

UCP HC interoperability Matrix

UCP HC (Release Version)	Hardware					
	v8.1	v8.2	v8.3	v8.4	v8.5	v8.6
Release date	July 25, 2023	January 8, 2024	January 16, 2024	March 15, 2024	May 6, 2024	October 21, 2024
Major vSphere Release	8.0	8.0a	8.0a	8.0a	8.0a	8.0a
Management and Compute Nodes: (HA820 G3)						
Compute Nodes: (HA820 G3)						
IO Card Support for HA820 G3 / HA820 G3						

UCP HC (Release Version)	v8.1	v8.2	v8.3	v8.4	v8.5	v8.6
UCP HC (Release Version)						
Major vSphere Release	8.0	8.0a	8.0a	8.0a	8.0a	8.0a
Compute Nodes: (HA820 G3)						
IO Card Support for HA820 G3 / HA820 G3						

UCP HC (Release Version)	v8.1	v8.2	v8.3	v8.4	v8.5	v8.6
UCP HC (Release Version)						
Major vSphere Release	8.0	8.0a	8.0a	8.0a	8.0a	8.0a
Compute Nodes: (HA820 G3)						
IO Card Support for HA820 G3 / HA820 G3						

For scanner firmware requirements for SDD and VAAI devices being used for SAN cache and/or...
 VMware Compatibility Guide (VMware Engineering) - VMware
 VMware vSphere 8.0 U1 Release Notes (VMware)
 VMware vSphere 8.0 U1 Release Notes (VMware)
 VMware vSphere 8.0 U1 Release Notes (VMware)

FC Switches

Vendor	Model	v8.1	v8.2	v8.3	v8.4	v8.5	v8.6
Brocade	8200	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported
Brocade	8200	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported

Ethernet Switches

Vendor	Model	v8.1	v8.2	v8.3	v8.4	v8.5	v8.6
Arista	7050-48	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported
Arista	7050-48	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported

Storage Models

UCP HC (Release Version)	v8.1	v8.2	v8.3	v8.4	v8.5	v8.6
UCP HC (Release Version)						
Major vSphere Release	8.0	8.0a	8.0a	8.0a	8.0a	8.0a
Compute Nodes: (HA820 G3)						
IO Card Support for HA820 G3 / HA820 G3						

GPU

UCP HC (Release Version)	v8.1	v8.2	v8.3	v8.4	v8.5	v8.6
UCP HC (Release Version)						
Major vSphere Release	8.0	8.0a	8.0a	8.0a	8.0a	8.0a
Compute Nodes: (HA820 G3)						
IO Card Support for HA820 G3 / HA820 G3						

Software

UCP HC (Release Version)	v8.1	v8.2	v8.3	v8.4	v8.5	v8.6
UCP HC (Release Version)						
Major vSphere Release	8.0	8.0a	8.0a	8.0a	8.0a	8.0a
Compute Nodes: (HA820 G3)						
IO Card Support for HA820 G3 / HA820 G3						

Note: An migration to the type of new firmware versions are needed for the selected OS/ES. Solution Engineering will...
 VMware Compatibility Guide (VMware Engineering) - VMware
 VMware vSphere 8.0 U1 Release Notes (VMware)
 VMware vSphere 8.0 U1 Release Notes (VMware)

Step 1 - For a given vSphere version, we check the driver link that is used for each OS/ES...
 Step 2 - For each OS/ES, we check the driver link that is used for each OS/ES...
 Step 3 - For each OS/ES, we check the driver link that is used for each OS/ES...
 Step 4 - For each OS/ES, we check the driver link that is used for each OS/ES...

Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1X0D266PS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	
Intel® Optane™ DC 256 GB Persistent Memory Module (NMA1X0D266PS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1X0D512GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	
GPU					
Components					
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1 VMware Compatibility Guide Link
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1 VMware Compatibility Guide Link
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1 VMware Compatibility Guide Link
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1 VMware Compatibility Guide Link
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS120G1, DS220 G1, DS120G2, DS220G2 VMware Compatibility Guide Link
NVIDIA Tesla A16	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS220 G2 VMware Compatibility Guide Link
NVIDIA Tesla A30	Nvidia Virtual GPU Software for vSphere	NA	510.47.03	525.60.12	Available for DS220 G2 VMware Compatibility Guide Link
NVIDIA Tesla A100-80G	Nvidia Virtual GPU Software for vSphere	NA	510.47.03	525.60.12	Available for DS220 G2 VMware Compatibility Guide Link
NVIDIA Tesla A2	Nvidia Virtual GPU Software for vSphere	NA	515.48.07	525.60.12	Available for DS220 G2 VMware Compatibility Guide Link
				525.60.12	

FC Switches					
Vendor	Models				Notes
Brocade	6840	9.0.1c	9.0.1c	9.0.1c	
Brocade	6720	9.1.0b	9.1.0b	9.1.0b	

Ethernet Switches					
Vendor	Models				Notes
Arista	7050C3-256R	4.25.4M	4.25.4M	4.25.4M	
Arista	7050C3-48Y-8-R	4.25.4M	4.25.4M	4.25.4M	
Arista	7050C3-48Y-8-R	4.25.4M	4.25.4M	4.25.4M	
Cisco	Nexus 3048	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	*These Cisco switches are used on UCP HC appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.
Cisco	Nexus 93180LC-EX	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8	
Cisco	Nexus 93180TC-12T	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8	
Cisco	Nexus 9312PQ	N/A	N/A	N/A	
Cisco	Nexus 922480C (1.6 G Wgmt)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8	
Cisco	Nexus 91180TC-XT (10/25G Leaf)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8	
Cisco	Nexus 93132C (100G Spine)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8	
Cisco	Nexus 91180TC-FX1 (150/25G Leaf)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8	
Cisco	Nexus 93660C (100G Spine)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8	These CISCO switches were added from Version 5.3

Storage Models					
Models					Notes
VSP	6200	83-05-43-v0/00	83-05-43-v0/00	83-05-43-v0/00	Hitachi Support Page - ECRs
VSP	6400	83-05-43-v0/00	83-05-43-v0/00	83-05-43-v0/00	
VSP	6500	83-05-43-v0/00	83-05-43-v0/00	83-05-43-v0/00	
VSP	6800	83-05-43-v0/00	83-05-43-v0/00	83-05-43-v0/00	
VSP	6400	83-05-43-v0/00	83-05-43-v0/00	83-05-43-v0/00	
VSP	6600	83-05-43-v0/00	83-05-43-v0/00	83-05-43-v0/00	
VSP	6800	83-05-43-v0/00	83-05-43-v0/00	83-05-43-v0/00	
VSP	6110	88-08-04-v0/00	88-08-04-v0/00	88-08-04-v0/00	
VSP	6170	88-08-04-v0/00	88-08-04-v0/00	88-08-04-v0/00	
VSP	6700	88-08-04-v0/00	88-08-04-v0/00	88-08-04-v0/00	
VSP	6900	88-08-04-v0/00	88-08-04-v0/00	88-08-04-v0/00	
VSP	7130	88-08-04-v0/00	88-08-04-v0/00	88-08-04-v0/00	
VSP	7170	88-08-04-v0/00	88-08-04-v0/00	88-08-04-v0/00	
VSP	7190	88-08-04-v0/00	88-08-04-v0/00	88-08-04-v0/00	
VSP	7900	88-08-04-v0/00	88-08-04-v0/00	88-08-04-v0/00	
VSP	81000, VSP G1500, VSP F1500	80-06-87-00/00	80-06-87-00/00	80-06-87-00/00	
VSP	8900	83-06-22-40/00	83-06-22-40/00	83-06-22-40/00	
VSP	8700	83-06-22-40/00	83-06-22-40/00	83-06-22-40/00	
VSP	8900	83-06-22-40/00	83-06-22-40/00	83-06-22-40/00	
VSP	81000	83-06-22-80/00	83-06-22-80/00	83-06-22-80/00	
VSP	81100, 5200, 5500, 5600	80-08-21-00/00	80-08-21-00/00	80-08-21-00/00	

* Minimum Level or above

Software					
Software Versions					
Vendor	Component				Notes
VMware	ESX	7.0U3 (Build # 19482537)	7.0U3 (Build # 20328353)	8.0 (Build # 20511097)	
VMware	VCENTER/VCSA	7.0U3 (Build # 19483086)	7.0U3 (Build # 20328353)	8.0 (Build # 20511097)	
VMware	VSAN	7.0U3 (Build # 19482537)	7.0U3 (Build # 20328353)	8.0 (Build # 20511097)	
Downloadable ZIPS					
Vendor	Component				Notes
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	
Hitachi	Adapter Firmware ZIP	Adapter_Firmware_20220729.zip	Adapter_Firmware_20221105.zip	Adapter_Firmware_20221105.zip	
Hitachi	Server Firmware ZIP	Server_Firmware_20220705.zip	Server_Firmware_20221105.zip	Server_Firmware_20221116.zip	
Hitachi	MB Packages	MB_20210906.zip	MB_20210906.zip	MB_20210906.zip	
Hitachi	VMware Software ZIP	vSphere7.0u3b19482537_20220705.zip	vSphere7u3b20328353_20221105.zip	DS_vSphere_8.7_20221116.zip DS_vSphere_7_x_20221116.zip DS_vSphere_8_x_20221116.zip	
Main Mediatekit ZIP					
Vendor	Component				Notes
Hitachi	UCPKit Mediatekit	UCPKit_Mediatekit_v6.1_20220905.zip	UCPKit_Mediatekit_v6.1_20221105.zip	UCPKit_HC_Base_Mediatekit_v7.0_20221116.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMware Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/mb that is used for each I/O adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use rmls_core Driver) we identify the version that is common across all adapters

Step 3* - For each I/O card, using the common driver/mb version, we identify the supported firmware version for that driver/mb.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

FSP	E100, S200, S500, S600	R0-08-21-00/00	R0-08-21-00/00	R0-08-21-00/00	R0-08-21-00/00
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* minimum Level or above

