, plus cabling and setup of onboard management firmware, as well as installation of the enclosure in a previously installed rack, if applicable.
Service deployment for networking products	Service deployment activities for networking products may include: — Loading the Customer-provided basic network configuration information such as device IP address, subnet mask, and default gateway — Testing, through PING test, of the network connectivity to a neighboring device connected to the same LAN
Service deployment for HPE Adaptive Rack Cooling System	Service deployment activities for HPE Adaptive Rack Cooling System may include: — Installation of the HPE Adaptive Rack Cooling System, and relevant power options purchased on the same order and intended to go into HPE Adaptive Rack Cooling System. — This service includes the verification of the HPE Adaptive Rack Cooling System and water connection to the facility. — The water flowing into the HPE Adaptive Rack Cooling System must meet the guidelines stated in the HPE Adaptive Rack Cooling System Site Preparation Guide. — Site preparation is not included in this service.
IVTs	HPE will run the appropriate installation verification tests required for this service.

Service limitations

Activities such as, but not limited to, the following are excluded from this service:

- Customer acknowledges and agrees that HPE may use resources outside the country of purchase for delivery of these services unless otherwise specified as part of a service feature description.
- Service deployment on hardware and/or software not covered by an HPE warranty or HPE support agreement (except as noted in the Service eligibility section)
- Service deployment on any product covered by a third-party support agreement
- Resolution of hardware-related problems encountered during the verification testing process, unless covered by an active HPE warranty or an applicable HPE hardware support agreement
- Planning, design, or assessment of the Customer's computing environment, except to identify service prerequisites for the product being installed (with the exception of specific activities denoted in the Service feature highlights section)
- Laying or installation of any cables beyond the required internal array or internal rack interconnect cables
- Reconfiguration of a factory-racked and factory-configured solution
- Reconfiguration of the Customer's existing IT infrastructure
- Services that, in the opinion of HPE, are required due to unauthorized attempts by third-party personnel to install, repair, maintain, or modify hardware, firmware, or software
- Site inspection activities such as a comprehensive analysis of the Customer facility's power, cooling and humidity, airborne contaminant, and vibration levels, and determination of whether the data center's raised floor has sufficient structural capability to accommodate the weight of the tape library to be installed
- Installation of software products as part of basic hardware installation, except as specifically stated in the "Service feature highlights" section; such installation may require the purchase of additional HPE Installation Service
- For factory-racked solutions, installation of more than one rack and/or at more than one site
- Any services not clearly specified in this document

Service eligibility

Only HPE products and HPE supported products that are sold by HPE or an HPE authorized reseller are eligible for HPE Installation Service.

When an existing system or environment into which a product is to be installed under the terms of this service is not covered by a current HPE service contract, a preinstallation inspection, plus additional work as needed to return the system or environment to a supported configuration, may need to be carried out at an additional charge before the installation can be performed.

Customer responsibilities

The Customer will:

- Ensure that the HPE Services for this service is registered within 10 days of purchase of the service, using the registration instructions within each package, email document, or as otherwise directed by HPE.
- Contact an HPE service specialist within 90 days of date of purchase to schedule the delivery of the service
- Ensure that all service prerequisites, as identified during service planning, have been met prior to the delivery of this service
- Uncrate the equipment (if applicable) and place it in the immediate location where the installation service will take place
- Allow HPE full and unrestricted access to all locations where the service is to be performed
- Assign a designated person from the Customer's staff who, on behalf of the Customer, will grant all approvals; provide information, for example, IP addresses; ensure that all hardware, firmware, and software that the HPE service specialist will need in order to deliver this service are available and that software products are properly licensed; and otherwise be available to assist HPE in facilitating the delivery of this service
- All cabling and network connections should be preinstalled and functional
- Adhere to licensing terms and conditions regarding the use of any HPE service tools used to facilitate the delivery of this service, if applicable
- Be responsible for all data backup and restore operations
- Be responsible for the disposal of the packaging materials

General provisions / other exclusions

Any services provided outside of HPE standard business hours may be subject to additional charges.

HPE's ability to deliver this service is dependent upon the Customer's full and timely cooperation with HPE, as well as the accuracy and completeness of any information and data the Customer provides to HPE.

To the extent HPE process personal data on the Customer's behalf in the course of providing services, the HPE Data Privacy and Security Agreement Schedule—HPE Support and Professional Services found at hpe.com/us/en/legal/customer-privacy.html shall apply.

HPE reserves the right to charge, on a time-and-materials basis, for any additional work over and above the quoted service pricing that may result from work required to address service prerequisites or other requirements not met by the Customer.

Defective hardware, as identified during the installation, will be replaced or repaired under the original vendor warranty terms for HPE supplied or HPE supported products.

Travel charges may apply; consult your local office.

Supplemental terms

The following supplemental terms apply to these services and take precedence in the event of any conflict:

— Upon receipt of an acceptable order, HPE will contact the Customer within 7 business days to organize a service delivery date. Service delivery dates are subject to resource availability and may be scheduled up to 30 days from the order acceptance date.

— The Customer must schedule and receive delivery of these services within 180 days from order acceptance. HPE reserves the right to reprice for services not scheduled and delivered within 180 days. Backorders or shipment delays may affect the delivery timeline. Orders for services will expire after 365 days (1 year) from the order acceptance date for services not scheduled and delivered, and the Customer will not be entitled to a refund for the unused services.

