



UCP Bare Metal Support Matrix Hitachi Advanced Server DS Series and DS G2 Series Product Lines

Note: Configurations added since the last matrix will be shown in **red** text.

Introduction

Use this interoperability matrix to check whether a proposed customer configuration is supported. Each page contains a set of components that together comprise an Hitachi Vantara-supported solution. This includes operating system (OS) and maintenance release, network interface cards (NIC) firmware and drivers, host bus adapter (HBA) firmware and driver, RAID/SAS Controller firmware and driver and Operating System Boot options.

Note :

If a combination does not appear on the OS support matrix, the Hitachi Vantara Sales Engineer (SE) associated with the customer or other Hitachi field service employee must submit an Aha Idea request in order to gain support for the new configuration.

Note that in some cases a component (HBA, driver, switch, switch firmware version) may no longer be supported (end of service life, EOSL) in which case the customer should choose components that are already supported from the matrix. Review the following pages for associated components.

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Table of Contents

Compatibility Matrices	Page
Table Of Contents	2
DS120 - Microsoft Windows Server	3
DS220 - Microsoft Windows Server	4
DS225 - Microsoft Windows Server	5
DS240 - Microsoft Windows Server	6
DS120 - VMware vSphere ESXi	7
DS220 - VMware vSphere ESXi	9
DS225 - VMware vSphere ESXi	11
DS240 - VMware vSphere ESXi	13
DS120 - Red Hat Enterprise Linux	15
DS220 - Red Hat Enterprise Linux	18
DS225 - Red Hat Enterprise Linux	20
DS240 - Red Hat Enterprise Linux	21
DS120 - SUSE Linux Enterprise Server	22
DS220 - SUSE Linux Enterprise Server	25
DS240 - SUSE Linux Enterprise Server	28
DS120 - Oracle Linux	29
DS220 - Oracle Linux	31
DS120 G2 - Microsoft Windows Server	33
DS220 G2 - Microsoft Windows Server	34
DS120 G2 - VMware vSphere ESXi	35
DS220 G2 - VMware vSphere ESXi	36
DS120 G2 - Red Hat Enterprise Linux	37
DS220 G2 - Red Hat Enterprise Linux	38
DS120 G2 - SUSE Linux Enterprise Server	39
DS220 G2 - SUSE Linux Enterprise Server	40
DS120 G2 - Oracle Linux	41
DS220 G2 - Oracle Linux	42

Components	Windows Server	
	2016 Versions	2019 Versions
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B16.H01	3B14.H01
BMC	4.65.06	4.62.06
CPLD	Rev10 / Rev11	Rev10 / Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	2016	2019
Network Cards				
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware	1.63.0	1.63.0
		Driver	12.15.22.6 (Inbox)	12.15.22.6 (Inbox)
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	7.30	6.80
		Driver	i40ea65.sys 1.12.171.0	i40ea68.sys 1.10.128.0
Intel X710-DA4, 10 GbE quad-port, PCIe (Note 3)	1HY1ZZZ000K.P	Firmware	7.30	7.30
		Driver	i40ea65.sys 1.12.171.0	i40ea68.sys 1.12.171.0
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz	1HYQZZZ067S.P	Firmware	14.26.1040	14.23.1020
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe	1HYQZZZ012Q.P	Firmware	14.26.1040	14.26.1040
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16	1HYQZZZ0120.P	Firmware	16.26.1040	16.26.1040
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
HBA Controllers				
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.6.240.22	12.0.193.13
		Driver	elxfc 12.6.165.0	elxstor 11.4.225.8009
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	12.6.240.22	12.0.193.13
		Driver	elxfc 12.6.165.0	elxstor 11.4.225.8009
RAID Controllers				
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.040.00-1123	5.040.00-1123
		Driver	megasas35i.sys 7.702.12.0	megasas35i.sys 7.705.8.0 (Inbox)
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	5.140.00-3185, package version: 51.14.0-3441	5.140.00-3185, package version: 51.14.0-3441
		Driver	7.713.12.00	7.705.08.00 (Inbox)
SAS Controllers				
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware	1A22 (16.00.09.00)	1A14(15.00.00.00.00)
		Driver	2.51.18.0	2.51.24.80 (Inbox)

Boot Options & VSP Interoperability	2016	2019
SATADOM Boot	Supported	Supported
Local Disk Boot	Supported	Supported
PXE Boot	Supported	Supported
VSP SAN Boot	Supported	Supported
VSP Direct Attach Boot	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for:

[DS120 Interoperability Matrix](#)

Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"

Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"

Note 3: Intel X710-DA4, 10 GbE quad-port, PCIe card has been tested with only BIOS/BMC version 316.H01/4.65.06

Components	Windows Server	
	2016	2019
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B16.H01	3B14.H01
BMC	4.65.06	4.62.06
CPLD	Rev10 / Rev11	Rev10 / Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	2016	2019
Network Cards				
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware	1.63.0	1.63.0
		Driver	12.15.22.6 (Inbox)	12.15.22.6 (Inbox)
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	7.30	6.80
		Driver	i40ea65.sys 1.12.171.0	i40ea68.sys 1.10.128.0
Intel X710-DA4, 10 GbE quad-port, PCIe (Note 3)	1HY1ZZZ000K.P	Firmware	7.30	7.30
		Driver	i40ea65.sys 1.12.171.0	i40ea68.sys 1.12.171.0
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz	1HYQZZZ067S.P	Firmware	14.26.1040	14.23.1020
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe	1HYQZZZ012Q.P	Firmware	14.26.1040	14.26.1040
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16	1HYQZZZ0120.P	Firmware	16.26.1040	16.26.1040
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
HBA Controllers				
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.6.240.22	12.0.193.13
		Driver	elxfc 12.6.165.0	elxstor 11.4.225.8009
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	12.6.240.22	12.0.193.13
		Driver	elxfc 12.6.165.0	elxstor 11.4.225.8009
RAID Controllers				
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.040.00-1123	5.040.00-1123
		Driver	megasas35i.sys 7.702.12.0	megasas35i.sys 7.705.8.0 (Inbox)
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	5.140.00-3185 package version: 51.14.0-3441	5.140.00-3185 package version: 51.14.0-3441
		Driver	7.713.12.00	7.705.08.00 (Inbox)
SAS Controllers				
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware	1A22 (16.00.09.00)	1A14(15.00.00.00.00)
		Driver	2.51.18.0	2.51.24.80 (Inbox)

Boot Options & VSP Interoperability	2016	2019
SATADOM Boot	Supported	Supported
Local Disk Boot	Supported	Supported
PXE Boot	Supported	Supported
VSP SAN Boot	Supported	Supported
VSP Direct Attach Boot	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for:

[DS220 Interoperability Matrix](#)

Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"

Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"

Note 3: Intel X710-DA4, 10 GbE quad-port, PCIe card has been tested with only BIOS/BMC version 316.H01/4.65.06

Components	Windows Server	Windows Server
	2016	2019
	Versions	Versions
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B16.H01	3B14.H01
BMC	4.65.06	4.62.06
CPLD	Rev10 / Rev11	Rev10 / Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	2016	2019
Network Cards				
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	7.30	6.80
		Driver	i40ea65.sys 1.12.171.0	i40ea68.sys 1.10.128.0
Intel X710-DA4, 10 GbE quad-port, PCIe (Note 3)	1HY1ZZZ000K.P	Firmware	7.30	7.30
		Driver	i40ea65.sys 1.12.171.0	i40ea68.sys 1.12.171.0
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz	1HYQZZZ067S.P	Firmware	14.26.1040	14.23.1020
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe	1HYQZZZ012Q.P	Firmware	14.26.1040	14.26.1040
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16	1HYQZZZ0120.P	Firmware	16.26.1040	16.26.1040
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
HBA Controllers				
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.6.240.22	12.0.193.13
		Driver	elxfc 12.6.165.0	elxstor 11.4.225.8009
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	12.6.240.22	12.0.193.13
		Driver	elxfc 12.6.165.0	elxstor 11.4.225.8009

Boot Options & VSP Interoperability		
SATADOM Boot	Supported	Supported
PXE Boot	Supported	Supported
VSP SAN Boot	Supported	Supported
VSP Direct Attach Boot	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for:

[DS225 Interoperability Matrix](#)

Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"

Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"

Note 3: Intel X710-DA4, 10 GbE quad-port, PCIe card has been tested with only BIOS/BMC version 316.H01/4.65.06

Components	Windows Server	
	2016	2019
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B16.H01	S7DH3B13.H01
BMC	4.65.06	4.60.06
CPLD	Rev10 / Rev11	Rev10 / Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	2016	2019
Network Cards				
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware	4.00	4.00
		Driver	i40ea65.sys 1.12.171.0	i40eb68.sys 1.10.130.0
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	7.30	6.80
		Driver	i40ea65.sys 1.12.171.0	i40ea68.sys 1.10.128.0
Intel X710-DA4, 10 GbE quad-port, PCIe (Note 3)	1HY1ZZZ000K.P	Firmware	7.30	7.30
		Driver	i40ea65.sys 1.12.171.0	i40ea68.sys 1.12.171.0
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz	1HYQZZZ067S.P	Firmware	14.26.1040	14.23.1020
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe	1HYQZZZ012Q.P	Firmware	14.26.1040	14.26.1040
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16	1HYQZZZ0120.P	Firmware	16.26.1040	16.26.1040
		Driver	mlx5.sys 2.30.21713.0	mlx5.sys 2.30.21713.0
HBA Controllers				
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.6.240.22	12.0.193.13
		Driver	elxfc 12.6.165.0	elxstor 11.4.225.8009
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	12.6.240.22	12.0.193.13
		Driver	elxfc 12.6.165.0	elxstor 11.4.225.8009
RAID Controllers				
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.040.00-1123	5.040.00-1123
		Driver	megasas35i.sys 7.702.12.0	megasas35i.sys 7.705.8.0 (Inbox)
SAS Controllers				
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware	1A22 (16.00.09.00)	1A14(15.00.00.00.00)
		Driver	2.51.18.0	2.51.24.80 (Inbox)

Boot Options & VSP Interoperability	2016	2019
Local Disk Boot	Supported	Supported
PXE Boot	Supported	Supported
VSP SAN Boot	Supported	Supported
VSP Direct Attach Boot	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for:

[DS240 Interoperability Matrix](#)

Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"

Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"

Note 3: Intel X710-DA4, 10 GbE quad-port, PCIe card has been tested with only BIOS/BMC version 316.H01/4.65.06

Components	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi
	6.7 U3	7.0	7.0 U2	7.0 U3d	7.0 U3g
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B14.H01	3B16.H01	3B22.H00	3B24.H00	3B24.H00
BMC	4.62.06	4.65.06	4.70.06	4.70.06	4.74.06
CPLD	Rev10 / Rev11	Rev10 / Rev11	Rev11	Rev11	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	6.7 U3	7.0	7.0 U2	7.0 U3	7.0 U3g
Network Cards							
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware Driver	4.00 i40en 1.7.17	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.36	4.00 1.11.1.31	4.00 VMware Inbox 1.11.1.31
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware Driver	N/A N/A	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.36	4.30 1.11.1.31	4.30 VMware Inbox 1.11.1.31
Intel X557-T4, 10GbE-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware Driver	4.00 i40en 1.7.17	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.36	4.30 1.11.1.31	4.30 VMware Inbox 1.11.1.31
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware Driver	6.80 i40en 1.7.17	7.30 VMware Inbox 1.8.1.16	6.8 or higher VMware Inbox 1.8.1.36	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	7.30 VMware Inbox 1.8.1.16	14.26.1040 - or higher VMware Inbox 1.8.1.36	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Intel X710-DA4, 10 GbE quad-port, OCP	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Intel X710-T4L, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Intel X710-T4L, 10 GbE quad-port, OCP	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (Note 3)	1HYQZZZ0675.P	Firmware Driver	14.23.1020 nmix5_core 4.17.14.2	14.27.1016 VMware Inbox 4.19.16.7	14.26.1040 VMware Inbox 4.19.16.10	14.29.1016 4.19.16.11	14.32.1010 or higher VMware Inbox 4.19.16.11
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe (Note 4)	1HYQZZZ012Q.P	Firmware Driver	14.23.1020 nmix5_core 4.17.14.2	14.26.1040 VMware Inbox 4.19.16.7	14.24.1000 VMware Inbox 4.19.16.10	14.29.1016 4.19.16.11	14.32.1010 or higher VMware Inbox 4.19.16.11
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16 (Note 5)	1HYQZZZ0120.P	Firmware Driver	14.23.1020 nmix5_core 4.17.14.2	16.27.2008 VMware Inbox 4.19.16.7	16.28.2006 - or higher VMware Inbox 4.19.16.10	16.29.1016 4.19.16.11	16.28.2006 - or higher VMware Inbox 4.19.16.11
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	26.29.2002 or higher 4.21.71.101	26.29.2002 or higher 4.21.71.101
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	26.29.2002 or higher 4.21.71.101	26.29.2002 or higher 4.21.71.101
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware Driver	N/A N/A	N/A N/A	1.63 1.4.11.2	1.63 1.4.11.2	1.63 VMware Inbox 1.4.11.2
Intel Quad Port GigE i350 Base-T OCP Card	ADPC0350001.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	1.63 1.4.11.2	1.63 VMware Inbox 1.4.11.2
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	3.00 or higher 1.6.5.0-1	3.2 or higher 1.6.5.0-1
HBA Controllers							
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware Driver	12.0.193.13 lpfc 12.0.193.14	12.6.240.22 VMware Inbox 12.4.293.3	12.6.182.8 or higher VMware Inbox 12.8.298.3	12.8.542.26 14.0.326.12	12.8.542.26 14.0.622.0 (Async)
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware Driver	12.0.193.13 lpfc 12.0.193.14	12.6.240.22 VMware Inbox 12.4.293.3	12.6.182.8 - or higher VMware Inbox 12.8.293.3	12.8.542.26 14.0.326.12	12.8.542.26 14.0.622.0 (Async)
Emulex LPe35002 FC HBA	1HY1ZZZ0264.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	12.8.542.26 14.0.326.12	12.8.542.26 14.0.622.0 (Async)
RAID Controllers							
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware Driver	N/A N/A	5.040.00-1123 lsi_mr3 7.712.50.00	5.040.00-1123 7.712.50.00 (Inbox)	5.100.00-2651 7.718.02.00	5.100.00-2651 or higher VMware Inbox 7.718.02.00
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware Driver	5.140.00-3185 package version: 51.14.0-3441 7.707.11.00 (Inbox)	5.140.00-3185 package version: 51.14.0-3441 7.712.50.00 (Inbox)	5.070.00-1615 7.712.50.00 (Inbox)	5.140.00-3185 7.718.02.00	5.130.00-3059 or higher VMware Inbox 7.718.02.00
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	5.130.02-3059 7.718.02.00-1vmw	5.130.02-3059 7.718.02.00-1vmw
SAS Controllers							
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware Driver	1A14 (15.00.00.00) (20190530) lsi_msgpt3 16.00.00.00-1OEM	1A22 (16.00.09.00) VMware Inbox 17.00.10.00	1A22 (16.00.09.00) VMware Inbox 17.00.10.00	16.00.09.00 17.00.12.00	1A22 (16.00.09.00) VMware Inbox - 17.00.12.00-1
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	18.00.01.00 19.00.02.00-1vmw	14.00.05.00 or higher VMware Inbox 19.00.02.00-1
QS-3916 Mezz Card	1HY1ZZZ026Y.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	5.170.00-3513 7.716.03.00-1vmw	5.170.00-3513 or higher VMware Inbox 7.722.02.00-1

