



## Hitachi Solution for the SAP HANA Platform Firmware and Software Matrix

**Note:** Configurations added since the last support matrix release are shown in red text.

### Introduction

Use this interoperability matrix to verify whether a proposed customer configuration is supported. Hitachi Solution for the SAP HANA Platform Firmware and Software Matrix is the official support matrix for Hitachi Unified Compute Platform for the SAP HANA platform (UCP for SAP HANA) or Hitachi Solution for the SAP HANA platform in a scale-up or scale-out configuration. SAP Solutions Engineering at Hitachi Vantara validates this matrix.

If a combination does not appear on the operating system support matrix, the customer's Hitachi Vantara Sales Engineer (SE) or other field service employee must submit an Interoperability Support Request in order to gain support for the new configuration.

### Legal Disclaimer

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## Hitachi Solution for the SAP HANA Platform in a Scale-out Configuration using Hitachi Advanced Server DS7040 with Intel Cascade Lake processors

Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS7040 in a scale-out configuration using Hitachi Virtual Storage Platform F700 or VSP G700.

Component		Version
Hitachi Advanced Server DS7040	Technical set	TS 34.04
	BMC firmware version	33.54.03 (Build 17)
	BIOS version	BIOS_PUR043.39.05.123
	Main FPGA	3.1.4.DBG0
	MP3CPLD	2.5.1.0
	MP3IOPLD	2.7.0.0
	WEO FPGA	0.0.0.0
	WEO BCM	FF.0F
	PEB FLASH	2.b.9
Hitachi Virtual Storage Platform F700 or VSP G700		83-05-40-60/01 or higher
SAP HANA	HANA 2.0 SPS05	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
Mellanox MT27710 10/25 GbE PCIe card driver	SLES 12 SP4	4.5-1.0.1
	RHEL 7.6	4.5-1.0.1
	RHEL 8.1	5.0-0
	SLES 15 SP1	5.0-0
	SLES 15 SP2	5.0-0
Mellanox MT27710 10/25 GbE PCIe card firmware	SLES 12 SP4	14.21.1000
	RHEL 7.6	14.21.1000
	RHEL 8.1	14.25.1020
	SLES 15 SP1	14.25.1020
	SLES 15 SP2	14.25.1020
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver	SLES12SP4	12.0.0.10
	RHEL 7.6	12.0.0-5
	RHEL 8.1	12.2.0.3
	SLES 15 SP1	12.8.0.3
	SLES 15 SP2	12.8.0.6
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware	SLES12SP4	12.0.261.15
	RHEL 7.6	12.0.261.15
	RHEL 8.1	12.6.240.40
	SLES 15 SP1	12.6.240.40
	SLES 15 SP2	12.6.240.40
Cisco 93180YC-EX switch	BIOS version	07.66
	NXOS version	7.0(3)I7(8)
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP4 with High Availability Extension SLES 15 SP1 with High Availability Extension SLES 15 SP2 with High Availability Extension
Red Hat Enterprise Linux Server		RHEL 7.6 with High Availability Add-on
		RHEL 8.1 with High Availability Add-on

## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using the Hitachi Advanced Server DS7000 series

*Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using the Hitachi Advanced Server DS7000 series with Intel Cascade Lake Processors in a scale-up configuration using Hitachi Virtual Storage Platform F350, VSP G350.*