Ordering information

This service may be ordered using HA113A1#xxx or other HPE Installation Service product numbers identified by your sales representative.

A Customer who requires installation services beyond those provided in this document may purchase HPE Installation and Startup Services or HPE Implementation Services, or work with HPE to create a custom quoted installation service.

Learn more at

HPE.com/services/lifecycleservices

Visit HPE.com

Chat now

This data sheet is governed by the Hewlett Packard Enterprise current standard sales terms, which include the supplemental data sheet, or, if applicable, the Customer's purchase agreement with Hewlett Packard Enterprise.

5981-9356ENW, Rev. 14

HEWLETT PACKARD ENTERPRISE

hpe.com

HPE Services

Data sheet

HPE Tech Care Service

Addendum for select HPE Storage products

Service overview

This addendum to the HPE Tech Care Service data sheet describes the HPE Tech Care Service when purchased for select HPE Storage products. It describes service features as delivered by the HPE Services Storage Support. The Customer must purchase HPE Tech Care Service on eligible HPE storage products.

Service applicability

The following product lines are covered by this HPE Tech Care Service addendum:

— HPE Nimble Storage

— HPE Alletra Storage 5000

— HPE Alletra Storage 6000

— HPE Alletra Storage MP X10000

— HPE Alletra Storage MP B10000 (previously called HPE GreenLake for Block Storage MP)

— HPE GreenLake for File Storage MP

Please note that service-level options vary by product line. For more information see the Service-level options section of this data sheet.

Service structure

HPE Tech Care Service for Storage, as noted in the following tables, provides a general set of features along with hardware-specific and/or software-specific deliverables. Some service features provided by the HPE Services Storage Support team differ from the HPE Tech Care Service deliverables. The different service features are described in Table 2. Some service features are enhanced when HPE InfoSight[1] is used enabling Hewlett Packard Enterprise to provide greater levels of technical guidance using the provided telemetry. Parts delivery or

[1] HPE InfoSight is an HPE proprietary service tool available on select products. For more information, visit infosight.hpe.com.

HPE

on-site attendance response times vary based on the service level selected. Regardless of the service level, Customers have direct access to Tierless HPE Services Storage Support engineers by telephone 24x7.

Table 1. Service feature summary

Feature	Delivery specifications
General features	— Direct access to experts[2] — General technical guidance — HPE InfoSight assistance[3] — Expert webform submittal[4] — HPE InfoSight predictive alerts[5] — Automated incident logging[6] — Tech tips videos[7] — Access to electronic support information and services — Outage management (Critical service level only)[8]
Hardware service features	— Remote problem diagnosis and support — On-site hardware support — Replacement parts and materials — Visual remote guidance[9] — HPE InfoSight dashboards[10] — HPE InfoSight workload insights[11] — Firmware updates for selected products — Collaborative support[12] — 6-hour hardware call to repair (Critical service level only)[13]
Software service features	— License to use software updates — Software support — Installation advisory support — Software features and operational support — Software product and documentation updates
Optional features	— Hardware data security options[14] — Hardware exchange service

[2, 4, 7, 8, 9, 12, 13, 14] Service feature delivery specification is different from the HPE Tech Care Service data sheet. Delivery specifications for HPE Storage are described in in Table 2

[3,5,6,10,11] Service deliverables require connectivity to HPE using HPE proprietary service tools. Not available on all products. Consult your HPE sales specialists for further details.

Table 2. Service feature

Feature	Delivery specifications
Direct access to experts	Customers may contact HPE support by telephone 24x7 to log support incidents with direct access to Level 3 expert HPE Storage support engineers.
Tech tips videos	HPE provides access to enhanced tech tips videos by experts offering technical best practices and functional expertise. Tech tips videos are available through the Welcome Center. The subject of content varies based on HPE operational experience with products and best practices in supporting and maintaining these products.
Visual remote guidance	Customers may choose to connect with specialist technical resources which may require using an enterprise collaboration application that enables live-stream video and voice and content sharing. Problem diagnosis and resolution may be performed in real time, with in-the-moment guidance and collaboration between the Customer and HPE subject matter experts. The application may also be used to assist in the installation of HPE designated Customer self-repair (CSR) parts.
Collaborative support	For entitled and supported configurations and uses, HPE Services Storage team engineers can collaborate with support for other HPE products and third-party hardware and software to investigate and resolve interaction issues with HPE Storage products. If HPE determines that the HPE product is not the source of the problem but deems the problem may be related to the third-party hardware and/or software, the Customer shall engage the third-party vendor for resolution and engage HPE's assistance by request. Engagement of relevant third parties (such as independent software vendors) is subject to the requirements and procedures of those parties. Some third parties might require the end user to initiate contact, confirm entitlement, open a support case, gather data, or perform action plans. For any third-party product or component, the user is required to acquire and maintain the relevant entitlement (for example, a license or subscription).
Expert webform submittal	Direct Level 3 expert webform access is available 24x7. Expert electronic webform submittal is provided in lieu of expert chat or forum support as described for HPE Tech Care Service.
Outage management (Critical service level)	HPE Tech Care Service Critical service level offers an enhanced outage management process for priority 1 HPE service incidents. Once a business outage or critical workflow interruption has been confirmed by HPE, technology-specific resources shall be engaged to drive incident resolution. Throughout the duration of the outage incident, the specialist resources drive technical resolution and proactively keep nominated Customer stakeholders informed of the status. Where identified by HPE, technical insights and opportunities shall be shared to help reduce future incident likelihood. Outage management is included for HPE products covered by the Critical service level option and is in addition to standard HPE escalation processes.
6-hour hardware call to repair (Critical service level)	Using on-site and/or remote resolution efforts, HPE returns the covered hardware to operating condition within six hours for priority 1 and 2 incidents. For further information, see "Hardware call to repair", "Travel zones", and "General provisions / other exclusions" sections. A 6-hour hardware call to repair is included for HPE products covered by the Critical option and is available on select HPE hardware products.
Hardware data security options	Defective Media Retention (DMR) and Comprehensive Defective Media Retention (CDMR) are available for select HPE Storage on-site support and hardware exchange service levels.