Boot Options & VSP Interoperability					
SATADOM Boot	Supported	Supported	Supported	Supported	Supported
Local Disk Boot	N/A	Supported	Supported	Supported	Supported
PXE Boot	Supported	Supported	Supported	Supported	Supported
VSP SAN Boot	N/A	Supported	Supported	Supported	Supported
VSP Direct Attach Boot	N/A	Supported	Supported	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for: DS120 Interoperability Matrix
 Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"
 Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"
 Note 3: "ON 25GbE ConnectX-4 Lx EN Dual port" Fw 14.21.1000 supported with driver 4.16.12.12 Async driver
 Note 4: Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A- ACA)"
 Note 5: Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"

VMware vSphere ESXi

8.0	
Components	Versions
CPU Family	Skylake / Cascade Lake
BIOS	3B24.H00
BMC	4.74.06
CPLD	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	8.0
Network Cards			
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware Driver	4.30 VMware Inbox - 1.11.2.5-1vmw
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware Driver	4.30 VMware Inbox - 1.11.2.5-1vmw
Intel X557-T4, 10GbE-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware Driver	4.30 VMware Inbox - 1.11.2.5-1vmw
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-DA4, 10 GbE quad-port, OCP	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-T4L, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-T4L, 10 GbE quad-port, OCP	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (Note 3)	1HYQZZZ0675.P	Firmware Driver	14.32.1010 or higher VMware Inbox - 4.23.0.36
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe (Note 4)	1HYQZZZ012Q.P	Firmware Driver	14.32.1010 or higher VMware Inbox - 4.23.0.36
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16 (Note 5)	1HYQZZZ0120.P	Firmware Driver	16.28.2006 or higher VMware Inbox - 4.23.0.36
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware Driver	26.29.2002 or higher 4.21.71.101
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware Driver	26.29.2002 or higher 4.21.71.101
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware Driver	1.63 VMware Inbox - 1.4.11.6-1vmw
Intel Quad Port GigE i350 Base-T OCP Card	ADPC0350001.P	Firmware Driver	1.63 VMware Inbox - 1.4.11.6-1vmw
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware Driver	3.2 or higher Partner Async - 1.8.5.0-1OEM
HBA Controllers			
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware Driver	12.8.542.26 14.0.622.0 (Async)
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware Driver	12.8.542.26 14.0.622.0 (Async)
Emulex LPe35002 FC HBA	1HY1ZZZ0264.P	Firmware Driver	12.8.542.26 14.0.622.0 (Async)
RAID Controllers			
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware Driver	5.100.00-2651 or higher VMware Inbox 7.722.02.00
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware Driver	5.130.00-3059 or higher VMware Inbox 7.722.02.00
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware Driver	5.130.02-3059 VMware Inbox 7.722.02.00
SAS Controllers			
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware Driver	1A22 (16.00.09.00) VMware Inbox - 17.00.13.00-1
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware Driver	14.00.05.00 or higher VMware Inbox - 23.00.00.00-1
QS-3916 Mezz Card	1HY1ZZZ026Y.P	Firmware Driver	5.170.00-3513 or higher VMware Inbox - 7.722.02.00-1

Boot Options & VSP Interoperability	
SATADOM Boot	Supported
Local Disk Boot	Supported
PXE Boot	Supported
VSP SAN Boot	Supported
VSP Direct Attach Boot	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices

Footnotes for: DS120 Interoperability Matrix
 Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"
 Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"
 Note 3: "ON 25GbE ConnectX-4 Lx EN Dual port" Fw 14.21.1000 supported with driver 4.16.12.12 Async driv
 Note 4: Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A- ACA)"
 Note 5: Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (M

Components	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi
	6.7 U3	7.0	7.0 U2	7.0 U3d	7.0 U3g
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B14.H01	3B16.H01	3B22.H00	3B22.H00	3B24.H00
BMC	4.62.06	4.65.06	4.70.06	4.70.06	4.74.06
CPLD	Rev10 / Rev11	Rev10 / Rev11	Rev11	Rev11	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	6.7 U3	7.0	7.0 U2	7.0 U3	7.0 U3g
Network Cards							
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware Driver	4.00 i40en 1.7.17	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.36	4.00 1.11.1.31	4.00 VMware Inbox 1.11.1.31
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware Driver	N/A N/A	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.36	4.30 1.11.1.31	4.30 VMware Inbox 1.11.1.31
Intel X557-T4, 10GbE-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware Driver	4.00 i40en 1.7.17	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.36	4.30 1.11.1.31	4.30 VMware Inbox 1.11.1.31
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware Driver	6.80 i40en 1.7.17	7.30 VMware Inbox 1.8.1.16	6.8 or higher VMware Inbox 1.8.1.36	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	7.30 VMware Inbox 1.8.1.16	14.26.1040 - or higher VMware Inbox 1.8.1.36	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Intel X710-DA4, 10 GbE quad-port, OCP	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Intel X710-T4L, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Intel X710-T4L, 10 GbE quad-port, OCP	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (Note 3)	1HYQZZZ0675.P	Firmware Driver	14.23.1020 nmix5_core 4.17.14.2	14.27.1016 VMware Inbox 4.19.16.7	14.26.1040 VMware Inbox 4.19.16.10	14.29.1016 4.19.16.11	14.32.1010 or higher VMware Inbox 4.19.16.11
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe (Note 4)	1HYQZZZ012Q.P	Firmware Driver	14.23.1020 nmix5_core 4.17.14.2	14.26.1040 VMware Inbox 4.19.16.7	14.24.1000 VMware Inbox 4.19.16.10	14.29.1016 4.19.16.11	14.32.1010 or higher VMware Inbox 4.19.16.11
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16 (Note 5)	1HYQZZZ0120.P	Firmware Driver	14.23.1020 nmix5_core 4.17.14.2	16.27.2008 VMware Inbox 4.19.16.7	16.28.2006 - or higher VMware Inbox 4.19.16.10	16.29.1016 4.19.16.11	16.28.2006 - or higher VMware Inbox 4.19.16.11
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	26.29.2002 or higher 4.21.71.101	26.29.2002 or higher 4.21.71.101
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	26.29.2002 or higher 4.21.71.101	26.29.2002 or higher 4.21.71.101
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware Driver	N/A N/A	N/A N/A	1.63 1.4.11.2	1.63 1.4.11.2	1.63 VMware Inbox 1.4.11.2
Intel Quad Port GigE i350 Base-T OCP Card	ADPC0350001.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	1.63 1.4.11.2	1.63 VMware Inbox 1.4.11.2
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	3.00 or higher 1.6.5.0-1	3.2 or higher 1.6.5.0-1
HBA Controllers							
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware Driver	12.0.193.13 lpfc 12.0.193.14	12.6.240.22 VMware Inbox 12.4.293.3	12.6.182.8 or higher VMware Inbox 12.8.298.3	12.8.542.26 14.0.326.12	12.8.542.26 14.0.622.0 (Async)
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware Driver	12.0.193.13 lpfc 12.0.193.14	12.6.240.22 VMware Inbox 12.4.293.3	12.6.182.8 - or higher VMware Inbox 12.8.293.3	12.8.542.26 14.0.326.12	12.8.542.26 14.0.622.0 (Async)
Emulex LPe35002 FC HBA	1HY1ZZZ0264.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	12.8.542.26 14.0.326.12	12.8.542.26 14.0.622.0 (Async)
RAID Controllers							
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware Driver	N/A N/A	5.040.00-1123 lsi_mr3 7.712.50.00	5.040.00-1123 7.712.50.00 (Inbox)	5.100.00-2651 7.718.02.00	5.100.00-2651 or higher VMware Inbox 7.718.02.00
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware Driver	5.140.00-3185 package version: 51.14.0-3441	5.140.00-3185 package version: 51.14.0-3441	5.070.00-1615 7.712.50.00 (Inbox)	5.140.00-3185 7.718.02.00	5.130.00-3059 or higher VMware Inbox 7.718.02.00
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	5.130.02-3059 7.718.02.00-1vmw	5.130.02-3059 7.718.02.00-1vmw
SAS Controllers							
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware Driver	1A14 (15.00.00.00) (20190530) lsi_msgpt3 16.00.00.00-1OEM	1A22 (16.00.09.00) VMware Inbox 17.00.10.00	1A22 (16.00.09.00) VMware Inbox 17.00.10.00	16.00.09.00 17.00.12.00	1A22 (16.00.09.00) VMware Inbox - 17.00.12.00-1
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	18.00.01.00 19.00.02.00-1vmw	14.00.05.00 or higher VMware Inbox 19.00.02.00-1
QS-3916 Mezz Card	1HY1ZZZ026Y.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	5.170.00-3513 7.716.03.00-1vmw	5.170.00-3513 or higher VMware Inbox 7.722.02.00-1

Boot Options & VSP Interoperability	6.7 U3	7.0	7.0 U2	7.0 U3	7.0 U3g
SATADOM Boot	Supported	Supported	Supported	Supported	Supported
Local Disk Boot	N/A	Supported	Supported	Supported	Supported
PXE Boot	Supported	Supported	Supported	Supported	Supported
VSP SAN Boot	N/A	Supported	Supported	Supported	Supported
VSP Direct Attach Boot	N/A	Supported	Supported	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for: [DS220 Interoperability Matrix](#)
 Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"
 Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"
 Note 3: "ON 25GbE ConnectX-4 Lx EN Dual port" Fw 14.21.1000 supported with driver 4.16.12.12 Async driver
 Note 4: Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A- ACA)"
 Note 5: Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"

VMware vSphere ESXi

8.0	
Components	Versions
CPU Family	Skylake / Cascade Lake
BIOS	3B24.H00
BMC	4.74.06
CPLD	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	8.0
Network Cards			
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware Driver	4.30 VMware Inbox - 1.11.2.5-1vmw
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware Driver	4.30 VMware Inbox - 1.11.2.5-1vmw
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware Driver	4.30 VMware Inbox - 1.11.2.5-1vmw
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-DA4, 10 GbE quad-port, OCP	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-T4L, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-T4L, 10 GbE quad-port, OCP	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (Note 3)	1HYQZZZ0675.P	Firmware Driver	14.32.1010 or higher VMware Inbox - 4.23.0.36
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe (Note 4)	1HYQZZZ012Q.P	Firmware Driver	14.32.1010 or higher VMware Inbox - 4.23.0.36
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16 (Note 5)	1HYQZZZ0120.P	Firmware Driver	16.28.2006 - or higher VMware Inbox - 4.23.0.36
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware Driver	26.29.2002 or higher 4.21.71.101
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware Driver	26.29.2002 or higher 4.21.71.101
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware Driver	1.63 VMware Inbox - 1.4.11.6-1vmw
Intel Quad Port GigE i350 Base-T OCP Card	ADPC0350001.P	Firmware Driver	1.63 VMware Inbox - 1.4.11.6-1vmw
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware Driver	3.2 or higher Partner Async - 1.8.5.0-1OEM
HBA Controllers			
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware Driver	12.8.542.26 14.0.622.0 (Async)
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware Driver	12.8.542.26 14.0.622.0 (Async)
Emulex LPe35002 FC HBA	1HY1ZZZ0264.P	Firmware Driver	12.8.542.26 14.0.622.0 (Async)
RAID Controllers			
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware Driver	5.100.00-2651 or higher VMware Inbox 7.722.02.00
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware Driver	5.130.00-3059 or higher VMware Inbox 7.722.02.00
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware Driver	5.130.02-3059 VMware Inbox 7.722.02.00
SAS Controllers			
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware Driver	1A22 (16.00.09.00) VMware Inbox - 17.00.13.00-1
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware Driver	14.00.05.00 or higher VMware Inbox - 23.00.00.00-1
QS-3916 Mezz Card	1HY1ZZZ026Y.P	Firmware Driver	5.170.00-3513 or higher VMware Inbox - 7.722.02.00-1

Boot Options & VSP Interoperability	
SATADOM Boot	Supported
Local Disk Boot	Supported
PXE Boot	Supported
VSP SAN Boot	Supported
VSP Direct Attach Boot	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices

Footnotes for: DS220 Interoperability Matrix

Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"

Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"

Note 3: "ON 25GbE ConnectX-4 Lx EN Dual port" Fw 14.21.1000 supported with driver 4.16.12.12 Async driv

Note 4: Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A- ACA)"