Software

Software Versions						
Vendor	Component	Versions				Notes
VMware	ESX	6.5U3 P06 (Build #17477841)	7.0U3d (Build # 19482537)	7.0U3g (Build # 20218353)	8.0 (Build # 20511097)	
VMware	VCenter(VCSA)	6.5U3n (Build # 17590285)	7.0U3d (Build # 19480866)	7.0U3g (Build # 20150588)	8.0 (Build # 20515528)	
VMware	VSAN	6.6.1	7.0U3d (Build # 19482537)	7.0U3g (Build # 20328353)	8.0 (Build # 20511097)	
Downloadable ZIPs						
Vendor	Component	Filename				Notes
Hpeachi	Arista Network Firmware ZIP	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	
Hpeachi	Cisco Network Firmware ZIP	Cisco_Firmware_20210906.zip	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	
Hpeachi	Storage Network Firmware ZIP	Brocade_RevA04a.txt	Brocade_RevA04a.txt	Brocade_RevA04a.txt	Brocade_RevA04a.txt	
Hpeachi	Adapter Firmware ZIP	Adapter_Firmware_20220307.zip	Adapter_Firmware_20220729.zip	Adapter_Firmware_20221205.zip	Adapter_Firmware_20221205.zip	
Hpeachi	Server Firmware ZIP	Server_Firmware_20220307.zip	Server_Firmware_20220705.zip	Server_Firmware_20221205.zip	Server_Firmware_20221216.zip	
Hpeachi	MS Packages	MSI_20210906.zip	MSI_20210906.zip	MSI_20210906.zip	MSI_20210906.zip	
Hpeachi	VMware Software ZIP	vsphere6.SuP06-171477841-20210224	vsphere7.0u3d-19482537_20220705.zip	vsphere7u3g_20328353_20221205.zip	OS_vsphere_6.7_20221216.zip OS_vsphere_7.x_20221216.zip OS_vsphere_8.x_20221216.zip	
Hpeachi	UCP Toolkit ZIP	UCPToolkit_v5.2_20220307.zip	UCPToolkit_v6.1_20220905.zip	UCPToolkit_v6.3_20221205.zip	UCPToolkit_v7.0_20221216.zip	
Main Mediatek ZIP						
Vendor	Component	Filename				Notes
Hpeachi	UCP CI Mediatek	UCPCI-HC_MediaKit_v5.2_20220307.zip	UCPCI-HC_MediaKit_V6.1_20220905.zip	UCPCI-HC_MediaKit_V6.3_20221205.zip	UCPCI-HC_Base_MediaKit_v7.0_20221216.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMware Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/firmware that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use rmls_core Driver) we identify the version that is common across all adapters

Step 3* - For Each I/O card, using the common driver/firmware version, we identify the supported firmware version for that driver/firmware.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP HC Interoperability Matrix

UCP HC

Hardware

UCP HC (Release Version)		v5.0		v5.2		
Release date		September 6, 2021		March 7, 2022		
Major vSphere Release:		6.5U3 P06, Build #17477841	6.7U3 EP18, Build # 17499825	6.5U3 P06	6.7U3 EP18	7.0 U3c
Management and Compute Nodes : (DS120 G2)						
Components	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	N/A	N/A	N/A	N/A	3A12 H03	Advanced Server D5x20 Gen2 support vSphere 7.0U2a onward.
BMC	N/A	N/A	N/A	N/A	4.72.06	
CPUD	N/A	N/A	N/A	N/A	Rev11	
CPU Family	N/A	N/A	N/A	N/A	Ice Lake	
Compute Nodes : (DS220 G2)						
Components	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	N/A	N/A	N/A	N/A	3A12 H03	Advanced Server D5x20 Gen2 support vSphere 7.0U2a onward.
BMC	N/A	N/A	N/A	N/A	1.16.06	
CPUD	N/A	N/A	N/A	N/A	REV7	
CPU Family	N/A	N/A	N/A	N/A	Ice Lake	
Management and Compute Nodes : (DS120 G1)						
Components	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	3821.H01	3821.H01	3822.H00	3822.H00	3823.H00	
BMC	4.69.06	4.69.06	4.70.06	4.70.06	4.72.06	
CPUD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev11	
CPU Family	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	
Compute Nodes : (DS220 G1)						
Components	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	3821.H01	3821.H01	3822.H00	3822.H00	3823.H00	
BMC	4.69.06	4.69.06	4.70.06	4.70.06	4.72.06	
CPUD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev11	
CPU Family	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	
Compute Nodes : (DS225 G1)						
Components	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	3821.H01	3821.H01	3822.H00	3822.H00	3823.H00	
BMC	4.69.06	4.69.06	4.70.06	4.70.06	4.72.06	
CPUD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev11	
CPU Family	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	
Compute Nodes : (DS240 G1)						
Components	Versions	Versions	Versions	Versions	Versions	Notes
BIOS						
BMC						
CPUD						
CPU Family						

I/O Card Support for DS120/220/225/240		Versions	Versions	Versions	Versions	Notes	VMware HCL / IOVP link:
Network Cards (Options)							
intel I350-T4, 1GbE quad-port PCIe	Firmware	N/A	N/A	N/A	N/A	1.63.0 or higher	
VID=8086, DVID=1521, SVID=8086, SSID=00a1	igbn Driver (ESXi)	N/A	N/A	N/A	N/A	VMware Inbox - 1.4.11.2-1vmw	Manual updates only. Currently no Firmware py support.
intel I350-T4, 1GbE quad-port OCP	Firmware	N/A	N/A	N/A	N/A	1.63.0 or higher	
VID=8086, DVID=1523, SVID=8086, SSID=00a3	igbn Driver (ESXi)	N/A	N/A	N/A	N/A	VMware Inbox - 1.4.11.2-1vmw	Only available on Advanced Server D5x20 Gen 2 nodes
intel X710-DA4, 10GbE quad-port PCIe	Firmware	N/A	N/A	N/A	N/A	8.30 or higher	
VID=8086, DVID=1572, SVID=8086, SSID=0004	igbn Driver (ESXi)	N/A	N/A	N/A	N/A	VMware Inbox - 1.8.1.136-1vmw	Only available on Advanced Server D5x20 Gen 2 nodes
intel X710-DA4, 10GbE quad-port OCP	Firmware	N/A	N/A	N/A	N/A	8.30 or higher	
VID=8086, DVID=1572, SVID=8086, SSID=0002	igbn Driver (ESXi)	N/A	N/A	N/A	N/A	VMware Inbox - 1.8.1.136-1vmw	Only available on Advanced Server D5x20 Gen 2 nodes
intel X710-T4L, 10GbE, quad-port PCIe	Firmware	N/A	N/A	N/A	N/A	8.30 or higher	
VID=8086, DVID=151f, SVID=8086, SSID=0002	igbn Driver (ESXi)	N/A	N/A	N/A	N/A	VMware Inbox - 1.8.1.136-1vmw	Only available on Advanced Server D5x20 Gen 2 nodes
intel X710-T4L, 10GbE, quad-port OCP	Firmware	N/A	N/A	N/A	N/A	8.30 or higher	
VID=8086, DVID=151f, SVID=8086, SSID=000a	igbn Driver (ESXi)	N/A	N/A	N/A	N/A	VMware Inbox - 1.8.1.136-1vmw	Manual updates only. Currently no Firmware py support.
intel E810-XXVDA2, 10GbE dual-port PCIe	Firmware	N/A	N/A	N/A	N/A	3.0 or higher	
VID=8086, DVID=153b, SVID=8086, SSID=0003	ten Driver (ESXi)	N/A	N/A	N/A	N/A	Partner Async - 1.6.5.0-10EM	Only available on Advanced Server D5x20 Gen 2 nodes
VID=8086, DVID=153b, SVID=8086, SSID=0005	ten Driver (ESXi)	N/A	N/A	N/A	N/A	Partner Async - 1.6.5.0-10EM	Manual updates only. Currently no Firmware py support.
Mellanox CX-6 MCX63102AN-ADA, Ax 25GbE, dual-port PCIe	Firmware	N/A	N/A	N/A	N/A	26.29.2002 or higher	Only available on Advanced Server D5x20 Gen 2 nodes
VID=15b3, DVID=101f, SVID=15b3, SSID=7777	fmnlx_core Driver (ESXi)	N/A	N/A	N/A	N/A	Partner Async - 4.21.71.101	Manual updates only. Currently no Firmware py support.
Mellanox CX-6 MCX63102AN-ADA, Ax 25GbE, dual-port OCPe	Firmware	N/A	N/A	N/A	N/A	26.29.2002 or higher	Only available on Advanced Server D5x20 Gen 2 nodes
VID=15b3, DVID=101f, SVID=15b3, SSID=0004	fmnlx_core Driver (ESXi)	N/A	N/A	N/A	N/A	Partner Async - 4.21.71.101	Manual updates only. Currently no Firmware py support.
intel X557-T4, 10GbE-T quad port, OCP Mezz	Firmware	3.2d	4.00	4.00	4.00		
VID=8086, DVID=1762, SVID=153d, SSID=8a3f	igbn Driver (ESXi)	1.7.17	1.7.17	1.7.17	1.7.17	VMware Inbox - 1.11.1.31-1vmw	Also listed on VMware HCL as: Intel® Ethernet Connection X557 for 10GbE SFP
intel X557-T4, 10/25/40GbE dual-port, PCIe	Firmware	8.0.1	8.0.1	7.30	7.30	8.30 or higher	
VID=8086, DVID=158b, SVID=8086, SSID=0003	igbn Driver (ESXi)	1.7.17	1.7.17	1.7.17	1.7.17	VMware Inbox - 1.11.1.31-1vmw	Also listed on VMware HCL as: Intel® Ethernet Network Adapter X557-10-2"
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240) (Quanta ON 25GbE C4x Lx EN Dual port)	Firmware	14.23.1020	14.23.1020	14.26.1040	14.26.1040	14.26.1040	Also listed on VMware HCL as: "ON 25GbE ConnectX-4 Lx EN Dual port"
VID=15b3, DVID=101b, SVID=153d, SSID=8a15	fmnlx_core Driver (ESXi)	4.16.14.2	4.16.14.2	4.17.14.2	4.17.14.2	VMware Inbox - 4.19.16.11	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2 (PCIe) (MCX4121A-ACA)	Firmware	14.23.1020	14.23.1020	14.27.1016	14.27.1016	14.28.2006 or higher	Also listed on VMware HCL as: ConnectX-4 Lx EN NIC, 25GbE; dual-port SFP28, (MCX4121A-ACA)
VID=15b3, DVID=101b, SVID=153d, SSID=8003	fmnlx_core Driver (ESXi)	4.16.14.2	4.16.14.2	4.17.14.2	4.17.14.2	VMware Inbox - 4.19.16.11	
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16 (MCX516EA-CCA1)	Firmware	14.23.1020	14.23.1020	14.27.1016	14.27.1016	14.28.2006 or higher	Also listed on VMware HCL as: ConnectX-5 Lx EN network interface card, 100GbE dual port QSFP28 (MCX516EA-CCA1)
VID=15b3, DVID=1017, SVID=153d, SSID=8007	fmnlx_core Driver (ESXi)	4.16.14.2	4.16.14.2	4.17.14.2	4.17.14.2	VMware Inbox - 4.19.16.11	
HBA Controller							
Emulex LP32002 FC HBA	Firmware	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	12.8.542.26 or higher	
VID=10df, DVID=8300, SVID=10df, SSID=4310	lsc Driver (ESXi)	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	Partner Async - 14.0.326.12	Listed on VMware HCL as: "Emulex LightPulse LP32002 4x2-Port 16Gb Fibre Channel Adapter"
Emulex LP32002 FC HBA	Firmware	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	12.8.542.26 or higher	Listed on VMware HCL as: "Emulex LightPulse LP32002 4x2-Port 16Gb Fibre Channel Adapter"
VID=10df, DVID=8300, SVID=10df, SSID=4300	lsc Driver (ESXi)	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	Partner Async - 14.0.326.12	
Emulex LP35002 FC 32G HBA	Firmware	N/A	N/A	N/A	N/A	12.8.542.26 or higher	
VID=110df, DVID=f4d0, SVID=110df, SSID=f402	lsc Driver (ESXi)	N/A	N/A	N/A	N/A	Partner Async - 14.0.326.12	Only available on Advanced Server D5x20 Gen 2 nodes
RAID Controller							
Broadcom 945516 8B2 RAID Maxxinne	Firmware	5.040.00.1123	5.100.00.2651	5.040.00.1123	5.100.00.2651		
VID=1000, DVID=0014, SVID=152d, SSID=8800	lsc Driver (ESXi)	7.304.7.0	7.307.11	7.304.7.0	7.307.11	VMware Inbox - 7.716.03.00	Listed on VMware HCL as: "Q5-3516B-R6-P032"
Broadcom 9460 4E	Firmware	N/A	N/A	N/A	N/A	5.130.00.3059 or higher	Listed on VMware HCL as: "MegaRAID SAS 9460 16" Used for RAID based devices on enclosures.
VID=1000, DVID=0016, SVID=1000, SSID=9460	lsc Driver (ESXi)	N/A	N/A	N/A	N/A	5.130.00.3059 or higher	
Broadcom 033916	Firmware	N/A	N/A	N/A	N/A	5.170.00-3513 or higher	5.130.02.3059 or higher
VID=1000, DVID=10e2, SVID=152d, SSID=00cd	lsc Driver (ESXi)	N/A	N/A	N/A	N/A	VMware Inbox - 7.716.03.00-1vmw	Only available on Advanced Server D5x20 Gen 2 nodes
Broadcom 9560 3U	Firmware	N/A	N/A	N/A	N/A	5.130.02.3059 or higher	
VID=1000, DVID=10e2, SVID=1000, SSID=4000	lsc Driver (ESXi)	N/A	N/A	N/A	N/A	VMware Inbox - 7.718.02.00-1vmw	Only available on Advanced Server D5x20 Gen 2 nodes
SAS Controller							
Quantia Q5-3216 Mezz Card	Firmware	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A22 (16.00.00.00)	1A22 (16.00.00.00)	Listed on VMware HCL as: "Q5-3216"
VID=1000, DVID=0018, SVID=152d, SSID=8a12	lsc Driver (ESXi)	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	VMware Inbox - 17.00.10.0	Only for DS120 and DS220 I/F