Service-level options

HPE offers five service-level offerings for HPE Storage support:

— Critical[15]

— Essential

— Essential parts exchange

— Basic

— Basic parts exchange

Product line	Basic parts exchange	Basic	Essential parts exchange	Essential	Critical
HPE Nimble Storage	Y	Y	Y	Y	N
HPE Alletra Storage 5000	Y	Y	Y	Y	N
HPE Alletra Storage 6000	Y	Y	Y	Y	N
HPE Alletra Storage MP B10000	N	Y[16]	Y[16]	Y	Y
HPE GreenLake for File Storage MP	N	N	N	Y	N
HPE Alletra Storage MP X10000	N	N	N	Y	N

Regardless of your service level, incidents with covered hardware or software can be reported to HPE through telephone or web as locally available or as an automated equipment reporting event using HPE electronic remote support solution 24x7.

All service levels are subject to local availability. Product eligibility may vary. Contact a local HPE sales office for detailed information on service availability and product eligibility.

Table 3. Description of service-level options

Service level	Service feature	Coverage window	Feature description
Critical[17]	Enhanced phone response	Remote response 24x7; service is available 24x7 including HPE holidays.	Immediate direct phone access to a product expert
	6-hour hardware call to repair	On-site response 24x7; service is available 24 hours per day seven days per week including HPE holidays.	For priority 1 and 2 incidents, HPE returns the covered hardware to operating conditions within six hours when the event is reported to HPE through telephone.[18]
	Outage management	Remote response 24x7; service is available 24 hours per day seven days per week including HPE holidays.	Available for priority 1 business-impacting situations, HPE provides priority access to incident recovery specialists to expedite return to service.

[15] Critical is only available for HPE Alletra Storage MP B10000 products.

[16] Basic only available in countries without an HPE Support Hub, Essential Parts Exchange only available in Partner-Led countries.

[17] Critical is only available for HPE Alletra Storage MP B10000.

[18] Hardware call-to-repair time begins when the initial incident has been received through telephone from the Customer and acknowledged by HPE or at the start time for work scheduled in agreement with the Customer, as specified in the "Hardware call to repair" section. Hardware call-to-repair time ends with HPE's determination that the hardware is repaired, or when HPE has determined that no on-site intervention is required. For hardware cases originating from software incidents, call-to-repair time begins when HPE has made the determination that the cause is attributable to the covered HPE hardware. For priority 3 or 4 incidents hardware/on-site service feature matches HPE Tech Care Essential.

Table 3. Description of service-level options (continued)

Service level	Service feature	Coverage window	Feature description
Essential	Enhanced phone response	Remote response 24x7; service is available 24x7 including HPE holidays	Immediate direct phone access to a product expert
	24x7 on-site coverage	On-site attendance 24x7 for hardware replacement; service is available 24x7 including HPE holidays	4-hour parts delivery with on-site response[19] for covered hardware
Essential parts exchange	Enhanced phone response	Remote response 24x7; service is available 24x7 including HPE holidays	Immediate direct phone access to a product expert
	24x7 parts exchange	Parts delivery 24x7; service is available 24x7 including HPE holidays	4-hour parts exchange[20] for covered hardware
Basic	Enhanced phone response	Remote response 24x7; service is available 24x7 including HPE holidays	Immediate direct phone access to a product expert
	Next business day on-site coverage	On-site attendance—The next standard business day for hardware replacement, during standard business days between 8:00 a.m. and 5:00 p.m. local time, Monday through Friday, excluding HPE holidays (coverage window)	Next business day on-site response for covered hardware;[21] support incidents received outside the coverage window shall be acknowledged the next coverage day and serviced within the following coverage day[22]
Basic parts exchange	Enhanced phone response	Remote response 24x7; service is available 24x7 including HPE holidays	Immediate direct phone access to a product expert
	Next business day parts exchange	Parts delivery the next standard business day, during standard business days between 8:00 a.m. and 5:00 p.m. local time, Monday through Friday, excluding HPE holidays (coverage window)	Next business day parts exchange for covered hardware; support incidents received outside the coverage window shall be acknowledged the next coverage day and serviced within the following coverage day

[19] On-site response time begins when the initial support incident has been received, acknowledged, and confirmed to be a hardware issue by HPE. The on-site response time ends when the HPE authorized representative arrives at your site, or when the reported event is closed with the explanation that HPE has determined that no on-site intervention is required.