Note 5: Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (M

Components	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi
	6.7 U3	7.0	7.0 U2	7.0 U3d	7.0 U3g
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B14.H01	3B16.H01	3B22.H00	3B22.H00	3B22.H00
BMC	4.62.06	4.65.06	4.70.06	4.70.06	4.70.06
CPLD	Rev10 / Rev11	Rev10 / Rev11	Rev11	Rev11	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	6.7 U3	7.0	7.0 U2	7.0U3d	7.0 U3g
Network Cards							
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware Driver	4.00 i40en 1.7.17	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.11.1.31
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware Driver	N/A N/A	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.16	4.30 VMware Inbox 1.11.1.31
Intel X557-T4, 10GbE-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware Driver	4.00 i40en 1.7.17	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.16	4.00 VMware Inbox 1.8.1.16	4.30 VMware Inbox 1.11.1.31
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware Driver	6.80 i40en 1.7.17	7.30 VMware Inbox 1.8.1.16	7.30 VMware Inbox 1.8.1.16	7.30 VMware Inbox 1.8.1.16	8.30 VMware Inbox 1.11.1.31
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	7.30 VMware Inbox 1.8.1.16	7.30 VMware Inbox 1.8.1.16	7.30 VMware Inbox 1.8.1.16	8.30 VMware Inbox 1.11.1.31
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	N/A N/A	8.30 VMware Inbox 1.11.1.31
Intel X710-T4L, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	N/A N/A	8.30 VMware Inbox 1.11.1.31
Intel X710-T4L, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	N/A N/A	8.30 VMware Inbox 1.11.1.31
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (Note 3)	1HYQZZZ0675.P	Firmware Driver	14.23.1020 nmlx5_core 4.17.14.2	14.27.1016 VMware Inbox 4.19.16.7	14.27.1016 VMware Inbox 4.19.16.7	14.27.1016 VMware Inbox 4.19.16.7	14.32.1010 or higher VMware Inbox 4.19.16.11
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe (Note 4)	1HYQZZZ012Q.P	Firmware Driver	14.23.1020 nmlx5_core 4.17.14.2	14.26.1040 VMware Inbox 4.19.16.7	14.26.1040 VMware Inbox 4.19.16.7	14.26.1040 VMware Inbox 4.19.16.7	14.32.1010 or higher VMware Inbox 4.19.16.11
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16 (Note 5)	1HYQZZZ0120.P	Firmware Driver	14.23.1020 nmlx5_core 4.17.14.2	16.27.2008 VMware Inbox 4.19.16.7	16.27.2008 VMware Inbox 4.19.16.7	16.27.2008 VMware Inbox 4.19.16.7	16.28.2006 - or higher VMware Inbox 4.19.16.11
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	26.29.2002 or higher 4.21.71.101	26.29.2002 or higher 4.21.71.101
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	26.29.2002 or higher 4.21.71.101	26.29.2002 or higher 4.21.71.101
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware nmlx5_core Driver (ES)	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Intel Quad Port GigE i350 Base-T OCP Card	ADPC0350001.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	1.63 1.4.11.2	1.63 VMware Inbox 1.4.11.2
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	3.00 or higher 1.6.5.0-1	3.2 or higher 1.6.5.0-1
HBA Controllers							
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware Driver	12.0.193.13 lpfc 12.0.193.14	12.6.240.22 VMware Inbox 12.4.293.3	12.6.240.22 VMware Inbox 12.4.293.3	12.6.240.22 VMware Inbox 12.4.293.3	12.8.542.26 14.0.622.0 (Async)
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware Driver	12.0.193.13 lpfc 12.0.193.14	12.6.240.22 VMware Inbox 12.4.293.3	12.6.240.22 VMware Inbox 12.4.293.3	12.6.240.22 VMware Inbox 12.4.293.3	12.8.542.26 14.0.622.0 (Async)
Emulex LPe35002 FC HBA	1HY1ZZZ0264.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	12.8.542.26 14.0.326.12	12.8.542.26 14.0.622.0 (Async)
RAID Controller							
Broadcom SAS3516 2GB RAID Mezzanine (only for DS240)	1HY9ZZZ090X.P	Firmware Driver	N/A N/A	N/A N/A	5.040.00-1123 7.712.50.00 (Inbox)	5.100.00-2651 7.718.02.00	5.100.00-2651 or higher VMware Inbox 7.718.02.00
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware Driver	N/A N/A	N/A N/A	5.070.00-1615 7.712.50.00 (Inbox)	5.140.00-3185 7.718.02.00	5.130.00-3059 or higher VMware Inbox 7.718.02.00
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	5.130.02-3059 7.718.02.00-1vmw	5.130.02-3059 7.718.02.00-1vmw
SAS Controller							
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	18.00.01.00 19.00.02.00-1vmw	14.00.05.00 or higher VMware Inbox 19.00.02.00-1
QS-3916 Mezz Card	1HY1ZZZ026Y.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	5.170.00-3513 7.716.03.00-1vmw	5.170.00-3513 or higher VMware Inbox 7.722.02.00-1
Broadcom SAS9305-16i PCIe	1HY1ZZZ026Y.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	16.00.09.00 17.00.12.00-1vmw (Inbox)	16.00.09.00 17.00.12.00-1vmw (Inbox)

Boot Options & VSP Interoperability					
SATADOM Boot	Supported	Supported	Supported	Supported	Supported
PXE Boot	Supported	Supported	Supported	Supported	Supported
VSP SAN Boot	N/A	Supported	Supported	Supported	Supported
VSP Direct Attach Boot	N/A	Supported	Supported	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for: [DS225 Interoperability Matrix](#)
 Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"
 Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"
 Note 3: "ON 25GbE ConnectX-4 Lx EN Dual port" Fw 14.21.1000 supported with driver 4.16.12.12 Async driver
 Note 4: Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A- ACA)"
 Note 5: Listed on VMware HCL as: "ConnectX*-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"

VMware vSphere ESXi

Components	8.0
Versions	
CPU Family	Skylake / Cascade Lake
BIOS	3B24.H00
BMC	4.74.06
CPLD	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	8.0
Network Cards			
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware Driver	4.30 VMware Inbox - 1.11.2.5-1vmw
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware Driver	4.30 VMware Inbox - 1.11.2.5-1vmw
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware Driver	4.30 VMware Inbox - 1.11.2.5-1vmw
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-T4L, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-T4L, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	8.30 VMware Inbox - 1.11.2.5-1vmw
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (Note 3)	1HYQZZZ0675.P	Firmware Driver	14.32.1010 or higher VMware Inbox - 4.23.0.36
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe (Note 4)	1HYQZZZ012Q.P	Firmware Driver	14.32.1010 or higher VMware Inbox - 4.23.0.36
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16 (Note 5)	1HYQZZZ0120.P	Firmware Driver	16.28.2006 or higher VMware Inbox - 4.23.0.36
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware Driver	26.29.2002 or higher 4.21.71.101
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware Driver	26.29.2002 or higher 4.21.71.101
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware nmlx5_core Driver (ES)	N/A N/A
Intel Quad Port GigE i350 Base-T OCP Card	ADPC0350001.P	Firmware Driver	1.63 VMware Inbox - 1.4.11.6-1vmw
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware Driver	3.2 or higher Partner Async - 1.8.5.0-10EM
HBA Controllers			
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware Driver	12.8.542.26 14.0.622.0 (Async)
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware Driver	12.8.542.26 14.0.622.0 (Async)
Emulex LPe35002 FC HBA	1HY1ZZZ0264.P	Firmware Driver	12.8.542.26 14.0.622.0 (Async)
RAID Controller			
Broadcom SAS3516 2GB RAID Mezzanine (only for DS240)	1HY9ZZZ090X.P	Firmware Driver	5.100.00-2651 or higher VMware Inbox 7.722.02.00
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware Driver	5.130.00-3059 or higher VMware Inbox 7.722.02.00
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware Driver	5.130.02-3059 VMware Inbox 7.722.02.00
SAS Controller			
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware Driver	N/A N/A
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware Driver	14.00.05.00 or higher VMware Inbox - 23.00.00.00-1
QS-3916 Mezz Card	1HY1ZZZ026Y.P	Firmware Driver	5.170.00-3513 or higher VMware Inbox - 7.722.02.00-1
Broadcom SAS9305-16i PCIe	1HY1ZZZ026Y.P	Firmware Driver	16.00.09.00 or higher VMware Inbox - 17.00.13.00-1

Boot Options & VSP Interoperability	
SATADOM Boot	Supported
PXE Boot	Supported
VSP SAN Boot	Supported
VSP Direct Attach Boot	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices

Footnotes for: [DS225 Interoperability Matrix](#)
 Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"
 Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"
 Note 3: "ON 25GbE ConnectX-4 Lx EN Dual port" Fw 14.21.1000 supported with driver 4.16.12.12 Async driv
 Note 4: Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A- ACA)"
 Note 5: Listed on VMware HCL as: "ConnectX*-5 Ex EN network interface card, 100GbE dual-port QSFP28 (M

Components	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi
	6.7 U3	7.0	7.0 U3d	7.0 U3g
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B14.H01	3B16.H01	3B22.H00	823.H00
BMC	4.62.06	4.65.06	4.70.06	4.71.06
CPLD	N/A	N/A	Rev11	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	6.7 U3	7.0	7.0 U3d	7.0 U3g
Network Cards						
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware Driver	4.00 i40en 1.7.17	4.00 VMware Inbox 1.8.1.16	4.00 1.11.1.31	4.00 VMware Inbox 1.11.1.31
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware Driver	N/A N/A	4.00 VMware Inbox 1.8.1.16	4.30 1.11.1.31	4.30 VMware Inbox 1.11.1.31
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware Driver	4.00 i40en 1.7.17	4.00 VMware Inbox 1.8.1.16	4.30 1.11.1.31	4.30 VMware Inbox 1.11.1.31
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware Driver	6.80 i40en 1.7.17	7.30 VMware Inbox 1.8.1.16	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	N/A N/A	7.30 VMware Inbox 1.8.1.16	8.30 1.11.1.31	8.30 VMware Inbox 1.11.1.31
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (Note 3)	1HYQZZZ067S.P	Firmware Driver	N/A N/A	14.26.1040 VMware Inbox 4.19.16.7	N/A N/A	N/A N/A
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe (Note 4)	1HYQZZZ012Q.P	Firmware Driver	14.23.1020 nmlx5_core 4.17.14.2	14.26.1040 VMware Inbox 4.19.16.7	14.29.1016 4.19.16.11	14.32.1010 or higher VMware Inbox 4.19.16.11
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16 (Note 5)	1HYQZZZ0120.P	Firmware Driver	14.23.1020 nmlx5_core 4.17.14.2	16.26.1040 VMware Inbox 4.19.16.7	16.29.1016 4.21.71.101	16.28.2006 - or higher VMware Inbox 4.19.16.11
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware nmlx5_core Driver (ES	N/A N/A	N/A N/A	1.63 1.4.11.2	1.63 VMware Inbox 1.4.11.2
HBA Controllers						
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware Driver	12.0.193.13 lpfc 12.0.193.14	12.6.240.22 VMware Inbox 12.4.293.3	12.8.351.32 14.0.326.12	12.8.542.26 14.0.622.0 (Async)
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware Driver	12.0.193.13 lpfc 12.0.193.14	12.6.240.22 VMware Inbox 12.4.293.3	12.8.351.32 14.0.326.12	12.8.542.26 14.0.622.0 (Async)
RAID Controllers						
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware Driver	5.040.00-1123 lsi-mr3 7.704.7.0	5.040.00-1123 7.712.50.00	5.040.00-1123 7.718.02.00	5.100.00-2651 or higher VMware Inbox 7.718.02.00
SAS Controllers						
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware Driver	N/A N/A	1A22 (16.00.09.00) VMware Inbox - 17.00.10.00	1A22 (16.00.09.00) VMware Inbox - 17.00.10.00	1A22 (16.00.09.00) VMware Inbox - 17.00.12.00-1
Broadcom SAS9460-16i PCIe Controller	1HYQZZZ029N.P	Firmware Driver	N/A N/A	N/A N/A	5.130.00-3059 or higher VMware Inbox - 7.718.02.00-1vmw	5.130.00-3059 or higher VMware Inbox 7.718.02.00

Boot Options & VSP Interoperability				
Local Disk Boot	Supported RAID1	Supported	Supported	Supported
PXE Boot	Supported	Supported	Supported	Supported
VSP SAN Boot	N/A	Supported	Supported	Supported
VSP Direct Attach Boot	N/A	Supported	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for:

DS240 Interoperability Matrix

Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"

Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"

Note 3: "ON 25GbE ConnectX-4 LX EN Dual port" Fw 14.21.1000 supported with driver 4.16.12.12 Async driver

Note 4: Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A- ACA)"

Note 5: Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"

[VMware vSphere ESXi](#)

Components	8.0 Versions
CPU Family	Skylake / Cascade Lake
BIOS	B23.H00
BMC	4.71.06
CPLD	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	8.0
Network Cards			
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware	4.30
		Driver	VMware Inbox - 1.11.2.5-1vmw
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware	4.30
		Driver	VMware Inbox - 1.11.2.5-1vmw
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware	4.30
		Driver	VMware Inbox - 1.11.2.5-1vmw
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	8.30
		Driver	VMware Inbox - 1.11.2.5-1vmw
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	8.30
		Driver	VMware Inbox - 1.11.2.5-1vmw
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (Note 3)	1HYQZZZ067S.P	Firmware	N/A
		Driver	N/A
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe (Note 4)	1HYQZZZ012Q.P	Firmware	14.32.1010 or higher
		Driver	VMware Inbox - 4.23.0.36
Mellanox ConnectX-5 EN 100GbE dual-port QSFP28, PCIe x16 (Note 5)	1HYQZZZ0120.P	Firmware	16.28.2006 - or higher
		Driver	VMware Inbox - 4.23.0.36
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware	1.63
		nmlx5_core Driver (ESX)	VMware Inbox - 1.4.11.6-1vmw
HBA Controllers			
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.8.542.26
		Driver	14.0.622.0 (Async)
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	12.8.542.26
		Driver	14.0.622.0 (Async)
RAID Controllers			
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.100.00-2651 or higher
		Driver	VMware Inbox 7.722.02.00
SAS Controllers			
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware	1A22 (16.00.09.00)
		Driver	VMware Inbox - 17.00.13.00-1
Broadcom SAS9460-16i PCIe Controller	1HYQZZZ029N.P	Firmware	5.130.00-3059 or higher
		Driver	VMware Inbox 7.722.02.00

Boot Options & VSP Interoperability	
Local Disk Boot	Supported
PXE Boot	Supported
VSP SAN Boot	Supported
VSP Direct Attach Boot	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices

Footnotes for:

[DS240 Interoperability Matrix](#)

Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"

Note 2: Listed : "Intel(R) Ethernet Connection X722 for 10GBASE-T"

Note 3: "ON 25GbE ConnectX-4 LX EN Dual port" Fw 14.21.1000 supported with driver 4.16.12.12 Async driv

Note 4: Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A- ACA)"

Note 5: Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (N

		Red Hat Enterprise Linux			Red Hat Enterprise Linux	
		7.6			8.1	
Components		Versions	Versions	Versions	Versions	Versions
CPU Family		Skylake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS		3B14.H01	S5BH3B17.H01	S5BH3B19.H00	3B18.H00	3B19.H00
BMC		4.62.06	4.66.06	4.68.06	4.67.06	4.68.06
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	7.6			8.1	
Network Cards							
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware	N/A	4.00	N/A	4.00	N/A
		Driver	N/A	2.3.2-k (Inbox)	N/A	2.8.20-k (Inbox)	N/A
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware	N/A	4.00	N/A	4.00	N/A
		Driver	N/A	2.3.2-k (Inbox)	N/A	2.8.20-k (Inbox)	N/A
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	6.0.2	5.51	5.51	7.30	5.51
		Driver	2.3.2-k	2.3.2-k	2.3.2-k	2.8.20-k (Inbox)	2.8.20-k (Inbox)
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	N/A	N/A	N/A	7.30	N/A
		Driver	N/A	N/A	N/A	2.8.20-k (Inbox)	N/A
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz	1HYQZZZ067S.P	Firmware	14.23.1020	N/A	N/A	14.26.1040	N/A
		Driver	Inbox	N/A	N/A	5.0-0 (Inbox)	N/A
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware	N/A	1.63.0	N/A	1.63.0	N/A
		Driver	N/A	5.4.0-k (Inbox)	N/A	5.6.0-k (Inbox)	N/A
Mellanox Connect CX-6 Dual Port 100GbE LP QSFP56	1HY1ZZZ026N.P	Firmware	N/A	N/A	N/A	N/A	N/A
		Driver	N/A	N/A	N/A	N/A	N/A
HBA Controllers							
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	N/A	12.0.261.15	12.0.261.15	12.6.240.22	12.0.261.15
		Driver	N/A	12.0.0.5 or higher	12.0.0.5 or higher	12.2.0.3 (Inbox)	12.2.0.3 (Inbox)
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	12.0.193.13	N/A	N/A	12.6.240.22	N/A
		Driver	Inbox	N/A	N/A	12.2.0.3 (Inbox)	N/A
RAID Controllers							
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.040.00-1123	N/A	v5.060.00-1455	5.100.00-2651	v5.060.00-1455
		Driver	07.705.02.00-rh1	N/A	v07.705.02.00-rh1	7.707.51.00-rc1 (Inbox)	7.707.51.00-rc1 (Inbox)
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	N/A	50.30.00-0945 or higher	50.30.00-0945 or higher	5.140.00-3185 package version: 51.14.0-	N/A
		Driver	N/A	07.705.02.00-rh1 (inbox)	07.705.02.00-rh1 (inbox)	07.707.51.00-rc1 (Inbox)	N/A
Boot Options & VSP Interoperability							
SATADOM Boot			Supported	N/A	N/A	Supported	N/A
Local Disk Boot			Supported	Supported	Supported	Supported	Supported
PXE Boot			Supported	N/A	N/A	Supported	Supported
VSP SAN Boot			N/A	Supported	Supported	Supported	Supported
VSP Direct Attach Boot			N/A	N/A	N/A	Supported	N/A
VSP Interoperability			Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Red Hat Enterprise Linux