Component	Version	Version	Version	Version	Version	Notes	
Broadcom SAS9300-16 PCIe (only for DS225)	Firmware	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	16.00.09.00	
VFD-1000, VFD-0504, VFD-1000, SSD-1130	nv_mimgpt3 Driver (ESX)	16.00.00-10EM	16.00.00-10EM	16.00.00-10EM	16.00.00-10EM	VMware Inbox -17.00.10.0	
Qanta QS18E Mezz Card	Firmware	N/A	N/A	N/A	N/A	18.00.01.00	
VFD-1000, VFD-0046, VFD-152d, SSD-00cc	nv_mimgpt3 Driver (ESX)	N/A	N/A	N/A	N/A	VMware Inbox -19.00.02.00-1vmw	
Broadcom 9500-16i	Firmware	N/A	N/A	N/A	N/A	18.00.00.00	
VFD-1000, VFD-0046, VFD-1000, SSD-4050	nv_mimgpt3 Driver (ESX)	N/A	N/A	N/A	N/A	VMware Inbox -19.00.02.00-1vmw	
Drives for vSAN Cache and Capacity (Options) for DS120/220/225/240							
Components	Version	Version	Version	Version	Version	Notes	
Intel SSD DC P3600 Series NVMe, 2.5" U2 (All except DS225)	Firmware	N/A	BDV10140 - or higher	N/A	BDV10140 - or higher	Not compatible with DS225	
Intel SSD DC P4600 Series NVMe, 2.5" U2 (All except DS225)	Firmware	BDV10101 - or higher	BDV10101 - or higher	BDV10101 - or higher	BDV10101 - or higher	Not compatible with DS225	
Intel SSD DC P4510 Series NVMe, 2.5" U2 (All except DS225)	Firmware	BDV10131 - or higher	BDV10131 - or higher	BDV10131 - or higher	BDV10131 - or higher	Not compatible with DS225	
Intel SSD DC P4600 Series NVMe, 2.5" U2 (All except DS225)	Firmware	BDV10101 - or higher	BDV10101 - or higher	BDV10101 - or higher	BDV10101 - or higher	Not compatible with DS225	
Intel SSD DC P4600 Series NVMe, 2.5" U2 (All except DS225)	Firmware	BDV10170 - or higher	BDV10170 - or higher	BDV10170 - or higher	BDV10170 - or higher	Not compatible with DS225	
Intel Optane SSD DC P4800 Series NVMe NVMe, 3.75in, 2.5" U2 (All except DS225)	Firmware	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatible with DS225	
Intel Optane SSD DC P4800 Series NVMe NVMe, 3.75in, 2.5" U2 (All except DS225)	Firmware	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatible with DS225	
VMware Driver	Driver (ESX)	intel-vmw-vmd 1.8.1.1001 (Async driver)	intel-vmw-vmd 1.8.1.1001 (Async driver)	intel-vmw-vmd 1.8.1.1001 (Async driver)	intel-vmw-vmd 1.8.1.1001 (Async driver)	VMware Inbox - nvme-pcie 1.2.3.1.6	
Intel SSD DC S4500 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller The min. version as listed on The VMware CG * Strongly suggested to use recommended version.	
Intel SSD DC S4510 Series	Firmware	KCV10100 - or higher	KCV10100 - or higher	KCV10100 - or higher	KCV10100 - or higher	* Requires SAS Controller The min. version as listed on The VMware CG * Strongly suggested to use recommended version.	
Intel SSD DC S4600 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller The min. version as listed on The VMware CG * Strongly suggested to use recommended version.	
Intel SSD DC S4610 Series	Firmware	KCV10100 - or higher	KCV10100 - or higher	KCV10100 - or higher	KCV10100 - or higher	* Requires SAS Controller The min. version as listed on The VMware CG * Strongly suggested to use recommended version.	
Intel SSD DC S4610 Series	Firmware	KCV10100 - or higher	KCV10100 - or higher	KCV10100 - or higher	KCV10100 - or higher	* Requires SAS Controller The min. version as listed on The VMware CG * Strongly suggested to use recommended version.	
Intel SSD DC S4610 Series	Firmware	KCV10100 - or higher	KCV10100 - or higher	KCV10100 - or higher	KCV10100 - or higher	* Requires SAS Controller The min. version as listed on The VMware CG * Strongly suggested to use recommended version.	
Samsung SATA SSD PM863a Series	Firmware	GXT3204Q - or higher	GXT3204Q - or higher	GXT3204Q - or higher	GXT3204Q - or higher	Requires SAS Controller	
Samsung SATA SSD PM863 Series	Firmware	HXT3204Q - or higher	HXT3204Q - or higher	HXT3204Q - or higher	HXT3204Q - or higher	Requires SAS Controller	
Seagate SAS HD 10000 rpm, 2.5 inch	Firmware	B004 - or higher	B004 - or higher	B004 - or higher	B004 - or higher	Requires SAS Controller	
Seagate SAS HD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	S003 - or higher	S003 - or higher	S003 - or higher	S003 - or higher	Requires SAS Controller	
Intel SSD S4510 Series (240 GB, M.2 2280)	Firmware	KC31120 - or higher	KC31120 - or higher	KC31120 - or higher	KC31120 - or higher	Only for DS240 Boot Device	
Toshiba / Kioxia BG4 Series - 256GB, M.2 2230	Firmware	N/A	N/A	N/A	N/A	Only available on Advanced Server DSx20 Gen 2 nodes. Only used as Boot device.	
Drives for vSAN Cache and Capacity (Options) for DS120/220							
Components	Version	Version	Version	Version	Version	Notes	
Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1X0D128GP5)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 256 GB Persistent Memory Module (NMA1X0D256GP5)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1X0D512GP5)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Components	Version	Version	Version	Version	Version	Notes	
NVIDIA Tesla V10	Nvidia Virtual GPU Software for vSphere		440.53				
GPU	Version	Version	Version	Version	Version	Notes	
Components	Version	Version	Version	Version	Version	Notes	
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	440.53	450.55	440.53	450.55	470.82	
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	440.53	450.55	440.53	450.55	470.82	
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	440.53	450.55	440.53	450.55	470.82	
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	440.53	450.55	440.53	450.55	470.82	
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	440.53	450.55	440.53	450.55	470.82	
NVIDIA Tesla A100	Nvidia Virtual GPU Software for vSphere	440.53	KCPCH-Base_Mediatek_v8.1_20230725.zip	440.53	450.55	470.82	
		N/A	N/A	N/A	N/A	470.82	
Software Versions	Vendor	Component	Version	Version	Version	Version	Notes
VMware	ESXi	6.5U3 P06 (Build #17477841)	6.7U1 EP18 (Build # 17499825)	6.5U3 P06 (Build # 17477841)	6.7U3 EP18 (Build # 17499825)	7.0U3c (Build # 19159300)	
VMware	VMware(vSAN)	6.5U3P (Build # 17590285)	6.7U3L (Build # 17130664)	6.5U3P (Build # 17590285)	6.7U3L (Build # 17130664)	7.0U3c (Build # 19159300)	
VMware	vSAN	6.6.1	6.7	6.6.1	6.7	7.0U3c (Build # 19159300)	
Downloadable ZIPs	Vendor	Component	Filename	Filename	Filename	Filename	Notes
Pitachi	Adapter	Firmware ZIP	Adapter_Firmware_20210906.zip	Adapter_Firmware_20210906.zip	Adapter_Firmware_20210906.zip	Adapter_Firmware_20210906.zip	
Pitachi	Server	Firmware ZIP	Server_Firmware_20210906.zip	Server_Firmware_20210906.zip	Server_Firmware_20210906.zip	Server_Firmware_20200325.zip	
Pitachi	MB	Package(s)	MB_20210906.zip	MB_20210906.zip	MB_20210906.zip	MB_20210906.zip	
Pitachi	VMware	Software ZIP	vSphere6_SuP06_171477841-20210224.zip	vSphere6_SuP06_171477841-20210224.zip	vSphere6_SuP06_171477841-20210224.zip	vSphere7_Ansi-19159300_20220414.zip	
Pitachi	UCP/Toolkit	ZIP	UCP/Toolkit_v5.0_20210906.zip	UCP/Toolkit_v5.0_20210906.zip	UCP/Toolkit_v5.0_20210906.zip	UCP/Toolkit_v5.2_2020325.zip	
Main Mediatek ZIP	Vendor	Component	Filename	Filename	Filename	Filename	Notes
Pitachi	UCP or Mediatek		KCPCH-Base_Mediatek_v5.0_20210906.zip	KCPCH-Base_Mediatek_v5.0_20210906.zip	KCPCH-Base_Mediatek_v5.2_20220307.zip	KCPCH-Base_Mediatek_v5.2_20220414.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMware Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common across all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP HC Interoperability Matrix