[20] Once an HPE Storage hardware issue has been confirmed by the support engineer, replacement hardware will be delivered to the covered Customer site within 4 hours, 24 hours a day, 7 days a week, including HPE holidays. Contact an HPE authorized sales representative for information on available locations for parts stocking. For areas not currently covered, on-site spare parts or kits for purchase are available.

[21] Requests to schedule on-site attendance outside the coverage window may incur additional cost and is subject to HPE availability.

[22] Replacement parts delivery will occur Monday through Friday 9:00 a.m. to 5:00 p.m. local time, excluding HPE holidays. Once a hardware issue has been confirmed by the HPE Storage support team, the submittal for hardware replacement parts must be initiated by 3:00 p.m. local time for spare parts replacement delivery on the next business day. Contact an HPE authorized sales representative for information on available locations for parts stocking. Local country shipment availability may impact the next local business day delivery of replacement parts. For areas not currently covered, on-site spare parts or kits for purchase are offered under the HPE Smart Spares Box option.

Table 4. Incident priority levels

Priority level	Business impact	Response time
Priority 1: Critically down	Not serving data or severe performance degradation	Expert response in 30 minutes or less
Priority 2: Critically degraded	Performance degradation, intermittent software faults, network degradation, or single controller not operational	Expert response in 2 hours or less
Priority 3: Normal	Issue or defect causing minimal business impact	Expert response in 8 hours or less
Priority 4: Low	Request for information, administrative requests	Next business day (Monday through Friday)

Note: All priorities include 24x7 engineering escalation support if required.

Travel zones

HPE Service Storage support may use forward stocking locations that have different coverage areas than those defined in the HPE Tech Care Service data sheet. Hardware on-site presence and on-site parts response times apply only to sites located within 150 miles (241 kms) of an HPE Services Storage designated support hub for non-critical service levels.

Travel zones and charges, if applicable, may vary in some geographic locations.

Response times to sites located more than 150 miles (241 kms) from an HPE designated support hub will have modified response times for extended travel, as shown in the following table.

Table 5. Hardware on-site / parts response travel zones

Distance from HPE designated support hub	4-hour hardware on-site / parts response time	Next-day hardware on-site / parts response time
0–150 miles (0–241 kms)	4 hours	Next coverage day
More than 150 miles (more than 241 kms)	Established at the time of order and subject to availability	Established at the time of order and subject to availability

Note: If an HPE designated support hub is not available in-country, HPE Tech Care Basic with best-effort support can be provided, subject to possible delays due to customs clearance. It is strongly recommended to include/purchase a spare parts kit.[23] At a minimum, the spare parts kits should comprise of: 1 Power Supply Unit, 1 HDD, 1 networking card of each type, 1 SSD or 2 SSDs (for All-Flash) and a Controller/IOM.

Coverage areas for critical service level are defined as follows:

Table 6. Critical service level travel zones

Distance from HPE designated support hub	Critical repair time
0–50 miles (0–80 kms)	6 hours
51–150 miles (81–241 kms)	8 hours
More than 150 miles (more than 241 kms)	Not available

[23] If a Customer chooses not to include/purchase the spare parts kit, HPE or its partner is not liable for any miss in the service level achievements, loss of performance or data, or any other issues resulting from the lack of a spare parts kit on-site.

Prerequisites

The Customer must purchase HPE Tech Care Service for HPE Storage hardware and software to receive the defined service features.

DMR and CDMR

The DMR and CDMR service feature options for certain HPE Storage products are available for on-site service and hardware exchange service levels.

Hardware call to repair

Availability of call-to-repair times is dependent on the proximity of Customers' site to an HPE-designated support hub, as described in the "Travel zones" section. Call-to-repair times apply to Customer submitted priority 1 and priority 2 incidents. For priority 3 or 4 incidents, or incidents scheduled at request, HPE works with Customers to schedule an agreed-upon time for the remedial action to begin, and the call-to-repair time will then start at that time. For automated electronically submitted priority 1 and 2 incidents, HPE attempts to contact the indicated Customer contact to commence repair. Incident priority levels are defined in the "General provisions / other exclusions" section.

For hardware call-to-repair time commitments, HPE requires that Customers install and operate the appropriate HPE remote support solution to enable service delivery. Contact a local HPE representative for further details on requirements, specifications, and exclusions. If Customers do not deploy the appropriate HPE remote support solution, HPE may not be able to provide the service as defined and is not obligated to do so. Additional charges will be applied for on-site installation of noncustomer-installable firmware if Customers do not deploy the appropriate HPE remote support solution in cases where recommended and available. Installation of Customer-installable firmware is the Customers' responsibility.

HPE reserves the right to modify the call-to-repair time commitment as it applies to specific product configuration, location, and environment. This is established at the time of the support agreement order and is subject to resource availability. A hardware call-to-repair time commitment does not apply to software products or when Customers choose to have HPE prolonged diagnosis rather than run recommended recovery procedures. The hardware call-to-repair time commitments and on-site response times do not apply to the repair or replacement of defective or depleted consumables, or proactive replacements. Consumables may be covered by a separate warranty.