Components	8.2		
	Versions	Versions	Versions
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B19.H00	3B21	3B22
BMC	4.68.06	4.69.06	4.70.06
CPLD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	8.2		
Network Cards					
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	5.51	5.51	5.51
		Driver	2.8.20-k (Inbox)	2.8.20-k (Inbox)	2.8.20-k (Inbox)
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz	1HYQZZZ067S.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
Mellanox Connect CX-6 Dual Port 100GbE LP QSFP56	1HY1ZZZ026N.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
HBA Controllers					
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.0.261.15	12.0.261.15	12.6.240.40
		Driver	12.6.0.2	12.6.0.2	12.6.0.2
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
RAID Controllers					
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	v5.060.00-1455	v5.060.00-1455	N/A
		Driver	v07.710.50.00-rc1	v07.710.50.00-rc1	N/A
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A

Boot Options & VSP Interoperability				
SATADOM Boot		N/A	N/A	N/A
Local Disk Boot		Supported	Supported	N/A
PXE Boot		Supported	Supported	Supported
VSP SAN Boot		Supported	Supported	Supported
VSP Direct Attach Boot		N/A	N/A	N/A
VSP Interoperability		Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Red Hat Enterprise Linux

Components	8.4		
	Versions	Versions	Versions
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B19.H00	3B21	3B22.H00
BMC	4.68.06	4.69.06	4.70.06
CPLD	Rev10 / Rev11	Rev10 / Rev11	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	8.4		
Network Cards					
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware	N/A	N/A	4.30
		Driver	N/A	N/A	4.18.0-305.el8.x86_64
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	5.51	5.51	8.30
		Driver	2.8.20-k (Inbox)	2.8.20-k (Inbox)	4.18.0-305.el8.x86_64
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	N/A	N/A	8.3
		Driver	N/A	N/A	4.18.0-305.el8.x86_64
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz	1HYQZZZ067S.P	Firmware	N/A	N/A	14.28.2006
		Driver	N/A	N/A	5.0-0
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware	N/A	N/A	1.63
		Driver	N/A	N/A	4.18.0-305.el8.x86_64
Mellanox Connect CX-6 Dual Port 100GbE LP QSFP56	1HY1ZZZ026N.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
HBA Controllers					
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.0.261.15	12.0.261.15	12.8.351.32
		Driver	12.6.0.2	12.6.0.2	12.8.0.5
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	N/A	N/A	12.8.351.32
		Driver	N/A	N/A	12.8.0.5
RAID Controllers					
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	v5.060.00-1455	v5.060.00-1455	v5.100.00-2651
		Driver	v07.710.50.00-rc1	v07.710.50.00-rc1	07.714.04.00-rh1
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	N/A	N/A	5.140.00-3185
		Driver	N/A	N/A	07.714.04.00-rh1

Boot Options & VSP Interoperability				
SATADOM Boot		N/A	N/A	N/A
Local Disk Boot		Supported	Supported	Supported
PXE Boot		Supported	Supported	Supported
VSP SAN Boot		Supported	Supported	Supported
VSP Direct Attach Boot		N/A	N/A	N/A
VSP Interoperability		Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

		Red Hat Enterprise Linux			Red Hat Enterprise Linux	
		7.6			8.1	
Components	Versions	Versions	Versions	Versions	Versions	Versions
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B14.H01	S5BH3B17.H01	S5BH3B19.H00	3B18.H00	3B19.H00	3B19.H00
BMC	4.62.06	4.66.06	4.68.06	4.67.06	4.68.06	4.68.06
CPLD	Rev11	Rev 11	Rev 11	Rev11	Rev11	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	7.6			8.1	
Network Cards							
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware Driver	N/A	4.00	N/A	4.00	N/A
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZZ096M.P	Firmware Driver	N/A	N/A	N/A	Latest	N/A
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZZ096N.P	Firmware Driver	N/A	4.00	N/A	4.00	N/A
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware Driver	6.0.2	5.51	5.51	7.30	5.51
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	N/A	N/A	N/A	7.30	N/A
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz	1HYQZZZ067S.P	Firmware Driver	14.23.1020	N/A	N/A	14.26.1040	N/A
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware Driver	N/A	1.63.0	N/A	5.0-0 (Inbox)	N/A
Mellanox Connect CX-6 Dual Port 100GbE LP QSFP56	1HY1ZZZ026N.P	Firmware Driver	N/A	N/A	N/A	N/A	N/A
HBA Controllers							
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware Driver	12.2.299.23	12.0.261.15	12.0.261.15	12.6.240.22	12.0.261.15
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware Driver	12.2.299.23	N/A	N/A	12.2.0.3 (Inbox)	12.2.0.3 (Inbox)
RAID Controllers							
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware Driver	5.060.00-1455 (Note 1)	N/A	v5.060.00-1455	5.100.00-2651	v5.060.00-1455
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware Driver	N/A	50.30.00-0945 or higher	50.30.00-0945 or higher	5.140.00-3185 package version: 51.14.0-3441	N/A
SAS Controller							
QS-3216 Mezz Card	1HY9ZZZ0910.P	Firmware Driver	N/A	N/A	N/A	N/A	N/A
Broadcom SAS9305-16i PCIe	1HYQZZZ029N.P	Firmware Driver	N/A	N/A	N/A	N/A	N/A
Boot Options & VSP Interoperability							
SATADOM Boot			Supported	N/A	N/A	Supported	N/A
Local Disk Boot			Supported	Supported	Supported	Supported	Supported
PXE Boot			Supported	N/A	N/A	Supported	Supported
VSP SAN Boot			Supported	Supported	Supported	Supported	Supported
VSP Direct Attach Boot			N/A	N/A	N/A	Supported	N/A
VSP Interoperability			Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for: DS220 Interoperability Matrix
 Note 1: Recommending to use either 5.040.00-1123 or 5.100.00-2651

Components	Red Hat Enterprise Linux			Red Hat Enterprise Linux
	8.2	8.2	8.2	8.4
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B19.H00	3B21	3B22	3B22.H00
BMC	4.68.06	4.69.06	4.70.06	4.70.06
CPLD	Rev11	Rev11	Rev11	Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	8.2			8.4
Network Cards						
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZ096P.P	Firmware	N/A	N/A	N/A	N/A
		Driver	N/A	N/A	N/A	N/A
Intel X527-DA2, 10GbE dual-port, OCP Mezz (Note 1)	1HY9ZZ096M.P	Firmware	N/A	N/A	N/A	N/A
		Driver	N/A	N/A	N/A	N/A
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZ096N.P	Firmware	N/A	N/A	N/A	4.30
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	5.51	5.51	5.51	8.30
		Driver	2.8.20-k (Inbox)	2.8.20-k (Inbox)	2.8.20-k (Inbox)	4.18.0-305.el8.x86_64
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZ000K.P	Firmware	N/A	N/A	N/A	8.30
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz	1HYQZZ067S.P	Firmware	N/A	N/A	N/A	14.28.2006
		Driver	N/A	N/A	N/A	5.0-0
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware	N/A	N/A	N/A	1.63
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64
Mellanox Connect CX-6 Dual Port 100GbE LP QSFP56	1HY1ZZ026N.P	Firmware	N/A	N/A	N/A	N/A
		Driver	N/A	N/A	N/A	N/A
HBA Controllers						
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.0.261.15	12.0.261.15	12.6.240.40	12.8.351.32
		Driver	12.6.0.2	12.6.0.2	12.6.0.2	12.8.0.5
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	N/A	N/A	N/A	12.8.351.32
		Driver	N/A	N/A	N/A	12.8.0.5
RAID Controllers						
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZ090X.P	Firmware	v5.060.00-1455	v5.060.00-1455	N/A	v5.100.00-2651
		Driver	v07.710.50.00-rc1	v07.710.50.00-rc1	N/A	07.714.04.00-rh1
Broadcom 9460-16i MegaRAID storage controller	1HYQZZ026R.P	Firmware	N/A	N/A	N/A	5.140.00-3185
		Driver	N/A	N/A	N/A	07.714.04.00-rh1
SAS Controller						
QS-3216 Mezz Card	1HY9ZZ0910.P	Firmware	N/A	N/A	N/A	v5.100.00-2651
		Driver	N/A	N/A	N/A	07.714.04.00-rh1
Broadcom SAS9305-16i PCIe	1HYQZZ029N.P	Firmware	N/A	N/A	N/A	5.140.00-3185
		Driver	N/A	N/A	N/A	07.714.04.00-rh1

Boot Options & VSP Interoperability						
SATADOM Boot			N/A	N/A	N/A	N/A
Local Disk Boot			Supported	Supported	N/A	Supported
PXE Boot			Supported	Supported	Supported	Supported
VSP SAN Boot			Supported	Supported	Supported	Supported
VSP Direct Attach Boot			N/A	N/A	N/A	N/A
VSP Interoperability			Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for: DS220 Interoperability Matrix

Note 1: Recommending to use either 5.040.00-1123 or 5.100.00-2651

		Red Hat Enterprise Linux		Red Hat Enterprise Linux	Red Hat Enterprise Linux
		7.6		8.1	8.4
Components		Versions	Versions	Versions	Versions
CPU Family		Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS		3B14.H01	55BH3B17.H01	3B18.H00	3B22.H00
BMC		4.62.06	4.66.06	4.67.06	4.70.06
CPLD		Rev11	Rev 11	Rev11	Rev11

IO Options	Hitach Vantara Part Number	Firmware / Driver	7.6		8.1	8.4
Network Cards						
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	6.02	5.51	7.30	8.30
		Driver	2.3.2-k	2.3.2-k (Inbox)	2.8.20-k (Inbox)	4.18.0-305.el8.x86_64
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	N/A	N/A	7.30	8.30
		Driver	N/A	N/A	2.8.20-k (Inbox)	4.18.0-305.el8.x86_64
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz	1HYQZZZ067S.P	Firmware	14.23.1020	N/A	14.26.1040	14.28.2006
		Driver	Inbox	N/A	5.0-0 (Inbox)	5.0-0
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware	N/A	1.63.0	1.63.0	1.63
		Driver	N/A	5.4.0-k (Inbox)	5.6.0-k (Inbox)	4.18.0-305.el8.x86_64
HBA Controllers						
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.2.299.23	12.0.261.15	12.6.240.22	12.8.351.32
		Driver	12.0.0.10	12.0.0.5 or higher	12.2.0.3 (Inbox)	12.8.0.5
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	12.2.299.23	N/A	12.6.240.22	12.8.351.32
		Driver	12.0.0.10	N/A	12.2.0.3 (Inbox)	12.8.0.5

Boot Options & VSP Interoperability					
SATADOM Boot		Supported	N/A	Supported	Supported
PXE Boot		Supported	N/A	Supported	Supported
VSP SAN Boot		Supported	Supported	Supported	Supported
VSP Direct Attach Boot		N/A	N/A	Supported	Supported
VSP Interoperability		Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Components	Red Hat Enterprise Linux	Red Hat Enterprise Linux	Red Hat Enterprise Linux	Red Hat Enterprise Linux
	7.8	8.1	8.2	8.4
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B16.H01	3B18.H00	3B23.H00	3B22.H00
BMC	4.65.06	4.67.06	4.71.06	4.70.06
CPLD	Rev11	Rev11	Rev11	Rev11

IO Options	Hitach Vantara Part Number	Firmware / Driver	7.8	8.1	8.2	8.4
Network Cards						
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZ096P.P	Firmware	4.00	N/A	4.30	4.00
		Driver	2.11.29	N/A	2.8.20-k	4.18.0-305.el8.x86_64
Intel X557-T4, 10GBase-T quad-port, OCP Mezz (Note 2)	1HY9ZZ096N.P	Firmware	N/A	N/A	N/A	4.30
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	7.30	7.30	8.60	8.30
		Driver	2.11.29	2.8.20-k (Inbox)	2.8.20-k (Inbox)	4.18.0-305.el8.x86_64
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZ000K.P	Firmware	N/A	7.30	7.30	8.30
		Driver	N/A	2.8.20-k (Inbox)	2.8.20-k (Inbox)	4.18.0-305.el8.x86_64
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240)	1HYQZZ067S.P	Firmware	N/A	N/A	N/A	14.28.2006
		Driver	N/A	N/A	N/A	5.0-0
Intel Quad Port GigE i350 Base-T PCI Card	ADPC0350001.P	Firmware	N/A	N/A	N/A	1.63
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64
HBA Controllers						
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	N/A	12.6.240.22	12.8.351.32	12.8.351.32
		Driver	N/A	12.2.0.3 (Inbox)	12.6.0.2	12.8.0.5
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	12.6.240.22	12.6.240.22	12.8.351.32	12.8.351.32
		Driver	12.0.0.13 (Inbox)	12.2.0.3 (Inbox)	12.6.0.2	12.8.0.5
RAID Controllers						
Broadcom SAS3516 2GB RAID Mezzanine	1HYQZZ017Q.P	Firmware	5.040.00-1123	5.100.00-2651	5.100.00-2651	5.100.00-2651
		Driver	07.710.50.00-rh1 (inbox)	7.707.51.00-rc1 (Inbox)	7.707.51.00-rc1 (Inbox)	7.707.51.00-rc1 (Inbox)
SAS Controller						
QS-3216 Mezz Card	1HY9ZZ0910.P	Firmware	N/A	N/A	16.00.09.00	N/A
		Driver	N/A	N/A	32.100.00.00	N/A

Boot Options & VSP Interoperability				
Local Disk Boot		Supported	Supported	Supported
PXE Boot		N/A	Supported	Supported
VSP SAN Boot		Supported	Supported	Supported
VSP Direct Attach Boot		N/A	Supported	Supported
VSP Interoperability		Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Foot Notes for: [DS240 Interoperability Matrix](#)

Note 1: Listed : "Intel(R) Ethernet Connection X722 for 10GbE SFP+"

		SUSE		
		SLES 12 SP4		
Components		Versions	Versions	Versions
CPU Family		Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS		3B14.H01	55BH3B17.H01	55BH3B19.H00
BMC		4.62.06	4.66.06	4.68.06
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11