UCP HC

Hardware

		UCP HC (Release Version)		v3.5 Update		v4.6			Notes
		Release date	Major vSphere Release:	June 1st, 2020		GA - April 15, 2021			
				6.5U3	6.7U3	6.5U3EP23, Build 17167537	6.7U3 P04, Build 17167734	7.0u1c, Build 17325551	
Compute Nodes (Based off DS120):									
Components									
BIOS		3816.H00	3816.H00	3819.H00	3819.H00	3819.H00	3819.H00	3819.H00	
BMC		4.64.06	4.64.06	4.68.06	4.68.06	4.68.06	4.68.06	4.68.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		Skylake / Cascade Lake		Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	
Compute Nodes (Based off DS220):									
Components									
BIOS		3816.H00	3816.H00	3819.H00	3819.H00	3819.H00	3819.H00	3819.H00	
BMC		4.64.06	4.64.06	4.68.06	4.68.06	4.68.06	4.68.06	4.68.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		Skylake / Cascade Lake		Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	
Compute Nodes (Based off DS225):									
Components									
BIOS		3816.H00	3816.H00	3819.H00	3819.H00	3819.H00	3819.H00	3819.H00	
BMC		4.64.06	4.64.06	4.68.06	4.68.06	4.68.06	4.68.06	4.68.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		Skylake / Cascade Lake		Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	
Compute Nodes (Based off DS240):									
Components									
BIOS		3816.H00	3816.H00	3819.H00	3819.H00	3819.H00	3819.H00	3819.H00	
BMC		4.64.06	4.64.06	4.68.06	4.68.06	4.68.06	4.68.06	4.68.06	
CMC		N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CPLD		Rev11	Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		Skylake		Skylake	Skylake	Skylake	Skylake	Skylake	
I/O Card Support for DS120/220/225									
Components									
Network Cards (Options)									
Intel X527-D4, 10GbE quad-port, OCP Mezz VID=8086, DVID=3743, SVID=152d, SSID=8a3f or 8a41	Firmware 40en Driver (ESX)	3.2d 1.5.6	4.00 1.7.17	4.00 1.7.17	4.00 1.7.17	4.00 1.7.17	4.00 1.7.17	4.00 VMWare Inbox - 1.8.1.136	Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+"
Intel X557-T4, 10GbBase-T quad-port, OCP Mezz VID=8086, DVID=3742, SVID=152d, SSID=8a3f	Firmware 40en Driver (ESX)	3.2d 1.5.6	4.00 1.7.17	4.00 1.7.17	4.00 1.7.17	4.00 1.7.17	4.00 VMWare Inbox - 1.8.1.136	Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"	
BIOS		6.0.1	3821.H01	6.8	6.8	6.8	6.8 - or higher	Listed on VMware HCL as: "Intel(R) Ethernet Network Adapter XXV710-2"	
BMC		1.5.6	4.89.06	1.7.17	1.7.17	1.7.17	VMWare Inbox - 1.8.1.136	Listed on VMware HCL as: "ON 25GbE ConnectX-4 LX EN Dual port"	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240) VID=15b3, DVID=1015, SVID=152d, SSID=8a15	Firmware nmlx4_core Driver (ESX)	14.23.1020	VMWare portal.	14.23.1020	14.23.1020	14.23.1020	VMWare Inbox - 4.19.16.10	Listed on VMware HCL as: "ConnectX-4 Lx EN NIC, 25GbE; dual-port SFP28; (MCX4121A-ACA)"	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-M2 (PCIe) VID=15b3, DVID=1015, SVID=152d, SSID=0003	Firmware nmlx4_core Driver (ESX)	N/A	N/A	N/A	N/A	N/A	VMWare Inbox - 4.19.16.10	Listed on VMware HCL as: "ConnectX-4 Lx EN NIC, 25GbE; dual-port SFP28; (MCX4121A-ACA)"	
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16 (Only for V220 Hybrid and V220P) VID=15b3, DVID=1017, SVID=15b3, SSID=0007	Firmware nmlx4_core Driver (ESX)	14.23.1020	14.23.1020	14.23.1020 (16.23.1020)	14.23.1020 (16.23.1020)	14.23.1020 (16.23.1020)	VMWare Inbox - 4.19.16.10	Listed on VMware HCL as: "ConnectX-5 Lx EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"	
HBA Controller									
	Firmware	N/A	N/A	12.6.182.8	12.6.182.8	12.6.182.8	12.6.182.8 - or higher		
Emulex LPe31002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e310									Listed on VMware HCL as: "Emulex LightPulse LPe31002-M6 2-Port 16Gb Fibre Channel Adapter" *HBA is OPTIONAL on HC nodes.
	lpfc Driver (ESX)	N/A	N/A	12.6.182.2	12.6.182.2	12.6.182.2	VMWare Inbox - 12.6.278.10		
Emulex LPe32002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e300									Listed on VMware HCL as: "Emulex LightPulse LPe31002-M6 2-Port 16Gb Fibre Channel Adapter" *HBA is OPTIONAL on HC nodes.
	lpfc Driver (ESX)	N/A	N/A	12.6.182.2	12.6.182.2	12.6.182.2	VMWare Inbox - 12.6.278.10		
RAID Controller									
Broadcom SAS3516 2GB RAID Mezzanine	Firmware	N/A	N/A	5.040.00-1123	5.040.00-1123	5.040.00-1123	5.040.00-1123 - or higher	Listed on VMware HCL as: "QS-35168-R6-PD32"	
Broadcom 9460-16i VID=1000, DVID=0014, SVID=1000, SSID=9460	lsi-mr3 Driver (ESX)	N/A	N/A	7.707.11.0	7.707.11.0	7.707.11.0	VMWare Inbox - 7.712.51.00	Listed on VMware HCL as: "MegaRAID SAS 9460-16i". Used for RAID boot devices on exceptions.	
SAS Controller									
Q3-3216 Mezz Card (only for DS120/220)	Firmware	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A22 (16.00.09.00)	Listed on VMware HCL as: "QS-3216"	
Broadcom SAS9305-16i PCIe (only for DS225)	lsi_msgpt3 Driver (ESX)	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	VMWare Inbox -17.00.10.0	Only for DS120 and DS220 LFF	
	Firmware	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	Listed on VMware HCL as: "9305-16i"	
	lsi_msgpt3 Driver (ESX)	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	VMWare Inbox -17.00.10.0	Only for DS225 and DS220 SFF	
Drives for vSAN Cache and Capacity (Options) for DS120/220/225									
Components									
Intel SSD DC P5600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	QDV1010D	QDV1010D	QDV1010D	QDV1010D	QDV1010D	Not compatible with DS225
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	Not compatible with DS225
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	Not compatible with DS225
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	Not compatible with DS225
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	QDV1010D1	Not compatible with DS225
Intel Optane SSD DC P4800 Series NVMe (NVMe, 375GB, 2.5" U2) (All except DS225)	Firmware	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	Not compatible with DS225
Intel Optane SSD DC P4800X Series NVMe (NVMe, 350GB, 2.5" U2) (All except DS225)	Firmware	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	Not compatible with DS225
NVMe Driver									
	Driver (ESX)	Intel-nvme-vmd 1.6.0.1003 (Async driver)	Intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.8.1.1001 (Async driver)	intel-nvme-vmd 1.8.1.1001 (Async driver)	intel-nvme-vmd 1.8.1.1001 (Async driver)	VMWare Inbox - iavmd 2.0.0.1152		
Intel SSD DC S4500 Series	Firmware	SCV10121	SCV10121	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	* Requires SAS Controller * The min. version as listed on The VMware CG * Strongly suggested to use recommended version.
Intel SSD DC S4510 Series	Firmware	XCV10100	XCV10100	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	* Requires SAS Controller * The min. version as listed on The VMware CG * Strongly suggested to use recommended version.
Intel SSD DC S4600 Series	Firmware	SCV10121	SCV10121	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	* Requires SAS Controller * The min. version as listed on The VMware CG * Strongly suggested to use recommended version.
Intel SSD DC S4610 Series	Firmware	XCV10100	XCV10100	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	* Requires SAS Controller * The min. version as listed on The VMware CG * Strongly suggested to use recommended version.
Samsung SATA SSD PM863A Series	Firmware	GXT5204Q	GXT5204Q	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	Requires SAS Controller
Samsung SATA SSD PM883 Series	Firmware	HXT7304Q	HXT7304Q	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	Requires SAS Controller
Seagate SASIII HDD 10000 rpm, 2.5 inch	Firmware	E004	E004	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	Requires SAS Controller
Seagate SASIII HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	E002	E002	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	Requires SAS Controller
Intel SSD S4510 Series (240 GB, M.2 2280)	Firmware	XC311120	XC311120	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Only for DS240 Boot Device
Drives for vSAN Cache and Capacity (Options) for DS120/220									
Components									
		Versions	Versions	Versions	Versions	Versions	Versions	Notes	

Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1XXD128GPP5)	Firmware			1.2.0.5375	1.2.0.5375	1.2.0.5375	
Intel® Optane™ DC 256 GB Persistent Memory Module (NMA1XXD256GPP5)	Firmware			1.2.0.5375	1.2.0.5375	1.2.0.5375	
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1XXD512GPP5)	Firmware			1.2.0.5375	1.2.0.5375	1.2.0.5375	
GPU for DS225							
Components		Versions	Versions	Versions	Versions		Notes
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	440.53	440.53	450.55	460.32	460.32	
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	440.53	440.53	450.55	460.32	460.32	
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	440.53	440.53	450.55	460.32	460.32	
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	440.53	440.53	450.55	460.32	460.32	
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	440.53	440.53	450.55	460.32	460.32	
		440.53	440.53	450.55	460.32	460.32	
Software							
Software Versions							
Vendor	Component	Versions	Versions	Versions	Versions		Notes
SAS Controller							
VMware	ESXi	6.5U3 (Build # 14320405)	6.7U3 (Build # 15160138)	6.5U3 P06 (Build #17477841)	6.7U3 EP18 (Build # 17499825)	7.0U2 (Build# 17630552)	
VMware	vCenter(VCSA)	6.5U3 (Build # 14020092)	6.7U3 (Build # 15976714)	6.5U3n (Build # 17590285)	6.7U3L (Build # 17138064)	7.0U2 (Build# 17694817)	
VMware	VSAN	6.6.1	6.7	6.6.1	6.7	7.0	
Downloadable ZIPs							
Vendor	Component	Filename	Filename	Filename	Filename		Notes
Hitachi	Server Firmware ZIP	Server_Firmware_20200129.zip	Server_Firmware_20200129.zip	Server_Firmware_20210405.zip	Server_Firmware_20210405.zip	Server_Firmware_20210405.zip	
Hitachi	Adapter Firmware ZIP			Adapter_Firmware_20210405.zip	Adapter_Firmware_20210405.zip	Adapter_Firmware_20210405.zip	
Hitachi	MIB Packages)			MIB_20210405v2.zip	MIB_20210405v2.zip	MIB_20210405v2.zip	Only Quanta MIBs currently
Hitachi	VMware Software ZIP	vSphere6.5U3_20190923.zip	vSphere6.7U3b_20200601.zip	vSphere6.5u3P06-171477841-20210224.zip	vSphere6.7u3EP18-17499825_20210224.zip	vSphere7.0u2-17630552_20210405.zip	
Hitachi	UCPToolkit ZIP	UCPToolkit_20200601.zip	UCPToolkit_20200601.zip	UCPToolkit_v4.6_20210405.zip	UCPToolkit_v4.6_20210405.zip	UCPToolkit_v4.6_20210405.zip	
Main Mediakit ZIP							
Vendor	Component	Filename	Filename	Filename	Filename		Notes
Hitachi	JCP HC Mediakit	JCPHC_MEDIKIT_V3.5.1_20200601.zip	JCPHC_MEDIKIT_V3.5.1_20200601.zip	JCPHC_Mediakit_v20210405.zip	JCPHC_Mediakit_v20210405.zip	JCPHC_Mediakit_v20210405.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMware Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx_core Driver) we identify the version that is common across all adapters.

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	440.53	450.55
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	440.53	450.55

UCPCI-HC_Base_Mediakit_v8.1_20230725.zip

UCP HC Interoperability Matrix

UCP HC

Hardware

UCP HC (Release Version)		v3.5 Update		v3.6.03		
Release date		June 1st, 2020	6.7U3	Updated - October 31st, 2020		
Major vSphere Release:		6.5U3		6.5U3EP21, Build 16901156	6.7U3 EP16, Build 16901156	7.0 GA, Build 15843807
Compute Nodes (Based off DS120):						
Components	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	3B16.H00	3B16.H00	3B17.H00	3B17.H00	3B17.H00	
BMC	4.64.06	4.64.06	4.66.06	4.66.06	4.66.06	
CPD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	
Compute Nodes (Based off DS220):						
Components	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	3B16.H00	3B16.H00	3B17.H00	3B17.H00	3B17.H00	
BMC	4.64.06	4.64.06	4.66.06	4.66.06	4.66.06	
CPD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	
Compute Nodes (Based off DS225):						
Components	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	3B16.H00	3B16.H00	3B17.H00	3B17.H00	3B17.H00	
BMC	4.64.06	4.64.06	4.66.06	4.66.06	4.66.06	
CPD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	
Compute Nodes (Based off DS240):						
Components	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	3B16.H00	3B16.H00	3B17.H00	3B17.H00	3B17.H00	
BMC	4.64.06	4.64.06	4.66.06	4.66.06	4.66.06	
CPD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family	Skylake	Skylake	Skylake	Skylake	Skylake	
I/O Card Support for DS120/220/225						
Components	Versions	Versions	Versions	Versions	Versions	Notes
Network Cards (Options)						
Intel X527-DA4, 10GbE quad-port, OCP Mezz VIB=8086, DVID=3742, SVID=1526, SSID=8a3f	Firmware	3.24	4.00	4.00	4.00	4.00
	40dm Driver (ESX)	1.5.6	1.7.17	1.7.17	1.7.17	VMWare Inbox - 1.8.1.16
Intel X557-T4, 10GbE-T quad-port, OCP Mezz VIB=8086, DVID=3742, SVID=1526, SSID=8a3f	Firmware	3.24	4.00	4.00	4.00	4.00
	40dm Driver (ESX)	1.5.6	1.7.17	1.7.17	1.7.17	VMWare Inbox - 1.8.1.16
Intel XCV710-DA2, 10/25/40GbE dual port, PCIe VIB=8086, DVID=1580, SVID=8086, SSID=0002	Firmware	6.0.1	7.30	4.00	6.8 - or higher	6.8 - or higher
	40dm Driver (ESX)	1.5.6	1.7.17	1.7.17	VMWare Inbox - 1.8.1.16	VMWare Inbox - 1.8.1.16
	Firmware	14.23.1020	VMware portal.	14.23.1020	14.23.1020	14.23.1020 - or higher
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240) VIB=1563, DVID=1015, SVID=1526, SSID=8a35	rmix4_core Driver (ESX)	N/A	N/A	N/A	N/A	N/A
	rmix5_core Driver (ESX)	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.7
	Firmware	14.23.1020	14.23.1020	14.23.1020	14.23.1020 - or higher	14.23.1020 - or higher
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MO2 (PCIe) VIB=1563, DVID=1015, SVID=1580, SSID=0003	rmix4_core Driver (ESX)	N/A	N/A	N/A	N/A	N/A
	rmix5_core Driver (ESX)	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.7
	Firmware	14.23.1020	14.23.1020	14.23.1020	14.23.1020 - or higher	14.23.1020 - or higher
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe v16 (Only for V220 Hybrid and V220P) VIB=1563, DVID=1017, SVID=1563, SSID=0007	rmix4_core Driver (ESX)	N/A	N/A	N/A	N/A	N/A
	rmix5_core Driver (ESX)	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.7
HBA Controller						
	Firmware	N/A	N/A	12.0.193.13	12.6.182.8	12.6.182.8
Emulex LPe31002 FC HBA						
VIB=10df, DVID=300, SVID=10df, SSID=310	ipfc Driver (ESX)	N/A	N/A	12.0.193.14	12.0.193.14	VMWare Inbox - 12.4.293.3
Emulex LPe32002 FC HBA						
VIB=10df, DVID=300, SVID=10df, SSID=300	ipfc Driver (ESX)	N/A	N/A	12.0.193.14	12.0.193.14	VMWare Inbox - 12.4.293.3
RAID Controller						
Broadcom SAS3516 ZGB RAID Mezzanine	Firmware	N/A	N/A	5.040.00.1123	5.040.00.1123	5.040.00.1123
	br-m3 Driver (ESX)	N/A	N/A	7.207.11.0	7.207.11.0	VMWare Inbox - 7.712.50.00
Broadcom 9440-16i VIB=1000, DVID=9014, SVID=1000, SSID=9440	Firmware	N/A	N/A	5.070.00.1615	5.070.00.1615	5.070.00.1615
	br-m3 Driver (ESX)	N/A	N/A	7.207.11.0	7.207.11.0	VMWare Inbox - 7.712.50.00
SAS Controller						
CS-3216 Mezz Card (only for DS120/220)	Firmware	[A14 (15.00.00.00) (20190530)]	[A14 (15.00.00.00) (20190530)]	[A14 (15.00.00.00) (20190530)]	[A14 (15.00.00.00) (20190530)]	[A22](16.00.09.00)
	lsi_mega3 Driver (ESX)	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	VMWare Inbox - 17.00.10.00
Broadcom SAS9305-6i PCIe (only for DS225)	Firmware	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	16.00.90.00
	lsi_mega3 Driver (ESX)	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	16.00.00.00-10EM	VMWare Inbox - 17.00.10.00
Drives for vSAN Cache and Capacity (Options) for DS120/220/225						
Components	Versions	Versions	Versions	Versions	Versions	Notes
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	80V101H0	80V101H0	80V101H0
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	80V101D1	80V101D1	80V101D1	80V101D1	80V101D1
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10131	VDV10131	VDV10131	VDV10170	VDV10170
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	80V101D1	80V101D1	80V101D1	80V101D1	80V101D1
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10140	VDV10140	VDV10170	VDV10170	VDV10170
Intel Optane SSD DC P4800X Series NVMe (NVMe, 3.5" 2.5" U2) (All except DS225)	Firmware	82010435	82010435	82010475	82010475	82010475
Intel Optane SSD DC P4800X Series NVMe (NVMe, 3.5" 2.5" U2) (All except DS225)	Firmware	82010435	82010435	82010475	82010475	82010475
NVMe Driver	Driver (ESX)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.8.1.1001 (Async driver)	intel-nvme-vmd 1.8.1.1001 (Async driver)	VMWare Inbox - nvme-pcie 1.2.2.13
Intel SSD DC S4500 Series	Firmware	SCV10121	SCV10121	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150
Intel SSD DC S4510 Series	Firmware	KCV10100	KCV10100	Min = KCV10100 / Recommended = KCV10132	Min = KCV10100 / Recommended = KCV10132	Min = KCV10100 / Recommended = KCV10132
Intel SSD DC S4600 Series	Firmware	SCV10121	SCV10121	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150
Intel SSD DC S4610 Series	Firmware	KCV10100	KCV10100	Min = KCV10100 / Recommended = KCV10132	Min = KCV10100 / Recommended = KCV10132	Min = KCV10100 / Recommended = KCV10132
Samsung SATA SSD PM883a Series	Firmware	6XT5204Q	6XT5204Q	6XT5204Q - or higher	6XT5204Q - or higher	6XT5204Q - or higher
Seagate SATA HDD 10000 rpm, 3.5 inch	Firmware	E004	E004	E004 - or higher	E004 - or higher	E004 - or higher
Seagate SATA HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	E002	E002	E002 - or higher	E002 - or higher	E002 - or higher
Intel X527-DA4, 10GbE quad-port, OCP Mezz VIB=8086, DVID=3742, SVID=1526, SSID=8a3f	Firmware	KC311120	Min = KC311120 / Recommended KC311133	Min = KC311120 / Recommended KC311133	Min = KC311120 / Recommended KC311133	Min = KC311120 / Recommended KC311133
Drives for vSAN Cache and Capacity (Options) for DS120/220						
Components	Versions	Versions	Versions	Versions	Versions	Notes
Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1XKD128GP5)	Firmware	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375
Intel® Optane™ DC 32 GB Persistent Memory Module (NMA1XKD32GP5)	Firmware	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1XKD512GP5)	Firmware	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375
GPU for DS225						
Components	Versions	Versions	Versions	Versions	Versions	Notes
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	440.53	440.53	450.55	450.55	450.55
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	440.53	440.53	450.55	450.55	450.55
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	440.53	440.53	450.55	450.55	450.55
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	440.53	440.53	450.55	450.55	450.55
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	440.53	440.53	450.55	450.55	450.55