The hardware call-to-repair time commitment is subject to Customers providing immediate and unrestricted access to the system as requested by HPE. The following activities or situations may suspend the hardware call-to-repair time calculation (if applicable) until they are completed or resolved:

— Any Customer or third-party action or inaction impacting the repair process

— Delayed or denied requests for system access, including physical, remote troubleshooting, and hardware diagnostic assessments, are delayed or denied

— Any automated or manual recovery processes triggered by a hardware malfunction, such as disk mechanism rebuild, sparing procedures, or data integrity protection measures

— Any other activities not specific to the hardware repair but which are required to verify that the hardware malfunction has been corrected, such as rebooting the operating system

Customer responsibilities

In addition to those outlined in the HPE Tech Care Service data sheet, the Customers are responsible for the following:

— The Customer must register for an HPE InfoSight account, where available, and associate applicable HPE Storage products.

— The Customer and related parties must maintain relevant install base data, such as contact information and service / delivery address. When such information must be withheld or occluded (such as for security reasons), support and service capabilities will be limited.

— The Customer and related parties must communicate information about the array, shelves, and any associated hardware and software. Timely, accurate, and complete information is critical to proper support.

— The Customer and related parties must maintain a supportable configuration, including software and hardware; these include drives, solid-state drives (SSDs), and cards. Any unsupported, third-party, or unofficial market components found with the HPE Storage product will void the supportability and any obligations for support. Support may resume when the HPE product is returned to its covered configuration. Supportability can be reestablished if the configuration is restored. Options include restoring components originally in the array/shelf or purchasing new, supported components and using those in the array/shelf.

— Movement or repurposing of hardware between compatible and eligible arrays should be confirmed with the relevant account team and HPE Services Storage Support to avoid getting to an unsupported configuration. Any unsupported configuration is ineligible for support, including downloads, until it has been restored to a supported configuration.

— The Customer acknowledges that when renewing HPE Tech Care Services, the mandatory HPE Alletra SaaS component also needs to be renewed for continued support and service.

Service limitations

These storage support services are available for HPE Storage devices, which have not reached their end of support date.

If, in HPE's reasonable judgment, the original acquisition of an HPE Storage product from HPE or a reseller occurred through unauthorized means, HPE has no obligations to provide Customer services or any support services to Customer for the product in question or to allow any associated software licenses to continue.

The HPE Storage support contracts and associated entitlements may not be transferred. If an entitled HPE Storage product is transferred or sold to another party, the receiving party must contact HPE to purchase the latest support contract.

The features of these services may differ or be limited, based on specific devices or software. Check with an HPE sales representative for specific limitations and local availability.

Service eligibility

The HPE Storage product must be a supported HPE hardware configuration running the HPE Storage software and covered by an active HPE Tech Care Service agreement.

The service requires that all hardware, hardware options, and software are covered by the service. HPE Tech Care Service (including HPE Tech Care Service for HPE Storage) is not designed to be purchased on software-only configurations due to the integrated nature of the service deliverables, thus, all the software and hardware, in the solution, should be purchased with the same HPE Tech Care Service level.

If an array or shelf does not have valid entitlement through a current HPE Storage support contract, any associated components will not be supported, except where required by law.

All arrays and shelves in a group must have an active and valid support contract to be eligible for support. A group is a collection of up to four arrays that are managed by the Customer as a single entity. If any array or shelf in a group does not have valid entitlement, support can be denied. The support term of any hardware component will co-terminate with the array with which the hardware is used. This includes expansion shelves.

When upgrading hardware components (controllers, networking modules, HDD/SSD drive packs, or shelves), the associated support term and costs will apply exclusively to the upgraded components. Existing hardware components that are not part of the upgrade will remain under their current support terms. Additionally, all support agreements will be co-terminated during the next renewal to streamline contract management.

Limitations

— The support term of the hardware component cannot be extended past the service life of that component, regardless of the array lifecycle. That is, any hardware component that has reached the end of support will not be supported, even if the array is supportable.

— If an array or shelf has reached the end of support, any hardware components within are not considered supportable, regardless of the component lifecycle. The relevant hardware component must be used with a compatible, supportable array that has a valid HPE support contract.

General provisions / other exclusions

— The Customer acknowledges and agrees that HPE may use resources outside the country of purchase for delivery of these services unless otherwise specified as part of a service feature description.

— For SSDs (including NVMe-based) that have not reached end of support, the HPE Storage support team monitors the wear of the component when sufficient data is provided by the Customer and replaces the component when the wear limit has been reached. Replacement parts for the wear-limited components are not stocked in local support hub and are not subject to the HPE Storage support SLAs. Such replacement parts are shipped from the HPE Storage manufacturing facilities on a commercially reasonable effort basis.

— HPE will be excused from the performance of its obligations under these terms if such failure to perform results from compliance with any requirement of applicable law, supply shortages, work stoppages, changes to international trade policies, telecommunications or network failure, acts of war (whether they be declared or not), acts of terrorism, regional or global pandemic, acts of God, and any causes beyond the reasonable control of HPE. Any delay resulting from any of such causes shall extend performance accordingly or excuse performance, in whole or in part, as may be reasonable under the circumstances.