IO Options	Hitach Vantara Part Number	Firmware / Driver	SLES 12 SP4	SLES 12 SP4	SLES 12 SP4
Network Cards					
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	7.30	7.30	N/A
		Driver	2.3.2-k (Inbox)	2.3.2-k (Inbox)	N/A
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	5.51	5.51	5.51
		Driver	i40e 2.3.2-k	2.3.2-k (inbox)	2.3.2-k (inbox)
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16	1HYQZZZ0120.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
HBA Controllers					
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.0.261.15	12.0.261.15	12.0.261.15
		Driver	lpfc 12.0.0.10	12.0.0.10 or higher	12.0.0.10 or higher
RAID Controllers					
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.060.00-1455	N/A	5.060.00-1455
		Driver	07.704.04.00-rc1	N/A	07.704.04.00-rc1
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	N/A	50.30.00-0945 or higher	N/A
		Driver	N/A	07.704.04.00-rc1	N/A

Boot Options & VSP Interoperability			
Local Disk Boot		Supported	Supported
VSP SAN Boot		Supported	Supported
VSP Interoperability		Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

		SUSE		SUSE		
		SLES 15 SP1		SLES 15 SP2		
Components		Versions		Versions		
CPU Family		Skylake / Cascade Lake		Skylake / Cascade Lake		
BIOS		S5BH3B19.H00		S5BH3B19.H00		
BMC		4.68.06		4.68.06		
CPLD		Rev10 / Rev11		Rev10 / Rev11		
CPLD		Rev11				
IO Options		Hitach Vantara Part Number	Firmware / Driver	SLES 15 SP1	SLES 15 SP2	SLES 15 SP2
Network Cards						
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	N/A	N/A	N/A	N/A
		Driver	N/A	N/A	N/A	N/A
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	5.51	5.51	N/A	N/A
		Driver	2.3.2-k (inbox)	2.8.20-k	N/A	N/A
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16	1HYQZZZ0120.P	Firmware	N/A	N/A	16.29.1016	
		Driver	N/A	N/a	5.0-0	
HBA Controllers						
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.0.261.15	12.0.261.15	N/A	N/A
		Driver	12.6.0.0	12.8.0.3	N/A	N/A
RAID Controllers						
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.060.00-1455	5.060.00-1455	N/A	N/A
		Driver	07.707.51.00-rc1	07.713.01.00-rc1	N/A	N/A
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	N/A	N/A	5.140.00-3185	
		Driver	N/A	N/A	07.714.04.00-rc1	
Boot Options & VSP Interoperability						
Local Disk Boot		Supported		Supported		Supported
VSP SAN Boot		Supported		Supported		Supported
VSP Interoperability		Hitachi Vantara Interop Matrices		Hitachi Vantara Interop Matrices		Hitachi Vantara Interop Matrices

[SUSE](#)

Components	SLES 15 SP3	
	Versions	Versions
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	S5BH3B19.H00	3B22.H00
BMC	4.68.06	4.70.06
CPLD	Rev10 / Rev11	Rev11

IO Options	Hitach Vantara Part Number	Firmware / Driver	SLES 15 SP3	SLES 15 SP3
Network Cards				
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	N/A	8.30
		Driver	N/A	2.8.20-k
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	5.51	8.30
		Driver	2.8.20-k	2.8.20-k
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16	1HYQZZZ0120.P	Firmware	N/A	16.29.1016
		Driver	N/A	5.0-0
HBA Controllers				
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.0.261.15	12.8.351.32
		Driver	12.8.0.3	12.8.0.7
RAID Controllers				
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.060.00-1455	N/A
		Driver	07.713.01.00-rc1	N/A
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	N/A	5.140.00-3185
		Driver	N/A	07.714.04.00-rc1

Boot Options & VSP Interoperability		
Local Disk Boot	Supported	Supported
VSP SAN Boot	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

[SUSE](#)

Components	SLES 12 SP4		
	Versions	Versions	Versions
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3B14.H01	S5BH3B17.H01	S5BH3B19.H00
BMC	4.62.06	4.66.06	4.68.06
CPLD	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11

IO Options	Hitachi Vantara Part Number	Firmware / Driver	SLES 12 SP4		
Network Cards					
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	7.30	7.30	N/A
		Driver	2.3.2-k (Inbox)	2.3.2-k (Inbox)	N/A
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	5.51	5.51	5.51
		Driver	i40e 2.3.2-k	2.3.2-k	2.3.2-k
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe	1HYQZZZ012Q.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16	1HYQZZZ0120.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
HBA Controllers					
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.0.261.15	12.0.261.15	12.0.261.15
		Driver	lpfc 12.0.0.10	12.0.0.10 or higher	12.0.0.10 or higher
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
RAID Controllers					
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.060.00-1455	N/A	5.060.00-1455
		Driver	07.704.04.00-rc1	N/A	07.704.04.00-rc1
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	N/A	50.30.00-0945 or higher	N/A
		Driver	N/A	07.704.04.00-rc1	N/A

Boot Options & VSP Interoperability			
Local Disk Boot	Supported	Supported	Supported
VSP SAN Boot	Supported	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

		SUSE		SUSE	
		SLES 15 SP1	SLES 15 SP2		
Components		Versions	Versions	Versions	
CPU Family		Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	
BIOS		S5BH3B19.H00	S5BH3B19.H00	S5BH3B21	
BMC		4.68.06	4.68.06	4.69.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	

IO Options	Hitachi Vantara Part Number	Firmware / Driver	SLES 15 SP1	SLES 15 SP2	SLES 15 SP2
Network Cards					
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	5.51	5.51	5.51
		Driver	2.3.2-k	2.8.20-k	2.8.20-k
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe	1HYQZZZ012Q.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16	1HYQZZZ0120.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
HBA Controllers					
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.0.261.15	12.0.261.15	12.0.261.15
		Driver	12.6.0.0	12.8.0.3	12.8.0.3
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
RAID Controllers					
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.060.00-1455	5.060.00-1455	5.060.00-1455
		Driver	07.707.51.00-rc1	07.713.01.00-rc1	07.713.01.00-rc1
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A

Boot Options & VSP Interoperability			
Local Disk Boot		Supported	Supported
VSP SAN Boot		Supported	Supported
VSP Interoperability		Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Components	SUSE	
	SLES 15 SP2	SLES 15 SP3
CPU Family	Skylake / Cascade Lake	
BIOS	3B22.H00	
BMC	4.70.06	
CPLD	Rev11	

IO Options	Hitachi Vantara Part Number	Firmware / Driver	SLES 15 SP2	SLES 15 SP3
Network Cards				
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	N/A	8.3
		Driver	N/A	2.8.20-k
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	N/A	8.3
		Driver	N/A	2.8.20-k
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2, PCIe	1HYQZZZ012Q.P	Firmware	16.29.1016	Latest
		Driver	5.0-0	Latest
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16	1HYQZZZ0120.P	Firmware	N/A	16.29.1016
		Driver	N/A	5.0-0
HBA Controllers				
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	N/A	12.8.351.32
		Driver	N/A	12.8.0.7
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	N/A	12.8.351.32
		Driver	N/A	12.8.0.7
RAID Controllers				
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	N/A	N/A
		Driver	N/A	N/A
Broadcom 9460-16i MegaRAID storage controller	1HYQZZZ026R.P	Firmware	5.140.00-3185	5.140.00-3185
		Driver	07.714.04.00-rc1	07.714.04.00-rc1

Boot Options & VSP Interoperability		
Local Disk Boot	Supported	Supported
VSP SAN Boot	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Components	SUSE	
	SLES 12 SP3	SLES 15 SP3
CPU Family	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS	3A02.H2	3B22.H00
BMC	4.23.06	4.70.06
CPLD	Rev10 / Rev11	Rev11

IO Options	Hitach Vantara Part Number	Firmware / Driver	SLES 12 SP3	SLES 15 SP3
Network Cards				
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY9ZZZ096P.P	Firmware	N/A	8.30
		Driver	N/A	2.8.20-k
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	6.02	8.30
		Driver	1.6.27-k	2.8.20-k
HBA Controllers				
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	11.4.204.34	12.8.351.32
		Driver	11.4.0.7-2	12.8.0.7
RAID Controllers				
Broadcom SAS3516 2GB RAID Mezzanine	1HY9ZZZ090X.P	Firmware	5.040.00-1123	N/A
		Drivers	07.701.17.00-rc1	N/A

Boot Options & VSP Interoperability		
Local Disk Boot	Supported	Supported
VSP SAN Boot	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

		Oracle Linux		Oracle Linux		Oracle Linux		Oracle Linux	
		OL and OL KVM 7.6		Oracle VM 3.4.6.1		OL and OL KVM 7.6		Oracle Linux 7.8	
Components		Versions		Versions		Versions		Versions	
CPU Family		Skylake / Cascade Lake		Skylake / Cascade Lake		Skylake / Cascade Lake		Skylake / Cascade Lake	
BIOS		3B14.H01		3B14.H01		3B16.H00		3B16.H01	
BMC		4.62.06		4.62.06		4.64.06		4.65.06	
CPLD		Rev11		Rev11		Rev11		Rev11	
IO Options		Hitach Vantara Part Number	Firmware / Driver	OL and OL KVM 7.6	Oracle VM 3.4.6.1	OL and OL KVM 7.6	Oracle Linux 7.8		
Network Cards									
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)		1HY9ZZZ096P.P	Firmware	N/A	N/A	4.00	N/A		
			Driver	N/A	N/A	2.7.6-k (inbox)	N/A		
Intel X710-DA4, 10 GbE quad-port, PCIe		1HY1ZZZ000K.P	Firmware	7.30	7.30	N/A	7.30		
			Driver	2.1.14-k (inbox)	2.1.14-k (inbox)	N/A	2.7.6-k (inbox)		
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe		ADPC0710009.P	Firmware	6.0.2	6.0.2	6.8	6.02		
			Driver	i40e Driver 2.7.6-k	2.1.14-k (inbox)	2.7.6-k (inbox)	2.8.20-k		
HBA Controllers									
Emulex LPe31002 FC HBA		LPE31002-M6.P	Firmware	12.2.299.23	12.4.243.17	12.4.243.17	12.2.299.23		
			Driver	lpfc Driver 12.0.0.10 (inbox)	lpfc Driver 12.0.0.10 (inbox)	lpfc Driver 12.0.0.10 (inbox)	12.0.0.13		
Emulex LPe32002 FC HBA		LPE32002-M2.P	Firmware	12.2.299.23	12.4.243.17	12.4.243.17	12.2.299.23		
			Driver	lpfc Driver 12.0.0.10 (inbox)	lpfc Driver 12.0.0.10 (inbox)	lpfc Driver 12.0.0.10 (inbox)	12.0.0.13		
Boot Options & VSP Interoperability									
VSP SAN Boot				Supported with latest UEK kernel update 4.14.35-1933.el7uek.x86_64	Supported with latest kernel 4.14.35-1902.10.8.el7uek.x86_64	Supported with latest kernel 4.14.35-1902.10.8.el7uek.x86_64	Supported with latest kernel 4.14.35-2025.400.9.1.el7uek.x86_64		
VSP Interoperability				Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices		

			Oracle Linux	Oracle Linux	Oracle Linux
			Oracle Linux 7.9	Oracle Linux KVM 7.9	Oracle Linux 8.4
Components			Versions	Versions	Versions
CPU Family			Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake
BIOS			3B18.H00	3B18.H00	3B22.H00
BMC			4.67.06	4.67.06	4.70.06
CPLD			Rev11	Rev11	Rev11
IO Options					
	Hitach Vantara Part Number	Firmware / Driver	Oracle Linux 7.9	Oracle Linux KVM 7.9	Oracle Linux 8.4
Network Cards					
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware	N/A	N/A	N/A
		Driver	N/A	N/A	N/A
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware	N/A	N/A	8.30
		Driver	N/A	N/A	2.8.20-k
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware	7.3	7.3	8.30
		Driver	2.8.20-k	2.8.20-k	2.8.20-k
HBA Controllers					
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware	12.4.243.17	12.6.240.22	12.8.351.32
		Driver	12.6.0.3	12.6.0.3	12.8.0.5
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware	12.4.243.17	12.6.240.22	12.8.351.32
		Driver	12.6.0.3	12.6.0.3	12.8.0.5
Boot Options & VSP Interoperability					
VSP SAN Boot			Supported with UEK kernel update 5.4.17-2011.6.2.el7uek.x86_64	Supported with UEK kernel update - 5.4.17-2036.102.0.2.el7uek.x86_64	Supported with UEK kernel update 5.4.17-2011.6.2.el7uek.x86_64
VSP Interoperability			Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

		Oracle Linux	Oracle Linux	Oracle Linux	Oracle Linux	
		OL and OL KVM 7.6	Oracle VM 3.4.6.1	OL and OL KVM 7.6	Oracle Linux 7.8	
Components		Versions	Versions	Versions	Versions	
CPU Family		Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	Skylake / Cascade Lake	
BIOS		3B14.H01	3B14.H01	3B16.H00	3B16.H01	
BMC		4.62.06	4.62.06	4.64.06	4.65.06	
CPLD		Rev11	Rev11	Rev11	Rev11	
IO Options	Hitachi Vantara Part Number	Firmware / Driver	OL and OL KVM 7.6	Oracle VM 3.4.6.1	OL and OL KVM 7.6	Oracle Linux 7.8
Network Cards						
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)	1HY9ZZZ096P.P	Firmware Driver	N/A N/A	N/A N/A	4.00 2.7.6-k (Inbox)	N/A N/A
Intel X710-DA4, 10 GbE quad-port, PCIe	1HY1ZZZ000K.P	Firmware Driver	7.30 2.1.14-k (Inbox)	7.30 2.1.14-k (Inbox)	N/A N/A	7.30 2.7.6-k (Inbox)
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	ADPC0710009.P	Firmware Driver	6.0.2 i40e Driver 2.7.6-k	6.0.2 2.1.14-k (inbox)	6.8 2.7.6-k (inbox)	6.02 2.8.20-k
HBA Controllers						
Emulex LPe31002 FC HBA	LPE31002-M6.P	Firmware Driver	12.2.299.23 lpfc Driver 12.0.0.10 (inbox)	12.4.243.17 lpfc Driver 12.0.0.10 (inbox)	12.4.243.17 lpfc Driver 12.0.0.10 (inbox)	12.2.299.23 12.0.0.13
Emulex LPe32002 FC HBA	LPE32002-M2.P	Firmware Driver	12.2.299.23 lpfc Driver 12.0.0.10 (inbox)	12.4.243.17 lpfc Driver 12.0.0.10 (inbox)	12.4.243.17 lpfc Driver 12.0.0.10 (inbox)	12.2.299.23 12.0.0.13
Boot Options & VSP Interoperability						
VSP SAN Boot			Supported with latest UEK kernel update 4.14.35-1933.el7uek.x86_64	Supported with latest kernel 4.14.35-1902.10.8.el7uek.x86_64	Supported with latest kernel 4.14.35-1902.10.8.el7uek.x86_64	Supported with latest kernel 4.14.35-2025.400.9.1.el7uek.x86_64
VSP Interoperability			Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