Software						
Software Versions						
Vendor	Component	Versions	Versions	Versions	Versions	Notes
Krsta	DLS-7010F-48-R	4.22-AM	4.22-AM	4.22-AM	4.23.5m	4.23.5m
VMware	ESX	6.5U3 (Build # 14320405)	6.7U3 (Build # 15160338)	6.5U3 EP21 (Build # 16901156)	6.7U3 EP16 (Build # 16773714)	7.0GA (Build# 15843807)
VMware	vCenter(VCSA)	6.5U3 (Build # 14020092)	6.7U3 (Build # 15976714)	6.5U3L (Build # 16764584)	6.7U3L (Build # 16708996)	7.0GA (Build# 15952498)
VMware	VSAN	6.6.1	6.7	6.6.1	6.7	7.0
Hitachi	UCP Advisor	3.5*	3.5*	3.5.1 or higher	3.8 or higher	
Downloadable ZIPs						
Vendor	Component	Filename	Filename	Filename	Filename	Notes
Hitachi	Server Firmware ZIP	Server_Firmware_20200129.zip	Server_Firmware_20200129.zip	Server_Firmware_20201031.zip	Server_Firmware_20201031.zip	Server_Firmware_20201031.zip
Hitachi	VMware Software ZIP	vSphere6-SU3_20190923.zip	vSphere6-7U36_20200601.zip	vSphere6-SU3-EP21_20201031.zip	vSphere6-7U3-EP16_20201031.zip	vSphere7.0GA_20200803.zip
Hitachi	UCP Toolkit ZIP	UCPToolkit_20200601.zip	UCPToolkit_20200601.zip	UCPToolkit_20201031.zip	UCPToolkit_20201031.zip	UCPToolkit_20201031.zip
Main Mediakit ZIP						
Vendor	Component	Filename	Filename	Filename	Filename	Notes
Hitachi	UCP HC Mediakit	UCPHC_MEDIKIT_V3.5.1_20200601.zip	UCPHC_MEDIKIT_V3.5.1_20200601.zip	UCPHC_MEDIKIT_V3.6_20201031.zip	UCPHC_MEDIKIT_V3.6_20201031.zip	UCPHC_MEDIKIT_V3.6_20201031.zip

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMware Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common across all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