— The Customer acknowledges that service levels are contingent upon the enablement of remote support capabilities. Failure to enable such capabilities may significantly hinder or prevent HPE from delivering support services in a timely manner. For further information, regarding remote support capabilities, refer to the related product white paper.

- Remote Support Enablement and Considerations for HPE Alletra Storage 5000, HPE Alletra Storage 6000 and HPE Nimble Storage
- Remote Support Enablement and Considerations for HPE GreenLake for File MP

Ordering information

In addition to the product numbers specified in the HPE Tech Care Service data sheet, the following parts exchange options are available for HPE Storage.

To obtain further information or order HPE Storage support services, contact a local HPE sales representative or an authorized reseller and reference the following product numbers.

HU4A3A3	HPE 3Y Tech Care Critical Service
HU4A3A4	HPE 4Y Tech Care Critical Service
HU4A3A5	HPE 5Y Tech Care Critical Service
HU4A4A3	HPE 3Y Tech Care Critical with Defective Media Retention Service
HU4A4A4	HPE 4Y Tech Care Critical with Defective Media Retention Service

HU4A4A5	HPE 5Y Tech Care Critical with Defective Media Retention Service
HU4A5A3	HPE 3Y Tech Care Critical with Comprehensive Defective Material Retention Service
HU4A5A4	HPE 4Y Tech Care Critical with Comprehensive Defective Material Retention Service
HU4A5A5	HPE 5Y Tech Care Critical with Comprehensive Defective Material Retention Service
HU4A6A3	HPE 3Y Tech Care Essential Service
HU4A6A4	HPE 4Y Tech Care Essential Service
HU4A6A5	HPE 5Y Tech Care Essential Service
HU4A7A3	HPE 3Y Tech Care Essential with Defective Media Retention Service
HU4A7A4	HPE 4Y Tech Care Essential with Defective Media Retention Service
HU4A7A5	HPE 5Y Tech Care Essential with Defective Media Retention Service
HU4A8A3	HPE 3Y Tech Care Essential with Comprehensive Defective Material Retention Service
HU4A8A4	HPE 4Y Tech Care Essential with Comprehensive Defective Material Retention Service
HU4A8A5	HPE 5Y Tech Care Essential with Comprehensive Defective Material Retention Service
HU4A9A3	HPE 3Y Tech Care Essential Exchange Service
HU4A9A4	HPE 4Y Tech Care Essential Exchange Service
HU4A9A5	HPE 5Y Tech Care Essential Exchange Service
HU4B0A3	HPE 3Y Tech Care Essential Exchange with Defective Media Retention Service
HU4B0A4	HPE 4Y Tech Care Essential Exchange with Defective Media Retention Service
HU4B0A5	HPE 5Y Tech Care Essential Exchange with Defective Media Retention Services
HU4B1A3	HPE 3Y Tech Care Essential Exchange with Comprehensive Defective Material Retention Service
HU4B1A4	HPE 4Y Tech Care Essential Exchange with Comprehensive Defective Material Retention Service
HU4B1A5	HPE 5Y Tech Care Essential Exchange with Comprehensive Defective Material Retention Service
HU4B2A3	HPE 3Y Tech Care Basic Service
HU4B2A4	HPE 4Y Tech Care Basic Service
HU4B2A5	HPE 5Y Tech Care Basic Service
HU4B3A3	HPE 3Y Tech Care Basic with Defective Media Retention Service
HU4B3A4	HPE 4Y Tech Care Basic with Defective Media Retention Service
HU4B3A5	HPE 5Y Tech Care Basic with Defective Media Retention Service
HU4B4A3	HPE 3Y Tech Care Basic with Comprehensive Defective Material Retention Service
HU4B4A4	HPE 4Y Tech Care Basic with Comprehensive Defective Material Retention Service
HU4B4A5	HPE 5Y Tech Care Basic with Comprehensive Defective Material Retention Service

HU4B5A3	HPE 3Y Tech Care Basic Exchange Service
HU4B5A4	HPE 4Y Tech Care Basic Exchange Service
HU4B5A5	HPE 5Y Tech Care Basic Exchange Service
HU4B6A3	HPE 3Y Tech Care Basic Exchange with Defective Media Retention Service
HU4B6A4	HPE 4Y Tech Care Basic Exchange with Defective Media Retention Service
HU4B6A5	HPE 5Y Tech Care Basic Exchange with Defective Media Retention Service
HU4B7A3	HPE 3Y Tech Care Basic Exchange with Comprehensive Defective Material Retention Service
HU4B7A4	HPE 4Y Tech Care Basic Exchange with Comprehensive Defective Material Retention Service
HU4B7A5	HPE 5Y Tech Care Basic Exchange with Comprehensive Defective Material Retention Services

Some offerings, features, and coverage (and related products) may not be available in all countries or areas. Depending on the point of purchase and the requested service-level option, other product numbers may apply. Consult a local HPE representative or HPE reseller regarding which product number will best meet the Customer-specific needs.

Learn more at

HPE.com/services/TechCare

Visit HPE.com

Chat now

This data sheet is governed by the Hewlett Packard Enterprise current standard sales terms, which include the supplemental data sheet, or, if applicable, the Customer's purchase agreement with Hewlett Packard Enterprise.

a50003571ENW, Rev. 11

HEWLETT PACKARD ENTERPRISE

hpe.com

Hewlett Packard
Enterprise

Barueri, 27 de Outubro de 2025.