		Oracle Linux		Oracle Linux		Oracle Linux	
		Oracle Linux 7.9		Oracle Linux KVM 7.9		Oracle Linux 8.4	
Components		Versions		Versions		Versions	
CPU Family		Skylake / Cascade Lake		Skylake / Cascade Lake		Skylake / Cascade Lake	
BIOS		3B18.H00		3B18.H00		3B22.H00	
BMC		4.67.06		4.67.06		4.70.06	
CPLD		Rev11		Rev11		Rev11	
IO Options		Hitachi Vantara Part Number	Firmware / Driver	Oracle Linux 7.9	Oracle Linux KVM 7.9	Oracle Linux 8.4	
Network Cards							
Intel X527-DA4, 10GbE quad-port, OCP Mezz (Note 1)		1HY9ZZZ096P.P	Firmware Driver	N/A N/A	N/A N/A	N/A N/A	
Intel X710-DA4, 10 GbE quad-port, PCIe		1HY1ZZZ000K.P	Firmware Driver	N/A N/A	N/A N/A	8.30 2.8.20-k	
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe		ADPC0710009.P	Firmware Driver	7.3 2.8.20-k	7.3 2.8.20-k	8.3 2.8.20-k	
HBA Controllers							
Emulex LPe31002 FC HBA		LPE31002-M6.P	Firmware Driver	12.4.243.17 12.6.0.3	12.6.240.22 12.6.0.3	12.8.351.32 12.8.0.5	
Emulex LPe32002 FC HBA		LPE32002-M2.P	Firmware Driver	12.4.243.17 12.6.0.3	12.6.240.22 12.6.0.3	12.8.351.32 12.8.0.5	
Boot Options & VSP Interoperability							
VSP SAN Boot				Supported with UEK kernel update 5.4.17-2011.6.2.el7uek.x86_64	Supported with UEK kernel update - 5.4.17-2036.102.0.2.el7uek.x86_64	Supported with latest kernel 4.14.35- 2025.400.9.1.el7uek.x86_64	
VSP Interoperability				Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	

Components	Windows Server	Windows Server	Windows Server
	2016	2019	2022
CPU Family	Ice Lake	Ice Lake	Ice Lake
BIOS	3A12.H03	3A12.H03	3A12.H03
BMC	3.16.06	3.16.06	3.16.06
CPLD	Rev7	Rev7	Rev7

IO Options	Hitachi Vantara Part Number	Firmware / Driver	2016	2019	2022
Network Cards					
Intel X710-T4L Quad Port 10GbE OCP 3.0 RJ-45	1HY1ZZZ026Q.P	Firmware	8.30	8.30	8.60
		Driver	1.15.51.0 pkg: wired_driver_26.3_x64	1.15.51.0 pkg: wired_driver_26.3_x64	1.16.139.0
Intel X710-DA4 Quad Port 10GbE OCP 3.0 SFP+	1HY1ZZZ0268.P	Firmware	8.30	8.30	8.60
		Driver	1.3.115.0 (Inbox)	1.8.103.2 (Inbox)	1.16.139.0
Intel Quad Port GigE i350 Base-T, PCIe	1HYQZZZ023I.P	Firmware	1.63	1.63	1.63
		Driver	12.15.22.6 (Inbox)	12.15.22.6 (Inbox)	13.0.13.0
Intel Quad Port GigE i350 Base-T, OCP	1HYQZZZ023I.P	Firmware	1.63	1.63	1.63
		Driver	12.15.22.6 (Inbox)	12.15.22.6 (Inbox)	13.0.13.0
Intel EX710-DA4 Quad Port 10GbE LP SFP+, PCIe	1HY1ZZZ000K.P	Firmware	8.30	8.30	8.60
		Driver	1.3.115.0 (Inbox)	1.8.103.2 (Inbox)	1.16.139.0
Intel X710-T4L Quad Port 10GbE LP RJ45, PCIe	1HY1ZZZ0256.P	Firmware	Golden Version	Golden Version	8.60
		Driver	Golden Version	Golden Version	1.16.139.0
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware	2.40	2.40	2.40
		Driver	1.8.39.0 pkg: wired_driver_26.3_x64	1.8.39.0 pkg: wired_driver_26.3_x64	1.8.39.0 pkg: wired_driver_26.3_x64
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware	26.29.1016	26.29.1016	26.29.2002
		Driver	2.60.23957.0	2.60.23957.0	2.70.24739.0
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware	26.29.1016	26.29.1016	26.29.2002
		Driver	2.60.23957.0	2.60.23957.0	2.70.24739.0
Broadcom BCM957504-P425G Quad Port 25GbE LP SFP28, PCIe	1HY1ZZZ026C.P	Firmware	218.0.153.0 pkg 218.0.169.0	218.0.219.21	218.0.219.21
		Driver	218.0.32.0	218.0.32.0	218.0.32.0
HBA Controllers					
LPe31002-M6 - LIGHTPULSE 2P 16GB GEN6 FC HBA, PCIe	1HY1ZZZ026H.P	Firmware	12.8.351.32	12.8.351.32	12.8.542.26
		Driver	11.0.247.8000 (Inbox)	11.4.225.8009	12.8.542.9
LPe35002-M2 - LIGHTPULSE 2P 32GB GEN7 FC HBA, PCIe	1HY1ZZZ0264.P	Firmware	12.8.351.37	12.8.351.37	12.8.542.26
		Driver	12.8.351.45	12.8.351.45	14.0.534.0
RAID Controllers					
Broadcom SAS3916 4G RAID Mezzanine	1HY1ZZZ026X.P	Firmware	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569	5.170.02-3513 pkg:52.17.0-4086
		Driver	7.717.2.0	7.717.2.0	7.716.2.0
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware	Golden Version	Golden Version	5.200.02-3618 pkg:52.20.0-4341
		Driver	Golden Version	Golden Version	7.718.05.00
SAS Controllers					
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware	18.00.00.00	18.00.00.00	18.00.00.00
		Driver	2.61.29.00	2.61.29.00	2.61.19.80

Boot Options & VSP Interoperability			
M.2 Boot	Supported	Supported	Supported
Local Disk Boot	Supported	Supported	Supported
PXE Boot	Supported	Supported	Supported
VSP SAN Boot	Supported	Supported	Supported
VSP Direct Attach Boot	Supported	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Components	Windows Server	Windows Server	Windows Server
	2016	2019	2022
CPU Family	Ice Lake	Ice Lake	Ice Lake
BIOS	3A12.H03	3A12.H03	3A12.H03
BMC	3.16.06	3.16.06	3.16.06
CPLD	Rev7	Rev7	Rev7

IO Options	Hitachi Vantara Part Number	Firmware / Driver	2016	2019	2022
Network Cards					
Intel X710-T4L Quad Port 10GbE OCP 3.0 RJ-45	1HY1ZZZ026Q.P	Firmware	8.30	8.30	8.60
		Driver	1.15.51.0 pkg: wired_driver_26.3_x64	1.15.51.0 pkg: wired_driver_26.3_x64	1.16.139.0
Intel X710-DA4 Quad Port 10GbE OCP 3.0 SFP+	1HY1ZZZ0268.P	Firmware	8.30	8.30	8.60
		Driver	1.3.115.0 (Inbox)	1.8.103.2 (Inbox)	1.16.139.0
Intel Quad Port GigE i350 Base-T, PCIe	1HYQZZZ0231.P	Firmware	1.63	1.63	1.63
		Driver	12.15.22.6 (Inbox)	12.15.22.6 (Inbox)	13.0.13.0
Intel Quad Port GigE i350 Base-T, OCP	1HYQZZZ0231.P	Firmware	1.63	1.63	1.63
		Driver	12.15.22.6 (Inbox)	12.15.22.6 (Inbox)	13.0.13.0
Intel EX710-DA4 Quad Port 10GbE LP SFP+, PCIe	1HY1ZZZ000K.P	Firmware	8.30	8.30	8.60
		Driver	1.3.115.0 (Inbox)	1.8.103.2 (Inbox)	1.16.139.0
Intel X710-T4L Quad Port 10GbE LP RJ45, PCIe	1HY1ZZZ0256.P	Firmware	Golden Version	Golden Version	8.60
		Driver	Golden Version	Golden Version	1.16.139.0
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware	2.40	2.40	2.40
		Driver	1.8.39.0 pkg: wired_driver_26.3_x64	1.8.39.0 pkg: wired_driver_26.3_x64	1.8.39.0 pkg: wired_driver_26.3_x64
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware	26.29.1016	26.29.1016	26.29.2002
		Driver	2.60.23957.0	2.60.23957.0	2.70.24739.0
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware	26.29.1016	26.29.1016	26.29.2002
		Driver	2.60.23957.0	2.60.23957.0	2.70.24739.0
Broadcom BCM957504-P425G Quad Port 25GbE LP SFP28, PCIe	1HY1ZZZ026C.P	Firmware	218.0.153.0 pkg 218.0.169.0	218.0.219.21	218.0.219.21
		Driver	218.0.32.0	218.0.32.0	218.0.32.0
HBA Controllers					
LPe31002-M6 - LIGHTPULSE 2P 16GB GEN6 FC HBA, PCIe	1HY1ZZZ026H.P	Firmware	N/A	12.8.351.32	12.8.542.26
		Driver	N/A	11.4.225.8009	12.8.542.9
LPe35002-M2 - LIGHTPULSE 2P 32GB GEN7 FC HBA, PCIe	1HY1ZZZ0264.P	Firmware	N/A	12.8.351.37	12.8.542.26
		Driver	N/A	12.8.351.45	14.0.534.0
RAID Controllers					
Broadcom SAS3916 4G RAID Mezzanine	1HY1ZZZ026X.P	Firmware	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569	5.170.02-3513 pkg:52.17.0-4086
		Driver	7.717.2.0	7.717.2.0	7.716.2.0
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware	5.180.02-3512	5.180.02-3512	5.200.02-3618 pkg:52.20.0-4341
		Driver	7.718.05.00	7.718.05.00	7.718.05.00
SAS Controllers					
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware	18.00.00.00	18.00.00.00	18.00.00.00
		Driver	2.61.29.00	2.61.29.00	2.61.19.80

Boot Options & VSP Interoperability			
M.2 Boot	Supported	Supported	Supported
Local Disk Boot	Supported	Supported	Supported
PXE Boot	Supported	Supported	Supported
VSP Direct Attach Boot	N/A	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Components	VMware vSphere ESXi		7.0 U2	7.0 U3d	7.0 U3g	8.0
	Versions	Versions	Versions	Versions	Versions	Versions
CPU Family			Ice Lake	Ice Lake	Ice Lake	Ice Lake
BIOS			3A12.H03	3A12.H03	3A15.H00	3A15.H00
BMC			3.16.06	3.16.06	3.33.06	3.33.06
CPLD			Rev7	Rev7	Rev7	Rev7

IO Options	Hitachi Vantara Part Number	Firmware / Driver	7.0 U2	7.0 U3d	7.0 U3g	8.0
Network Cards						
Intel I350-T4 Quad Port 1GbE OCP 3.0 RJ-45	1HY1ZZZ026W.P	Firmware	N/A	1.63	1.63	1.63
		Driver	N/A	1.4.11.2 (Inbox)	VMware Inbox 1.4.11.2	VMware Inbox - 1.4.11.6-1vmw
Intel X710-T4L Quad Port 10GbE OCP 3.0 RJ-45	1HY1ZZZ026Q.P	Firmware	8.30	8.30	8.30	8.30
		Driver	1.8.1.136 (Inbox)	1.8.1.136 (Inbox)	VMware Inbox 1.11.1.31	VMware Inbox - 1.11.2.5-1vmw
Intel X710-DA4 Quad Port 10GbE OCP 3.0 SFP+	1HY1ZZZ0268.P	Firmware	8.30	8.30	8.30	8.30
		Driver	1.8.1.136 (Inbox)	1.8.1.136 (Inbox)	VMware Inbox 1.11.1.31	VMware Inbox - 1.11.2.5-1vmw
Intel Quad Port GigE i350 Base-T, PCIe	1HYQZZZ023I.P	Firmware	1.63	1.63	1.63	1.63
		Driver	1.4.11.2 (Inbox)	1.4.11.2 (Inbox)	VMware Inbox 1.4.11.2	VMware Inbox - 1.4.11.6-1vmw
Intel EX710-DA4 Quad Port 10GbE LP SFP+, PCIe	1HY1ZZZ000K.P	Firmware	8.30	8.30	8.30	8.30
		Driver	1.8.1.136 (Inbox)	1.8.1.136 (Inbox)	VMware Inbox 1.11.1.31	VMware Inbox - 1.11.2.5-1vmw
Intel X710-T4L Quad Port 10GbE LP RJ45, PCIe	1HY1ZZZ0256.P	Firmware	N/A	8.30	8.30	8.30
		Driver	N/A	1.8.1.136-1vmw	VMware Inbox 1.11.1.31	VMware Inbox - 1.11.2.5-1vmw
Intel E810 Dual Port 25GbE LP SFP+, PCIe	1HY1ZZZ026D.P	Firmware	2.40	3.00	3.20 or higher	3.20 or higher
		Driver	1.6.2.0 (Inbox)	1.6.5.0-1OEM	1.8.5.0-1 (Async)	Partner Async - 1.8.5.0-1OEM
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware	26.29.2002	26.29.2002	26.29.2002 or higher	26.29.2002 or higher
		Driver	4.21.71.101	4.21.71.101	VMware Inbox 4.21.71.101	VMware Inbox 4.21.71.101
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware	26.29.2002	26.29.2002	26.29.2002 or higher	26.29.2002 or higher
		Driver	4.21.71.101	4.21.71.101	VMware Inbox 4.21.71.101	VMware Inbox 4.21.71.101
Mellanox CX-6 VPI Dual Port 100GbE LP QSFP56	1HY1ZZZ026G.P	Firmware	20.29.1016	20.29.1016	20.29.1016 or higher	20.29.1016 or higher
		Driver	4.21.71.101	4.19.16.11	VMware Inbox 4.19.16.11	VMware Inbox 4.21.71.101
HBA Controllers						
LPe31002-M6 - LIGHTPULSE 2P 16GB GEN6 FC HBA, PCIe	1HY1ZZZ026H.P	Firmware	12.8.351.32	12.8.542.26	12.8.542.26	12.8.542.26 - or higher
		Driver	12.8.298.3 (Inbox)	14.0.326.12	14.0.622.0 (Async)	Partner Async - 14.0.622.0
LPe35002-M2 - LIGHTPULSE 2P 32GB GEN7 FC HBA, PCIe	1HY1ZZZ0264.P	Firmware	12.8.542.26	12.8.542.26	12.8.542.26	12.8.542.26 - or higher
		Driver	12.8.298.3	14.0.326.12	14.0.622.0 (Async)	Partner Async - 14.0.622.0
RAID Controllers						
Broadcom SAS3916 4G RAID Mezzanine	1HY1ZZZ026X.P	Firmware	5.170.00-3513 pkg: 52.17.0-4086	5.170.00-3513	5.170.00-3513 or higher	5.170.00-3513 or higher
		Driver	7.716.03.00 (Inbox)	7.716.03.00-1vmw	VMware Inbox 7.722.02.00-1	VMware Inbox - 7.722.02.00-1
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware	Golden Version	5.130.02-3059	5.130.02-3059 or higher	5.130.02-3059 or higher
		Driver	Golden Version	7.718.02.00-1vmw	VMware Inbox 7.718.02.00	VMware Inbox 7.722.02.00
SAS Controllers						
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware	18.00.00.00	18.00.01.00	14.00.05.00 or higher	14.00.05.00 or higher
		Driver	17.00.02.00 (Inbox)	19.00.02.00-1vmw	VMware Inbox 19.00.02.00-1	VMware Inbox - 23.00.00.00-1
Broadcom 9500-16i SAS Controller, PCIe	1HY1ZZZ026I.P	Firmware	N/A	18.00.00.00	22.00.00.00 or higher	5.130.02-3059 or higher
		Driver	N/A	19.00.02.00-1vmw	VMware Inbox 19.00.02.00-1	VMware Inbox 7.722.02.00
Boot Options & VSP Interoperability						
M.2 Boot			Supported	Supported	Supported	Supported
Local Disk Boot			Supported	Supported	Supported	Supported
PXE Boot			Supported	Supported	Supported	Supported
VSP SAN Boot			Supported	Supported	Supported	Supported
VSP Direct Attach Boot			Supported	Supported	Supported	Supported
VSP Interoperability			Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Components	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi	VMware vSphere ESXi
	7.0 U2	7.0 U3d	7.0 U3g	8.0
CPU Family	Ice Lake	Ice Lake	Ice Lake	Ice Lake
BIOS	3A12.H03	3A12.H03	3A15.H00	3A15.H00
BMC	3.16.06	3.16.06	3.33.06	3.33.06
CPLD	Rev7	Rev7	Rev7	Rev7