VMware	VSAN	6.6.1	6.7
Downloadable ZIPs			

7.0

UCPCHC_Base_Mediakit_v8.1_20230725.zip

UCP HC Interoperability Matrix

UCP HC v3.6

Hardware

UCP HC (Release Version)	v3.0.0			v3.0.0			v3.5.1		
	Release date	September 30th, 2019		December 2nd, 2019		February 14th, 2020			
Major vSphere Release:	6.5U3	6.7U3	6.5U3	6.7U3	6.5U3	6.7U3			
Compute Nodes (Based off DS120):	V120F/V121F/V120 Hybrid/V123F/V124N								
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes	
BIOS	B814.H01	B814.H01	B814.H01	B814.H01	B814.H01	B816.H00	B816.H00		
BMC	4.62.06	4.62.06	4.62.06	4.62.06	4.62.06	4.64.06	4.64.06		
CPUD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11		
CPU Family	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake		
Compute Nodes (Based off DS220):	V220 Hybrid/V220F								
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes	
BIOS	B814.H01	B814.H01	B814.H01	B814.H01	B814.H01	B816.H00	B816.H00		
BMC	4.61.06	4.61.06	4.62.06	4.62.06	4.62.06	4.64.06	4.64.06		
CPUD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11		
CPU Family	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake		
Compute Nodes (Based off DS225):	V225G								
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes	
BIOS	B814.H01	B814.H01	1.3092.0 or higher (SPV 7.30)	B814.H01	B814.H01	B816.H00	B816.H00		
BMC	4.62.06	4.62.06	R.10 or higher (SPV 7.30)	4.62.06	4.62.06	4.64.06	4.64.06		
CPUD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11		
CPU Family	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake	SkyLake / Cascade Lake		
Compute Nodes (Based off DS240):	N/A								
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes	
BIOS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Newly added for UCP HC v3.5.1 Update	
BMC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Newly added for UCP HC v3.5.1 Update	
CMC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Newly added for UCP HC v3.5.1 Update	
CPUD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Newly added for UCP HC v3.5.1 Update	
CPU Family	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Newly added for UCP HC v3.5.1 Update	
I/O Card Support for DS120/220/225									
Components	Versions	Versions	VMware Compatibility Guide Link	Versions	Versions	Versions	Versions	Notes	
Network Cards (Options)									
Intel X57-DA4, 10GbE quad-port, OCP Mezz	Firmware iH0en Driver (ESXi)	3.2d 1.5.6	4.00 1.7.17	3.2d 1.5.6	4.00 1.7.17	3.2d 1.5.6	4.00 1.7.17	Listed on VMware HCL as: Intel(R) Ethernet Connection X722 for 10GbE SFP+	
Intel X557-T4, 10GbBase-T quad-port, OCP Mezz	Firmware iH0en Driver (ESXi)	3.2d 1.5.6	4.00 1.7.17	3.2d 1.5.6	4.00 1.7.17	3.2d 1.5.6	4.00 1.7.17	Listed on VMware HCL as: Intel(R) Ethernet Connection X722 for 10GbBase-T*	
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	Firmware iH0en Driver (ESXi)	3.2d 1.5.6	4.00 1.7.17	3.2d 1.5.6	4.00 1.7.17	3.2d 1.5.6	4.00 1.7.17		
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240)	Firmware mmlm4_core Driver (ESXi)	14.23.1020 N/A	VMware portal. N/A	This is not yet listed on VMware portal. N/A	14.23.1020 N/A	14.23.1020 N/A	14.23.1020 N/A	*ON 25GbE ConnectX-4 Lx EN Dual port*	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2 (PG0)	Firmware mmlm4_core Driver (ESXi)	4.16.14.2 14.23.1020	4.17.14.2 14.23.1020	4.16.14.2 14.23.1020	4.17.14.2 14.23.1020	4.16.14.2 14.23.1020	4.17.14.2 14.23.1020	FW 14.21.1000 supported with driver 4.16.12.12 Async driver	
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16 (Only for V220 Hybrid and V220F)	Firmware mmlm5_core Driver (ESXi)	4.16.14.2 14.23.1020	4.17.14.2 14.23.1020	4.16.14.2 14.23.1020	4.17.14.2 14.23.1020	4.16.14.2 14.23.1020	4.17.14.2 14.23.1020	Listed on VMware HCL as: *ConnectX-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCKX516A-CCAT)	
HBA Controller									
Emulex LPe32002 FC HBA	Firmware	N/A	N/A	N/A	N/A	N/A	N/A		
	ipfc Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A		
Emulex LPe32002 FC HBA	Firmware	N/A	N/A	N/A	N/A	N/A	N/A		
	ipfc Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A		
RAID Controller									
Broadcom SAS3516 Z68 RAID Mezzanine	Firmware bism3 Driver (ESXi)	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A		
SAS Controller									
25-3216 Mezz Card (only for DS120/220)	Firmware ni_megst3 Driver (ESXi)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	Only for DS120 and DS220 LFF	
Broadcom SAS9305-16i PCIe (only for DS225)	Firmware ni_megst3 Driver (ESXi)	15.00.00.00 16.00.00.00-10EIM	15.00.00.00 16.00.00.00-10EIM	15.00.00.00 16.00.00.00-10EIM	15.00.00.00 16.00.00.00-10EIM	15.00.00.00 16.00.00.00-10EIM	15.00.00.00 16.00.00.00-10EIM	Only for DS225 and DS220 SFF	
Drivers for vSAN Cache and Capacity (Options) for DS120/220/225									
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes	
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	Not compatible with V225G	
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	SDV10101	SDV10101	SDV10101	SDV10101	SDV10101	SDV10101	Not compatible with V225G	
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	SDV10101	SDV10101	SDV10101	SDV10101	SDV10101	SDV10101	Not compatible with V225G	
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	SDV10101	SDV10101	SDV10101	SDV10101	SDV10101	SDV10101	Not compatible with V225G	
Intel Optane SSD DC P4800X Series (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	Not compatible with V225G	
Intel Optane SSD DC P4800X Series (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	Not compatible with V225G	
Intel Optane SSD DC P4800X Series (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	Not compatible with V225G	
VMware Driver									
Intel SSD DC S4510 Series	Firmware	SCV10101	SCV10101	SCV10101	SCV10101	SCV10101	SCV10101	Requires SAS Controller	
Intel SSD DC S4510 Series	Firmware	SCV10101	SCV10101	SCV10101	SCV10101	SCV10101	SCV10101	Requires SAS Controller	
Intel SSD DC S4600 Series	Firmware	SCV10101	SCV10101	SCV10101	SCV10101	SCV10101	SCV10101	Requires SAS Controller	
Intel SSD DC S4600 Series	Firmware	SCV10101	SCV10101	SCV10101	SCV10101	SCV10101	SCV10101	Requires SAS Controller	
Samsung SATA SSD PM883a Series	Firmware	6XTS204Q	6XTS204Q	6XTS204Q	6XTS204Q	6XTS204Q	6XTS204Q	Requires SAS Controller	
Samsung SATA SSD PM883 Series	Firmware	HXT7304Q	HXT7304Q	HXT7304Q	HXT7304Q	HXT7304Q	HXT7304Q	Requires SAS Controller	
Seagate SK01 HDD 10000 rpm, 3.5 inch	Firmware	0004	0004	0004	0004	0004	0004	Requires SAS Controller	
Seagate SAS11 HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	0002	0002	0002	0002	0002	0002	Requires SAS Controller	
Intel PCD S4510 Series (240 GB, M.2 2280)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	Only for DS240 Boot Device	
CPU for DS225									
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes	
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere								
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	390.94	390.94	390.94	390.94	390.94	390.94		
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	390.94	390.94	390.94	390.94	390.94	390.94		
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	390.94	390.94	390.94	390.94	390.94	390.94		
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	390.94	390.94	390.94	390.94	390.94	390.94		
		N/A	N/A	N/A	N/A	N/A	N/A		
Software									
Software Versions									
Vendor	Component	Versions	Versions	Versions	Versions	Versions	Versions	Notes	
VMware	ESXi	6.5U3 (Build # 14320405)	6.7U3 (Build # 14320388)	6.7U3 (Build # 14320388)	6.7U3 (Build # 14320388)	6.5U3 (Build # 14320405)	6.7U3 (Build # 14320388)		
VMware	vCenter(VCSA)	6.5U3 (Build # 14200092)	6.7U3 (Build # 14367737)	6.5U3 (Build # 14200092)	6.7U3 (Build # 14367737)	6.5U3 (Build # 14200092)	6.7U3 (Build # 14367737)		
VMware	vSAN	8.6.1	8.7	8.6.1	8.7	8.6.1	8.7		
Hitachi	vCP Advisor	1.0	1.0	1.5*	1.5*	1.5*	1.5*	* Requires at least VCSA 6.5U2C * When available	
Downloadable ZIPs									
Vendor	Component	Filename	Filename	Filename	Filename	Filename	Filename	Notes	
Hitachi	Server Firmware ZIP	Server_Firmware_20190923.zip	Server_Firmware_20190923.zip	Server_Firmware_20190923.zip	Server_Firmware_20190923.zip	Server_Firmware_20200129.zip	Server_Firmware_20200129.zip		
Arista	CL-37050X3-48YC-R	4.31.6F	4.31.6F	4.31.6F	4.31.6F	4.31.6F	4.31.6F	4.32.4M	
Hitachi	VMware Software ZIP	vSphere6.5U3_20190923.zip	vSphere6.7U3_20190923.zip	vSphere6.5U3_20190923.zip	vSphere6.7U3_20190923.zip	vSphere6.5U3_20190923.zip	vSphere6.7U3_20190923.zip		
Hitachi	vCP Toolkit ZIP	vCPToolkit_20190923.zip	vCPToolkit_20190923.zip	vCPToolkit_2019126.zip	vCPToolkit_2019126.zip	vCPToolkit_20200205.zip	vCPToolkit_20200205.zip		
Main MediaKit ZIP									
Vendor	Component	Filename	Filename	Filename	Filename	Filename	Filename	Notes	
Hitachi	UCP HC MediaKit	UCPHC_MEDIAKIT_V3.0.0_20190923.zip	UCPHC_MEDIAKIT_V3.0.0_20190923.zip	UCPHC_MEDIAKIT_V3.5.0_20191127.zip	UCPHC_MEDIAKIT_V3.5.0_20191127.zip	UCPHC_MEDIAKIT_V3.5.1_20200205.zip	UCPHC_MEDIAKIT_V3.5.1_20200205.zip		

[Redacted]

[Redacted]

Hitachi	UCPToolkit ZIP	UCPToolkit_20190923.zip	UCPToolkit_20190923.zip	UCPToolkit_20191126.zip	UCPToolkit_20191126.zip	UCPToolkit_20191126.zip	UCPToolkit_20200205.zip
Main Mediakit ZIP							

535.104.06 or higher

UCPCH-Base_Mediakit_v8.1_20230725.zip

UCPCH-Base_Mediakit_v8.6_20240116.zip



535.104.06 or higher

UCFD-HC_Base_MediaKit_v8.1_20230725.zip

UCFD-HC_MediaKit_v8.6_20240116.zip

UCP HC Interoperability Matrix

UCP HC v1.0 - v2.3.0

Hardware

UCP HC (Release Version)	v1.0 September 7th, 2017		v1.0 January 8, 2018		v2.0 November 20, 2017		v2.1 April 9th, 2018		v1.1 April 9th, 2018		v2.2 June 4th, 2018		v2.3.0 August 6th, 2018	
Major vSphere Release:	6.5U1		6.5U1		6.5U1		6.5U1		6.5U1		6.5U2		6.5U2	
Compute Nodes (Based off DS120):	V120F		N/A		V120F/V121F		V120F/V121F		N/A		V120F/V121F/V120 Hybrid/V123F		N/A	
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	A408.H2	N/A	A408.H2	A408.H3	N/A	A408.H3	A410.H3	N/A	A410.H3	A410.H3	A410.H3	A410.H3	N/A	
CMC	3.75.06	N/A	3.75.06	3.75.06	N/A	3.75.06	3.75.06	N/A	3.75.06	3.75.06	3.75.06	3.75.06	N/A	
CPUD	Rev9	N/A	Rev9	Rev10	N/A	Rev10	Rev10	N/A	Rev10	Rev10	Rev10	Rev10	N/A	
CPU Family	Skylake		N/A		Skylake		Skylake		N/A		Skylake		N/A	

Compute Nodes (Based off DS225):	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CMC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CPUD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CPU Family	N/A		N/A		N/A		N/A		N/A		N/A		N/A	

I/O Card Support for DS120/220/225	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes
Network Cards (Options)	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Notes
Intel X710-Q41, 10GbE quad port, OCP Mezz	1.2d	1.2d	1.2d	1.2d	1.2d	1.2d	1.2d	1.2d	1.2d	1.2d	1.2d	1.2d	1.2d	Not on VMware HCL as Intel(R) Ethernet Connection X722 for 10GbE SFP+

RAID Controller	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
RAID Controller	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Notes
Broadcom 9405-16i PCIe (only for DS225)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

GPU for DS225	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
GPU for DS225	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Firmware	Notes
NVIDIA Tesla M10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Software