À

DEFENSORIA PUBLICA DO ESTADO DA PARAIBA

Edital Eletrônico: 027/2025

SODO- 101268

Declaramos para os devidos fins, que a empresa **PLUGNET COMÉRCIO E REPRESENTAÇÕES LTDA**, inscrita no **CNPJ 02.213.325/0002-69,** sediada à **RUA NOSSA SENHORA DOS NAVEGANTES, 104 SALA-402 – TAMBAÚ - JOÃO PESSOA – PR - Cep. 58.039-110**, é uma revenda Participante do Programa de Canais e está apta a comercializar os produtos e serviços HPE ofertados, apta a comercializar a linha HPE Partner Ready for Service Delivery, como parceria oficial de Entrega de Serviços de Instalação (PRSD), estando apta e qualificada para instalação, configuração de produtos de computação de nossa fabricação.

PN	Descrição	PN SERVIÇO
P52534-B21	HPE DL380 Gen11 8SFF NC CTO Svr	HU4A3A5

Declaramos que todos os produtos ofertados são novos, de primeiro uso, consta em linha de produção do fabricante, sem data de descontinuidade definida na época da realização da licitação, e da versão mais recente adequada a esta especificação;

As configurações ofertadas para esta licitação são de nossa própria fabricação ou homologadas por regime de OEM e estão em nossa linha de produção continuada, incluindo substituição do disco rígido em caso de aviso de pré-falha identificado pelo software de gerenciamento e garantimos a total funcionalidade de todos os componentes e interfaces básicas;

Todos os produtos terão assistência técnica em garantia on-site pelo período de 36 (trinta e seis) meses nos termos deste edital e em conformidade com os termos de garantia HPE;

A HPE, durante todo período da garantia dos equipamentos, manterá em seu site (https:www.hpe.com) todos os drivers para os sistemas operacionais suportados e proverá todas as atualizações e correções de BIOS, bug para drivers, softwares e firmware que porventura sejam necessários aos respectivos equipamentos de forma proativa;

Durante o período de garantia, responsabilizamo-nos pela garantia dentro das condições padrão Hewlett Packard Enterprise no território nacional, conforme especificado em nossos manuais técnicos;

Serviços adicionais ao especificado pela garantia, podem ser adquiridos através da compra do HPE Care Pack pela **Plugnet Comércio e Representações LTDA**;

As soluções ofertadas, incluem todos os componentes de hardware e software, possuindo central de suporte com opções para abertura de chamados, incluindo 0800 no Brasil e atendimento em português do Brasil.

Hewlett Packard Enterprise (HPE)
Alameda Rio Negro, 750 – Barueri, SP – 06454-000

Hewlett Packard
Enterprise

As configurações ofertadas para esta licitação são de nossa própria fabricação ou homologadas por regime de OEM e estão em nossa linha de produção continuada, incluindo substituição do disco rígido em caso de aviso de pré-falha identificado pelo software de gerenciamento e garantimos a total funcionalidade de todos os componentes e interfaces básicas.

Durante o período de garantia, responsabilizamo-nos pela garantia dentro das condições padrão Hewlett Packard Enterprise, conforme especificado em nossos manuais técnicos. Serviços adicionais ao especificado pela garantia, podem ser adquiridos através da **PLUGNET COMÉRCIO E REPRESENTAÇÕES LTDA.**

Declaramos ainda, que a HPE possui site na internet - www.hpe.com.br - onde pode ser efetuado download de drivers para os equipamentos ofertados e número de telefone para Grande São Paulo – (011) 4004-7751 e demais regiões – 0800 55 64 05 - para informações e aberturas de chamados técnicos.

Lista de Assistência Técnica:

BEZERRA & BARBOSA LTDA

R DESEMBARGADOR JOSE PEREGRINO, 217, LOJA 07, Bairro CENTRO
JOAO PESSOA - PB, CEP: 58013-500

20.844.941/0001-19

Atenciosamente,

CRISTIANE REGINA GOMES:12384826867

Digitally signed by CRISTIANE REGINA GOMES:12384826867
Date: 2025.10.27 16:36:20 -03'00'

Cristiane Regina Gomes

Representante Legal HPE

cristiane.martins@hpe.com

+55 11 26578379 Office

Hewlett Packard Enterprise (HPE)
Alameda Rio Negro, 750 – Barueri, SP – 06454-000

Hewlett Packard
Enterprise

Barueri, 3 de Novembro de 2025.

À

DEFENSORIA PUBLICA DO ESTADO DA PARAIBA

Edital Eletrônico: 027/2025

SODO- 101268

Declaramos para os devidos fins, que a empresa **PLUGNET COMÉRCIO E REPRESENTAÇÕES LTDA**, inscrita no **CNPJ 02.213.325/0002-69,** sediada à **RUA NOSSA SENHORA DOS NAVEGANTES, 104 SALA-402 – TAMBAÚ - JOÃO PESSOA – PR - Cep. 58.039-110**, é uma revenda Participante do Programa de Canais e está apta a comercializar os produtos e serviços HPE ofertados, apta a comercializar a linha HPE Partner Ready for Service Delivery, como parceria oficial de Entrega de Serviços de Instalação (PRSD), estando apta e qualificada para instalação, configuração de produtos de computação de nossa fabricação.