IO Options	Hitachi Vantara Part Number	Firmware / Driver	7.0 U2	7.0 U3d	7.0 U3g	8.0
Network Cards						
Intel I350-T4 Quad Port 1GbE OCP 3.0 RJ-45	1HY1ZZZ026W.P	Firmware Driver	N/A N/A	1.63 1.4.11.2 (Inbox)	1.63 VMware Inbox 1.4.11.2	1.63 VMware Inbox - 1.4.11.6-1vmw
Intel X710-T4L Quad Port 10GbE OCP 3.0 RJ-45	1HY1ZZZ026Q.P	Firmware Driver	8.30 1.8.1.136 (Inbox)	8.30 1.8.1.136 (Inbox)	8.30 VMware Inbox 1.11.1.31	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-DA4 Quad Port 10GbE OCP 3.0 SFP+	1HY1ZZZ0268.P	Firmware Driver	N/A N/A	8.30 1.8.1.136 (Inbox)	8.30 VMware Inbox 1.11.1.31	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel Quad Port GigE i350 Base-T, PCIe	1HYQZZZ023I.P	Firmware Driver	1.63 1.4.11.2 (Inbox)	1.63 1.4.11.2 (Inbox)	1.63 VMware Inbox 1.4.11.2	1.63 VMware Inbox - 1.4.11.6-1vmw
Intel EX710-DA4 Quad Port 10GbE LP SFP+, PCIe	1HY1ZZZ000K.P	Firmware Driver	8.30 1.8.1.136 (Inbox)	8.30 1.8.1.136 (Inbox)	8.30 VMware Inbox 1.11.1.31	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel X710-T4L Quad Port 10GbE LP RJ45, PCIe	1HY1ZZZ0256.P	Firmware Driver	N/A N/A	8.30 1.8.1.136-1vmw	8.30 VMware Inbox 1.11.1.31	8.30 VMware Inbox - 1.11.2.5-1vmw
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware Driver	2.40 1.6.2.0 (Inbox)	3.00 1.6.5.0-10EM	3.20 or higher 1.8.5.0-1 (Async)	3.20 or higher Partner Async - 1.8.5.0-10EM
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware Driver	26.29.2002 4.21.71.101	26.29.2002 4.21.71.101	26.29.2002 or higher VMware Inbox 4.21.71.101	26.29.2002 or higher VMware Inbox 4.21.71.101
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware Driver	26.29.2002 4.21.71.101	26.29.2002 4.21.71.101	26.29.2002 or higher VMware Inbox 4.21.71.101	26.29.2002 or higher VMware Inbox 4.21.71.101
Mellanox CX-6 VPI Dual Port 100GbE LP QSFP56	1HY1ZZZ026G.P	Firmware Driver	20.29.1016 4.21.71.101	20.29.1016 4.19.16.11	20.29.1016 or higher VMware Inbox 4.19.16.11	20.29.1016 or higher VMware Inbox 4.21.71.101
HBA Controllers						
LPe31002-M6 - LIGHTPULSE 2P 16GB GEN6 FC HBA, PCIe	1HY1ZZZ026H.P	Firmware Driver	12.8.351.32 12.8.298.3 (Inbox)	12.8.542.26 14.0.326.12	12.8.542.26 14.0.622.0 (Async)	12.8.542.26 - or higher Partner Async - 14.0.622.0
LPe35002-M2 - LIGHTPULSE 2P 32GB GEN7 FC HBA, PCIe	1HY1ZZZ0264.P	Firmware Driver	12.8.542.26 12.8.298.3	12.8.542.26 14.0.326.12	12.8.542.26 14.0.622.0 (Async)	12.8.542.26 - or higher Partner Async - 14.0.622.0
RAID Controllers						
Broadcom SAS3916 4G RAID Mezzanine	1HY1ZZZ026X.P	Firmware Driver	5.170.00-3513 pkg: 52.17.0-4086 7.716.03.00 (Inbox)	5.170.00-3513 7.716.03.00-1vmw	5.170.00-3513 or higher VMware Inbox 7.722.02.00-1	5.170.00-3513 or higher VMware Inbox - 7.722.02.00-1
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware Driver	N/A N/A	5.130.02-3059 7.718.02.00-1vmw	5.130.02-3059 or higher VMware Inbox 7.718.02.00	5.130.02-3059 or higher VMware Inbox 7.722.02.00
SAS Controllers						
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware Driver	18.00.00.00 17.00.02.00 (Inbox)	18.00.01.00 19.00.02.00-1vmw	14.00.05.00 or higher VMware Inbox 19.00.02.00-1	14.00.05.00 or higher VMware Inbox - 23.00.00.00-1
Broadcom 9500-16i SAS Controller, PCIe	1HY1ZZZ026I.P	Firmware Driver	N/A N/A	18.00.00.00 19.00.02.00-1vmw	22.00.00.00 or higher VMware Inbox 19.00.02.00-1	5.130.02-3059 or higher VMware Inbox 7.722.02.00

Boot Options & VSP Interoperability				
M.2 Boot	Supported	Supported	Supported	Supported
Local Disk Boot	Supported	Supported	Supported	Supported
PXE Boot	Supported	Supported	Supported	Supported
VSP SAN Boot	Supported	Supported	Supported	Supported
VSP Direct Attach Boot	Supported	Supported	Supported	Supported
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

		Red Hat Enterprise Linux	Red Hat Enterprise Linux	Red Hat Enterprise Linux	Red Hat Enterprise Linux	Red Hat Enterprise Linux	
		7.8	7.9	8.2	8.4	8.5	
Components	Versions						
CPU Family	Ice Lake						
BIOS	3A12.H03						
BMC	3.16.06						
CPLD	Rev7						
IO Options	Hitachi Vantara Part Number	Firmware / Driver	7.8	7.9	8.2	8.4	8.5
Network Cards							
Intel I350-T4 Quad Port 1GbE OCP 3.0 RJ-45	1HY1ZZZ026W.P	Firmware	N/A	N/A	N/A	1.63	N/A
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64	N/A
Intel X710-T4L Quad Port 10GbE OCP 3.0 RJ-45	1HY1ZZZ026Q.P	Firmware	N/A	N/A	N/A	8.30	N/A
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64 (Inbox)	N/A
Intel X710-DA4 Quad Port 10GbE OCP 3.0 SFP+	1HY1ZZZ0268.P	Firmware	N/A	N/A	8.30	8.30	N/A
		Driver	N/A	N/A	2.8.20-k (Inbox)	4.18.0-305.el8.x86_64 (Inbox)	N/A
Intel Quad Port GigE i350 Base-T, PCIe	1HYQZZZ0231.P	Firmware	N/A	N/A	N/A	1.63	N/A
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64	N/A
Intel EX710-DA4 Quad Port 10GbE LP SFP+, PCIe	1HY1ZZZ000K.P	Firmware	N/A	N/A	8.30	8.30	N/A
		Driver	N/A	N/A	2.8.20-k (Inbox)	4.18.0-305.el8.x86_64 (Inbox)	N/A
Intel X710-T4L Quad Port 10GbE LP RJ45, PCIe	1HY1ZZZ0256.P	Firmware	N/A	N/A	N/A	8.30	N/A
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64 (Inbox)	N/A
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware	N/A	N/A	2.40	2.40	2.42
		Driver	N/A	N/A	1.6.4	1.6.4	Ice 0.8.2-k (inbox)
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware	N/A	26.29.1016	26.29.1016	26.29.1016	N/A
		Driver	N/A	5.4-1.0.3	5.0-0 (Inbox)	5.0-0 (Inbox)	N/A
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware	N/A	26.29.1016	26.29.1016	26.29.1016	N/A
		Driver	N/A	5.4-1.0.3	5.0-0 (Inbox)	5.0-0 (Inbox)	N/A
Broadcom BCM957504-N425G Quad Port 25GbE OCP SFP28	1HY1ZZZ026B.P	Firmware	N/A	N/A	N/A	218.0.219.13 /pkg 218.0.219.21	N/A
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64	N/A
Broadcom BCM957504-P425G Quad Port 25GbE LP SFP28, PCIe	1HY1ZZZ026C.P	Firmware	N/A	N/A	N/A	218.0.153.0/pkg 218.0.169.0	N/A
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64 (Inbox)	N/A
Mellanox CX-6 VPI Dual Port 100GbE LP QSFP56	1HY1ZZZ026G.P	Firmware	20.29.1016	20.29.1016	20.29.1016	20.29.1016	N/A
		Driver	5.0-0	5.0-0	5.0-0	5.0-0	N/A
Mellanox CX-6 Dx Dual Port 100GbE LP QSFP56	1HY1ZZZ026N.P	Firmware	N/A	N/A	N/A	22.32.2004	N/A
		Driver	N/A	N/A	N/A	5.4-3.5.8.0-rhel8.4-x86_64	N/A
HBA Controllers							
LPe31002-M6 - LIGHTPULSE 2P 16GB GEN6 FC HBA, PCIe	1HY1ZZZ026H.P	Firmware	N/A	N/A	12.8.351.32	12.8.351.32	N/A
		Driver	N/A	N/A	12.6.0.2 (Inbox)	12.8.0.5	N/A
LPe35002-M2 - LIGHTPULSE 2P 32GB GEN7 FC HBA, PCIe	1HY1ZZZ0264.P	Firmware	N/A	12.8.351.37	12.8.351.37	12.8.351.37	12.8.542.26
		Driver	N/A	12.0.0.13 (Inbox)	12.6.0.2 (Inbox)	12.8.0.5	12.8.0.10
RAID Controllers							
Broadcom SAS3916 4G RAID Mezzanine	1HY1ZZZ026X.P	Firmware	N/A	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569	N/A
		Driver	N/A	07.714.04.00-rh1 (inbox)	07.710.50.00-rc1 (Inbox)	07.714.04.00-rh1 (inbox)	N/A
Broadcom 9560-16i RAID Controller, PCIe	1HY1ZZZ026J.P	Firmware	N/A	N/A	N/A	N/A	N/A
		Driver	N/A	N/A	N/A	N/A	N/A
SAS Controllers							
Broadcom SAS3816 SAS Mezzanine	1HY1ZZZ026Y.P	Firmware	N/A	N/A	N/A	N/A	N/A
		Driver	N/A	N/A	N/A	N/A	N/A
Broadcom 9500-16i SAS Controller, PCIe	1HY1ZZZ026I.P	Firmware	N/A	N/A	N/A	18.00.00.00	N/A
		Driver	N/A	N/A	N/A	35.101.00.00 (inbox)	N/A
Boot Options & VSP Interoperability							
M.2 Boot			N/A	N/A	Supported	Supported	N/A
Local Disk Boot			N/A	Supported	Supported	Supported	N/A
PXE Boot			N/A	Supported	Supported	Supported	N/A
VSP SAN Boot			N/A	Supported	Supported	Supported	Supported
VSP Direct Attach Boot			N/A	Supported	Supported	Supported	N/A
VSP Interoperability	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