Software Versions	v1.0		v1.0		v2.0		v2.1		v1.1		v2.2		v2.3.0	
Vendor	Component	Version	Version	Version	Version	Version	Version	Version	Version	Version	Version	Version	Version	Notes
VMware	ESXi	6.5U1 (Build # 5969303)	6.5U1 (Build # 5969303)	6.5U1 (Build # 6165564)	6.5U1 (Build # 7388607)	6.5U1 (Build # 7388607)	6.5U2 (Build # 8294253)	6.5U2 (Build # 8294253)	6.5U1 (Build # 8307201)	6.5U1 (Build # 8307201)	6.5U1 (Build # 8307201)	6.5U1 (Build # 8307201)	6.5U2 (Build # 8307201)	
VMware	VCSA	6.6.1	6.6.1	6.6.1	6.6.1	6.6.1	6.6.1 U2	6.6.1 U2	6.6.1 U2	6.6.1 U2	6.6.1 U2	6.6.1 U2	6.6.1 U2	
Hitschi	UCP Advisor	2.0	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	* Requires at least VCSA 6.5U2c

Downloadable ZIPS	v1.0		v1.0		v2.0		v2.1		v1.1		v2.2		v2.3.0	
Vendor	Component	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Notes
Hitschi	Server Firmware ZIP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Hitschi	VMware Software ZIP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Main Medaikit ZIP	v1.0		v1.0		v2.0		v2.1		v1.1		v2.2		v2.3.0	
Vendor	Component	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Filename	Notes
Hitschi	UCP HC Medaikit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	



535.104.06 or higher

UCPCI-HC_Base_Mediakit_v8.1_20230725.zip

UCPCI-HC_Mediakit_v8.6_20240116.zip

Hitachi Unified Compute Platform HC for VMware

UCP HC V210/V210F (*)										
Hardware										
Compute Nodes:		D51B-2U (2U1N)								
UCP HC (Media Kit Version)		1.0	2.0	3.0	4.0	5.0	6.0		6.1	
Release date		January 1, 2017	April 19, 2017	July 17, 2017	August 15, 2017	December 18, 2017	October 25, 2018		July 15th, 2019	
Components	Versions	Versions	Versions	Versions	Versions	versions	versions	versions	versions	versions
BIOS	S25_3B09.01	S25_3B09.01	S25_3B09.01	S25_3B09.01	S25_3B09.01	S2B_3B10.03	S2B_3B10.03	S2B_3B10.03	S2B_3B19.02	S2B_3B19.02
BMC	3.51	3.51	3.51	3.51	3.51	3.66	3.66	3.66	3.73	3.73
CPUD	09	Rev 9	Rev 9	Rev 9	Rev 9	Rev9	Rev9	Rev9	Rev9	Rev9
CPU Family	Haswell/Broadwell	Haswell/Broadwell	Haswell/Broadwell	Haswell/Broadwell	Haswell/Broadwell	Haswell/Broadwell	Haswell/Broadwell	Haswell/Broadwell	Haswell/Broadwell	Haswell/Broadwell
Network Cards (Options)										
Intel Dual Port 10GigE SFP+ 82599ES OCP Mezz Card, and PCI Card	Driver (ESXi)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)
Dual port GigE Base-T Intel i350 Mezz Card	Driver (ESXi)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)
Dual port 10GigE Base-T Intel X540 Mezz Card, and PCI Card	Driver (ESXi)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)
Mellanox CX3 40/56GbE, Dual Port QSFP	Driver (ESXi)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)
I/O Controller										
LSI SAS 3008 Mezz Card	Firmware	[1A12] 09.00.00.00	[1A12] 09.00.00.00	1.3082.0 or higher (SPV 7.30)	[1A12] 09.00.00.00	[1A12] 09.00.00.00	[1A12] 09.00.00.00	[1A12] 09.00.00.00	[1A12] 09.00.00.00	[1A12] 09.00.00.00
	Driver (ESXi)	lsi_msegt3 version 10.00.00.00-10EM	lsi_msegt3 version 10.00.00.00-10EM	lsi_msegt3 version 10.00.00.00-10EM	lsi_msegt3 version 10.00.00.00-10EM	lsi_msegt3 version 10.00.00.00-10EM	lsi_msegt3 version 10.00.00.00-10EM	lsi_msegt3 version 10.00.00.00-10EM	lsi_msegt3 version 10.00.00.00-10EM	lsi_msegt3 version 10.00.00.00-10EM
Drives for vSAN Cache and Capacity (Options)										
Intel® SSD DC S3700 Series	Firmware	5DV10265	5DV10265	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Intel® SSD DC S3710 Series	Firmware	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140
Samsung SSD PM863a	Firmware	N/A	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q
Seagate SAS HDD 10k rpm, 2.5 inch	Firmware	0002	0002	0002	0002	0002	0002	0002	0002	0002
Seagate SASIII HDD 7200 rpm, 3.5 inch	Firmware	E001	E002	E002	E002	E002	E002	E002	E002	E002
Software										
Vendor	Component	Versions								
VMware	ESXi	6.0 U2 (Build # 4600944)	6.0 U3 (Build # 5050593)	6.5 (Build # 5310538)	6.5 U1 (Build # 5969303)	6.5 U1 (Build # 6765664)	6.5U2 EP 10 (Build # 10390116)	6.7.0U1-10302608	6.5U2-13635690	6.7.0U2-13644319
	vCenter (VCSA)	6.0 U2 (Build # 3634788)	6.0 U3b (Build # 5326117)	VMware Compatibility Guide Link	6.5 U1 (Build # 5973321)	6.5 U1 (Build # 5973321)	6.5U2c (Build # 9451637)	6.7.0-10244745	6.5U2c-13638625	6.7U2a-13643870
	vSAN	6.2	6.2 U3	6.6	6.6.1	6.6.1	6.6.1 EP 10	6.7.0U1	6.6.1	6.7.0U2
						Note: On the Media kit, there is a specific package to update the vSphere via Update Manager	Note: On the Media kit, there is a specific package to update the vSphere via Update Manager	Note: On the Media kit, there is a specific package to update the vSphere via Update Manager	Note: On the Media kit, there is a specific package to update the vSphere via Update Manager	Note: On the Media kit, there is a specific package to update the vSphere via Update Manager

(*) End-of-Sale

Hitachi Unified Compute Platform HC for VMware

UCP HC V240/V240F (*)																	
Hardware																	
Compute Nodes		T415-2U (2U4N)															
UCP HC (Media Kit Version)		1 (V240 only)															
Release date		May 16, 2016		September 6, 2016		April 19, 2017		August 28, 2017		November 20, 2017		June 27, 2018		October 25, 2018		July 15th, 2019	
Components		Versions		Versions		Versions		Versions		Versions		Versions		Versions		Versions	
BIOS		S25_3A18		S25_3B06		S25_3B08.02		S25_3B08.02		S25_3B09.01		S25_3B10.02		S25_3B10.03		S25_3B12	
BMC		3.36		3.42		3.51		3.51		3.58		3.66.00		3.66.00		3.77.00	
CPUD		Rev 8		Rev 8		Rev 9		Rev 9		Rev 9		Rev 9		Rev 9		Rev 9	
CMC		3.37.0_03		3.37.0_03		3.41.0_04		3.41.0_04		3.44.0_04		3.44.0_04		3.44.0_04		3.44.0_04	
CPU Family		Haswell/Broadwell		Haswell/Broadwell		Haswell/Broadwell		Haswell/Broadwell		Haswell/Broadwell		Haswell/Broadwell		Haswell/Broadwell		Haswell/Broadwell	
Network Cards (Options)																	
Intel Dual Port 10GigE SFP+ 82599ES OCP Mezz Card, and PCI Card		Driver (ESXi)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)
Dual port GigE Base-T Intel I350 Mezz Card, and PCI Card		Driver (ESXi)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)
Dual port 10GigE Base-T Intel X540 Mezz Card, and PCI Card		Driver (ESXi)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)
Mellanox CX3 40/56GbE, Dual Port QSFP Mezz Card		Driver (ESXi)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)	(inbox driver)
I/O Controller																	
SI SAS 2308 Mezz Card (Q5-2308-8i-R)		Firmware	1B03) 19.00.00.00-IT	1B03) 19.00.00.00-IT	1B03) 19.00.00.00-IT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Driver (ESXi)	mpt2sas version 19.00.00.00.1vmw	mpt2sas version 19.00.00.00.1vmw	4.10 or higher (SPV 7.30)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SI SAS 3008 Mezz Card		Firmware	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00	1A12) 09.00.00.00
		Driver (ESXi)	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM	lsi_mega3 version 10.00.00.00-10EM
Drives for vSAN Cache and Capacity (Options)																	
Intel® SSD DC S3700 Series		Firmware	5DV10265	5DV10265	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Intel® SSD DC S3710 Series		Firmware	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140	G2010140
Samsung SSD PM863a		Firmware	N/A	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q
Seagate SAS HDD 10k rpm, 2.5 inch		Firmware	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
Software																	
Vendor	Component	Version															
VMware	ESXi	6.0 U2 (Build # 3620759)	6.0 U2 (Build # 3620759)	6.5 (Build # 5310538)	6.5U1 (Build # 5969303)	6.5U1 (Build # 6765664)	6.0.0U3-6765662	6.5U2 EP 10 (Build # 10390116)	6.7.0U1-10302608	6.5U2-13635690	6.7.0U2-13644319						
	vCenter (VCSA)	6.0 U2 (Build # 3634788)	6.0 U2 (Build # 3634788)	6.5 (Build # 5318154)	6.5U1 (Build # 5973321)	6.5U1 (Build # 5973321)	6.0.0U3-30500-7977753	6.5U2c (Build # 9451637)	6.7.0-10244745	6.5U2g-13638625	6.7.0U2a-13643870						
	vSAN	6.2	6.2	6.6	6.6.1	6.6.1	Note: On the Media kit, there is a specific package to update the vSphere via Update Manager	6.6.1 EP 10	6.7.0U1	6.6.1	6.7.0U2						
						Note: On the Media kit, there is a specific package to update the vSphere via Update Manager	Note: On the Media kit, there is a specific package to update the vSphere via Update Manager	Note: On the Media kit, there is a specific package to update the vSphere via Update Manager	Note: On the Media kit, there is a specific package to update the vSphere via Update Manager	Note: On the Media kit, there is a specific package to update the vSphere via Update Manager	Note: On the Media kit, there is a specific package to update the vSphere via Update Manager						

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