ITEM 01		
Qty	**Product**	**Description**
48	P64707-B21	HPE 64GB 2Rx4 PC5-5600B-R Smart Kit
48	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 02		
Qty	**Product**	**Description**
38	P40505-B21	HPE 3.84TB SATA MU SFF BC MV SSD
38	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 03		
Qty	**Product**	**Description**
38	P40501-B21	HPE 7.68TB SATA RI SFF BC MV SSD
38	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 04		
Qty	**Product**	**Description**
48	P64846-B21	HPE 3.84T NVMeRI SFF BC U.3ST V2 MV SSD
48	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 05		
Qty	**Product**	**Description**
48	P64848-B21	HPE 7.68T NVMeRI SFF BC U.3ST V2 MV SSD
48	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC

Hewlett Packard Enterprise (HPE)
Alameda Rio Negro, 750 - Barueri, SP - 06454-000

Hewlett Packard
Enterprise

ITEM 06		
Qty	**Product**	**Description**
2	S0K89C	NVIDIA L4 24GB PCIe Accelerator
2	HA113A1	HPE Installation SVC
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
ITEM 07		
Qty	**Product**	**Description**
2	S0K90C	NVIDIA L40 48GB PCIe Accelerator
2	P56072-B21	HPE DL380/DL560 Gen11 2U GPU Pwr Cbl Kit
4	P48818-B21	HPE DL380/DL560 G11 High Perf 2U HS Kit
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
2	HA113A1	HPE Installation SVC
ITEM 08		
Qty	**Product**	**Description**
4	P44712-B21	HPE 1800W-2200W FS Ti Ht Plg PS Kit
1	HU4A6A5	HPE 5Y Tech Care Essential SVC
2	HA113A1	HPE Installation SVC

Declaramos que todos os produtos ofertados são novos, de primeiro uso, consta em linha de produção do fabricante, sem data de descontinuidade definida na época da realização da licitação, e da versão mais recente adequada a esta especificação;

As configurações ofertadas para esta licitação são de nossa própria fabricação ou homologadas por regime de OEM e estão em nossa linha de produção continuada, incluindo substituição do disco rígido em caso de aviso de pré-falha identificado pelo software de gerenciamento e garantimos a total funcionalidade de todos os componentes e interfaces básicas;

Todos os produtos terão assistência técnica em garantia on-site pelo período de 36 (trinta e seis) meses nos termos deste edital e em conformidade com os termos de garantia HPE;

A HPE, durante todo período da garantia dos equipamentos, manterá em seu site (https:www.hpe.com) todos os drivers para os sistemas operacionais suportados e proverá todas as atualizações e correções de BIOS, bug para drivers, softwares e firmware que porventura sejam necessários aos respectivos equipamentos de forma proativa;

Durante o período de garantia, responsabilizamo-nos pela garantia dentro das condições padrão Hewlett Packard Enterprise no território nacional, conforme especificado em nossos manuais técnicos;

Serviços adicionais ao especificado pela garantia, podem ser adquiridos através da compra do HPE Care Pack pela **Plugnet Comércio e Representações LTDA**;

As soluções ofertadas, incluem todos os componentes de hardware e software, possuindo central de suporte com opções para abertura de chamados, incluindo 0800 no Brasil e atendimento em português do Brasil.

Hewlett Packard Enterprise (HPE)
Alameda Rio Negro, 750 - Barueri, SP - 06454-000

Hewlett Packard
Enterprise

As configurações ofertadas para esta licitação são de nossa própria fabricação ou homologadas por regime de OEM e estão em nossa linha de produção continuada, incluindo substituição do disco rígido em caso de aviso de pré-falha identificado pelo software de gerenciamento e garantimos a total funcionalidade de todos os componentes e interfaces básicas.

Durante o período de garantia, responsabilizamo-nos pela garantia dentro das condições padrão Hewlett Packard Enterprise, conforme especificado em nossos manuais técnicos. Serviços adicionais ao especificado pela garantia, podem ser adquiridos através da **PLUGNET COMÉRCIO E REPRESENTAÇÕES LTDA.**

Declaramos ainda, que a HPE possui site na internet - www.hpe.com.br - onde pode ser efetuado download de drivers para os equipamentos ofertados e número de telefone para Grande São Paulo – (011) 4004-7751 e demais regiões – 0800 55 64 05 - para informações e aberturas de chamados técnicos.

Lista de Assistência Técnica:

BEZERRA & BARBOSA LTDA

R DESEMBARGADOR JOSE PEREGRINO, 217, LOJA 07, Bairro CENTRO
JOAO PESSOA - PB, CEP: 58013-500

20.844.941/0001-19

Atenciosamente,

CRISTIANE REGINA GOMES:12384826867
Digitally signed by CRISTIANE REGINA GOMES:12384826867
Date: 2025.11.03 10:07:33 -03'00'

Cristiane Regina Gomes

Representante Legal HPE

cristiane.martins@hpe.com

+55 11 26578379 Office

Hewlett Packard Enterprise (HPE)
Alameda Rio Negro, 750 - Barueri, SP - 06454-000