		Red Hat Enterprise Linux	Red Hat Enterprise Linux	Red Hat Enterprise Linux	Red Hat Enterprise Linux	Red Hat Enterprise Linux
		7.8	7.9	8.2	8.4	8.5
Components						
CPU Family		Ice Lake	Ice Lake	Ice Lake	Ice Lake	Ice Lake
BIOS		3A12.H03	3A12.H03	3A12.H03	3A15.H03	3A12.H03
BMC		3.16.06	3.16.06	3.16.06	3.33.06	3.16.06
CPLD		Rev7	Rev7	Rev7	Rev7	Rev7
IO Options						
Network Cards	Hitachi Vantara Part Number	Firmware / Driver	7.8	7.9	8.2	8.4
Intel I350-T4 Quad Port 1GbE OCP 3.0 RJ-45	1HY1ZZZ026W.P	Firmware	N/A	N/A	N/A	1.63
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64
Intel X710-T4L Quad Port 10GbE OCP 3.0 RJ-45	1HY1ZZZ026Q.P	Firmware	N/A	N/A	N/A	8.30
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64 (Inbox)
Intel X710-DA4 Quad Port 10GbE OCP 3.0 SFP+	1HY1ZZZ0268.P	Firmware	N/A	N/A	8.30	8.30
		Driver	N/A	N/A	2.8.20-k (Inbox)	4.18.0-305.el8.x86_64 (Inbox)
Intel EX710-DA4 Quad Port 10GbE LP SFP+, PCIe	1HY1ZZZ000K.P	Firmware	N/A	N/A	8.30	8.30
		Driver	N/A	N/A	2.8.20-k (Inbox)	4.18.0-305.el8.x86_64 (Inbox)
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware	N/A	N/A	2.40	2.40
		Driver	N/A	N/A	1.6.4	1.6.4
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware	N/A	26.29.1016	26.29.1016	26.29.1016
		Driver	N/A	5.4-1.0.3	5.0-0 (Inbox)	5.0-0 (Inbox)
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware	N/A	26.29.1016	26.29.1016	26.29.1016
		Driver	N/A	5.4-1.0.3	5.0-0 (Inbox)	5.0-0 (Inbox)
Broadcom BCM957504-N425G Quad Port 25GbE OCP SFP28	1HY1ZZZ026B.P	Firmware	N/A	N/A	N/A	218.0.219.13 /pkg 218.0.219.21
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64
Broadcom BCM957504-P425G Quad Port 25GbE LP SFP28, PCIe	1HY1ZZZ026C.P	Firmware	N/A	N/A	N/A	218.0.153.0/pkg 218.0.169.0
		Driver	N/A	N/A	N/A	4.18.0-305.el8.x86_64 (Inbox)
Mellanox CX-6 VPI Dual Port 100GbE LP QSFP56	1HY1ZZZ026G.P	Firmware	20.29.1016	20.29.1016	20.29.1016	20.29.1016
		Driver	5.0-0	5.0-0	5.0-0	5.0-0
Mellanox CX-6 Dx Dual Port 100GbE LP QSFP56	1HY1ZZZ026N.P	Firmware	N/A	N/A	N/A	22.32.2004
		Driver	N/A	N/A	N/A	5.4-3.5.8.0-rhel8.4-x86_64
HBA Controllers						
LPe31002-M6 - LIGHTPULSE 2P 16GB GEN6 FC HBA, PCIe	1HY1ZZZ026H.P	Firmware	N/A	N/A	12.8.351.32	12.8.351.32
		Driver	N/A	N/A	12.6.0.2 (Inbox)	12.8.0.5
LPe35002-M2 - LIGHTPULSE 2P 32GB GEN7 FC HBA, PCIe	1HY1ZZZ0264.P	Firmware	N/A	N/A	12.8.351.37	12.8.351.37
		Driver	N/A	N/A	12.6.0.2 (Inbox)	12.8.0.5
RAID Controllers						
Broadcom SAS3916 4G RAID Mezzanine	1HY1ZZZ026X.P	Firmware	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569
		Driver	07.714.04.00-rh1 (inbox)	07.714.04.00-rh1 (inbox)	07.710.50.00-rc1 (inbox)	07.714.04.00-rh1 (inbox)
Boot Options & VSP Interoperability						
M.2 Boot			Supported	Supported	Supported	N/A
Local Disk Boot			Supported	Supported	Supported	Supported
PXE Boot			Supported	Supported	Supported	Supported
VSP SAN Boot			Supported	Supported	Supported	Supported
VSP Direct Attach Boot			Supported	Supported	Supported	Supported
VSP Interoperability			Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Components	SUSE	SUSE	SUSE
	SLES 12 SP5	SLES 15 SP2	SLES 15 SP3
CPU Family	Ice Lake	Ice Lake	Ice Lake
BIOS	3A12.H03	3A12.H03	3A12.H03
BMC	3.16.06	3.16.06	3.16.06
CPLD	Rev7	Rev7	Rev7

IO Options	Hitachi Vantara Part Number	Firmware / Driver	SLES 12 SP5	SLES 15 SP2	SLES 15 SP3
Network Cards					
Intel X710-T4L Quad Port 10GbE OCP 3.0 RJ-45	1HY1ZZZ026Q.P	Firmware	N/A	8.60	N/A
		Driver	N/A	2.8.20-k	N/A
Intel X710-DA4 Quad Port 10GbE OCP 3.0 SFP+	1HY1ZZZ0268.P	Firmware	N/A	8.30	8.30
		Driver	N/A	2.8.20-k (Inbox)	2.8.20-k (Inbox)
Intel Quad Port GigE i350 Base-T, PCIe	1HYQZZZ023I.P	Firmware	N/A	1.63	1.63
		Driver	N/A	5.6.0-k (Inbox)	5.6.0-k (Inbox)
Intel EX710-DA4 Quad Port 10GbE LP SFP+, PCIe	1HY1ZZZ000K.P	Firmware	N/A	8.30	8.30
		Driver	N/A	2.8.20-k (Inbox)	2.8.20-k (Inbox)
Intel X710-T4L Quad Port 10GbE LP RJ45, PCIe	1HY1ZZZ0256.P	Firmware	N/A	8.60	N/A
		Driver	N/A	2.8.20-k	N/A
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware	N/A	2.40	2.40
		Driver	N/A	0.8.2-k (Inbox)☒	0.8.2-k (Inbox)☒
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware	26.29.1016	26.29.1016	26.29.1016
		Driver	5.4-1.0.3	5.0-0 (Inbox)	5.0-0 (Inbox)
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware	26.29.1016	26.29.1016	26.29.1016
		Driver	5.4-1.0.3	5.0-0 (Inbox)	5.0-0 (Inbox)
Broadcom BCM957504-P425G Quad Port 25GbE LP SFP28, PCIe	1HY1ZZZ026C.P	Firmware	N/A	218.0.153.0 pkg 218.0.169.0	218.0.153.0 pkg 218.0.169.0
		Driver	N/A	1.10.1 (Inbox)	1.10.1 (Inbox)
Mellanox CX-6 VPI Dual Port 100GbE LP QSFP56	1HY1ZZZ026G.P	Firmware	20.29.1016	N/A	N/A
		Driver	5.0-0	N/A	N/A
HBA Controllers					
LPe31002-M6 - LIGHTPULSE 2P 16GB GEN6 FC HBA, PCIe	1HY1ZZZ026H.P	Firmware	N/A	12.8.542.26	12.8.351.32
		Driver	N/A	12.8.0.0	12.8.0.7
LPe35002-M2 - LIGHTPULSE 2P 32GB GEN7 FC HBA, PCIe	1HY1ZZZ0264.P	Firmware	12.8.351.37	12.8.351.37	12.8.351.37
		Driver	12.4.0.0 (Inbox)	12.8.0.0 (Inbox)	12.8.0.7
RAID Controllers					
Broadcom SAS3916 4G RAID Mezzanine	1HY1ZZZ026X.P	Firmware	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569
		Driver	07.707.51.00-rc1 (Inbox)	07.713.01.00-rc1 (Inbox)	07.713.01.00-rc1 (Inbox)

Boot Options & VSP Interoperability			
M.2 Boot		N/A	Supported
Local Disk Boot		Supported	Supported
PXE Boot		Supported	Supported
VSP SAN Boot		Supported	Supported
VSP Direct Attach Boot		Supported	Supported
VSP Interoperability		Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Components	SUSE	SUSE	SUSE
	SLES 12 SP5	SLES 15 SP2	SLES 15 SP3
CPU Family	Ice Lake	Ice Lake	Ice Lake
BIOS	3A12.H03	3A12.H03	3A12.H03
BMC	3.16.06	3.16.06	3.16.06
CPLD	Rev7	Rev7	Rev7

IO Options	Hitachi Vantara Part Number	Firmware / Driver	SLES 12 SP5	SLES 15 SP2	SLES 15 SP3
Network Cards					
Intel X710-T4L Quad Port 10GbE OCP 3.0 RJ-45	1HY1ZZZ026Q.P	Firmware	N/A	8.60	N/A
		Driver	N/A	2.8.20-k	N/A
Intel X710-DA4 Quad Port 10GbE OCP 3.0 SFP+	1HY1ZZZ0268.P	Firmware	N/A	8.30	8.30
		Driver	N/A	2.8.20-k (Inbox)	2.8.20-k (Inbox)
Intel Quad Port GigE i350 Base-T, PCIe	1HYQZZZ0231.P	Firmware	N/A	1.63	1.63
		Driver	N/A	5.6.0-k (Inbox)	5.6.0-k (Inbox)
Intel EX710-DA4 Quad Port 10GbE LP SFP+, PCIe	1HY1ZZZ000K.P	Firmware	N/A	8.30	8.30
		Driver	N/A	2.8.20-k (Inbox)	2.8.20-k (Inbox)
Intel X710-T4L Quad Port 10GbE LP RJ45, PCIe	1HY1ZZZ0256.P	Firmware	N/A	8.60	N/A
		Driver	N/A	2.8.20-k	N/A
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware	N/A	2.40	2.40
		Driver	N/A	0.8.2-k (Inbox)☒	0.8.2-k (Inbox)☒
Mellanox CX-6 Lx EN Dual Port 25GbE OCP 3.0 QSFP28	1HY1ZZZ026M.P	Firmware	N/A	26.29.1016	26.29.1016
		Driver	N/A	5.0-0 (Inbox)	5.0-0 (Inbox)
Mellanox CX-6 Lx EN Dual Port 25GbE LP QSFP28, PCIe	1HY1ZZZ026L.P	Firmware	26.29.1016	26.29.1016	26.29.1016
		Driver	5.4-1.0.3	5.0-0 (Inbox)	5.0-0 (Inbox)
Broadcom BCM957504-N425G Quad Port 25GbE OCP SFP28	1HY1ZZZ026B.P	Firmware	26.29.1016	N/A	N/A
		Driver	5.4-1.0.3	N/A	N/A
Broadcom BCM957504-P425G Quad Port 25GbE LP SFP28, PCIe	1HY1ZZZ026C.P	Firmware	N/A	218.0.153.0	218.0.153.0
		Driver	N/A	1.10.1 (Inbox)	1.10.1 (Inbox)
Mellanox CX-6 VPI Dual Port 100GbE LP QSFP56	1HY1ZZZ026G.P	Firmware	20.29.1016	N/A	N/A
		Driver	5.0-0	N/A	N/A
HBA Controllers					
LPe31002-M6 - LIGHTPULSE 2P 16GB GEN6 FC HBA, PCIe	1HY1ZZZ026H.P	Firmware	N/A	12.8.542.26	12.8.351.32
		Driver	N/A	12.8.0.0	12.8.0.7
LPe35002-M2 - LIGHTPULSE 2P 32GB GEN7 FC HBA, PCIe	1HY1ZZZ0264.P	Firmware	12.8.351.37	12.8.351.37	12.8.351.37
		Driver	12.4.0.0 (Inbox)	12.8.0.0 (Inbox)	12.8.0.7
RAID Controllers					
Broadcom SAS3916 4G RAID Mezzanine	1HY1ZZZ026X.P	Firmware	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569	5.140.02-3287 pkg:52.14.0-3569
		Driver	07.707.51.00-rc1 (Inbox)	07.713.01.00-rc1☒(Inbox)	07.713.01.00-rc1☒(Inbox)

Boot Options & VSP Interoperability			
M.2 Boot		N/A	Supported
Local Disk Boot		Supported	Supported
PXE Boot		Supported	Supported
VSP SAN Boot		Supported	Supported
VSP Direct Attach Boot		Supported	Supported
VSP Interoperability		Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Components	Oracle Linux		Oracle Linux	
	Oracle Linux 7.9	Oracle Linux 8.4	Oracle Linux 8.5	Oracle Linux 8.5
CPU Family	Ice Lake	Ice Lake	Ice Lake	Ice Lake
BIOS	3A12.H03	3A12.H03	3A12.H03	3A12.H03
BMC	3.16.06	3.16.06	3.16.06	3.16.06
CPLD	Rev7	Rev7	Rev7	Rev7

IO Options	Hitachi Vantara Part Number	Firmware / Driver	Oracle Linux 7.9	Oracle Linux 8.4	Oracle Linux 8.5	Oracle Linux 8.5
Network Cards						
Intel EX710-DA4 Quad Port 10GbE LP SFP+, PCIe	1HY1ZZZ000K.P	Firmware	8.30	8.30	8.30	8.50
		Driver	2.8.20-k (inbox)	2.8.20-k (inbox)	2.8.20-k (inbox)	2.8.20-k (inbox)
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware	2.40	2.40	2.42	N/A
		Driver	1.6.4 (Note 1)	1.6.4 (Note 1)	ice 0.8.2-k	N/A
Broadcom BCM957504-P425G Quad Port 25GbE LP SFP28, PCIe	1HY1ZZZ026C.P	Firmware	N/A	N/A	N/A	218.0.166.0
		Driver	N/A	N/A	N/A	1.10.2
HBA Controllers						
LPe31002-M6 - LIGHTPULSE 2P 16GB GEN6 FC HBA, PCIe	1HY1ZZZ026H.P	Firmware	12.8.351.32	12.8.351.32	N/A	N/A
		Driver	12.8.0.5	12.8.0.5	N/A	N/A
LPe35002-M2 - LIGHTPULSE 2P 32GB GEN7 FC HBA, PCIe	1HY1ZZZ0264.P	Firmware	12.8.542.26	12.8.542.26	12.8.542.26	12.8.542.26
		Driver	12.8.0.5	12.8.0.5	12.8.0.10	12.8.0.10

Boot Options & VSP Interoperability						
M.2 Boot			N/A	N/A	N/A	Supported
Local Disk Boot			N/A	N/A	N/A	Supported
PXE Boot			Supported	Supported	Supported	Supported
VSP SAN Boot			Supported	Supported	Supported	Supported
VSP Direct Attach Boot			Supported	Supported	Supported	Supported
VSP Interoperability			Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for:

[DS120 G2 Interoperability Matrix](#)

Note 1: Intel E810 card Driver 1.6.4 is only supported with RHCK kernel

Components	Oracle Linux	Oracle Linux	Oracle Linux
	Oracle Linux 7.9	Oracle Linux 8.4	Oracle Linux 8.5
CPU Family	Ice Lake	Ice Lake	Ice Lake
BIOS	3A12.H03	3A12.H03	3A12.H03
BMC	3.16.06	3.16.06	3.16.06
CPLD	Rev7	Rev7	Rev7

IO Options	Hitachi Vantara Part Number	Firmware / Driver	Oracle Linux 7.9	Oracle Linux 8.4	Oracle Linux 8.5	Oracle Linux 8.5
Network Cards						
Intel EX710-DA4 Quad Port 10GbE LP SFP+, PCIe	1HY1ZZZ000K.P	Firmware	8.30	8.30	8.30	8.50
		Driver	2.8.20-k (inbox)	2.8.20-k (inbox)	2.8.20-k (inbox)	2.8.20-k (inbox)
Intel E810 Dual Port 25GbE LP SFP28, PCIe	1HY1ZZZ026D.P	Firmware	2.40	2.40	2.42	2.42
		Driver	1.6.4 (Note 1)	1.6.4 (Note 1)	ice 0.8.2-k	ice 0.8.2-k
Broadcom BCM957504-P425G Quad Port 25GbE LP SFP28, PCIe	1HY1ZZZ026C.P	Firmware	N/A	N/A	N/A	218.0.166.0
		Driver	N/A	N/A	N/A	1.10.2
HBA Controllers						
LPe35002-M2 - LIGHTPULSE 2P 32GB GEN7 FC HBA, PCIe	1HY1ZZZ0264.P	Firmware	12.8.542.26	12.8.542.26	12.8.542.26	12.8.542.26
		Driver	12.8.0.5	12.8.0.5	12.8.0.10	12.8.0.10

Boot Options & VSP Interoperability				
M.2 Boot		N/A	N/A	Supported
Local Disk Boot		N/A	N/A	Supported
PXE Boot		Supported	Supported	Supported
VSP SAN Boot		Supported	Supported	Supported
VSP Direct Attach Boot		Supported	Supported	Supported
VSP Interoperability		Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices	Hitachi Vantara Interop Matrices

Footnotes for:

[DS220 G2 Interoperability Matrix](#)

Note 1: Intel E810 card Driver 1.6.4 is only supported with RHCK kernel