DS7000 Server		DS7020/DS7040/DS7080	DS7160	
Component		Version	Version	
Hitachi Advanced Server DS7000 or DS7160 using eXternal Node Controller	Module	Technical set	TS 34.02	
		BMC firmware version	33.54.01 (Build 3)	
		BIOS version	BIOS_PUR043.39.03.116	
		Main FPGA	3.1.4.DBG0	
		MP3CPLD	2.5.1.0	
		MP3IOCPLD	2.7.0.0	
		WEO FPGA	0.0.0.0 or higher ( Unavailable)	
		WEO BCM	FF.0F or higher **	
		NBB CPLD Rear	Unavailable	
		NBB CPLD Front	Unavailable	
		PEB FLASH	2.B.9 or higher	
	DCPMM Firmware (for DCPMM only)	01.02.00.5417 or higher		
	LMB0 (DS7160 only)	LMC	Not Applicable	34.18.00 (Build 666)
		Main Multi		0.9.1.DBG0
		LMB0: Main Mngt		0.3.2.DBG0
		LMB0: CPLD		0.5.0.DBG0
		LMB0: UNB0 FPGA		0.8.0.DBG0
		LMB0: UNB1 FPGA		0.8.0.DBG0
		LMB0: UNB0 CLK		0.0.3
LMB0: UNB1 CLK	0.0.3			
Hitachi Virtual Storage Platform F350, VSP G350 (for appliance)		88-04-02-20/00 or higher	88-05-01-20/00 or higher	
Hitachi Virtual Storage Platform Fx00 or VSP Gx00 (for TDI)		88-04-02-x0/00 or higher	88-05-01-20/00 or higher	
SAP HANA	SLES 12 SP4	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)		
	SLES 15 SP1			
	RHEL 7.6	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)		
	RHEL 8.1			
Mellanox MT27710 10/25 GbE PCIe card driver	SLES 12 SP4	4.5-1.0.1	N/A	
	RHEL 7.6	4.5-1.0.1	5.0-0	
	SLES 15 SP1	5.0-0	5.0-0	
	RHEL 8.1	5.0-0	5.0-0	
Mellanox MT27710 10/25 GbE PCIe card firmware		14.25.1020	14.25.1020	
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver	SLES 12 SP4	12.0.0.10	N/A	
	RHEL 7.6	12.0.0.5	12.0.0.5	
	SLES 15 SP1	12.6.0.0	12.6.0.0	
	RHEL 8.1	12.2.0.3	12.2.0.3	
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware		12.2.299.14	12.2.299.14	
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP4 or SLES15 SP1	SLES15 SP1	
RedHat Linux Enterprise Server for SAP Applications		RHEL 7.6 or RHEL 8.1	RHEL 7.6 or RHEL 8.1	

\*\* With partitions containing multiple nodes, WEO BCM sometimes might show on master module as 1.00 and on slave module as FF.0F. This can be ignored.

## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using the Hitachi Advanced Server DS7000 series

*Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using the Hitachi Advanced Server DS7000 series with Intel Skylake procesors in a scale-up configuration using Hitachi Virtual Storage Platform F350, VSP G350, VSP G200.*

Component		Version
Hitachi Advanced Server DS7000	Technical set	7.2 or higher
	BMC firmware version	33.27.02 (Build 6) or higher
	BIOS version	BIOS_SKL040.59.01.104 or higher
	Main FPGA	2.5.9.DBG1 or higher
	MP3CPLD	2.4.8.0 or higher
	MP3IOCPLD	2.6.0 or higher
	WEO FPGA	0.0.0.0 or higher
	WEO BCM	FF.0F or higher
PEB FLASH	2.B.9 or higher	
Hitachi Virtual Storage Platform F350, VSP G350 (for appliance)		88-04-02-20/00 or higher
Hitachi Virtual Storage Platform Fx00 or VSP Gx00 (for TDI)		88-04-02-x0/00 or higher
Hitachi Virtual Storage Platform G200 (for appliance)		88-04-02-x0/00 or higher
SAP HANA	RHEL 7.4	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 7.6	
	RHEL 8.1	
	SLES 12 SP2	
	SLES 12 SP3	
	SLES 15 SP1	
Mellanox MT27710 10/25 GbE PCIe card driver	RHEL 7.4	4.4-2.0.7 or higher
	RHEL 7.6	4.5-1.0.1
	RHEL 8.1	5.0-0
	SLES 12 SP2	4.1-1.0.2
	SLES 12 SP3	4.4-2.0.7
	SLES 15 SP1	5.0-0
Mellanox MT27710 10/25 GbE PCIe card firmware		14.25.1020
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver	RHEL 7.4	11.2.0.6 or higher
	RHEL 7.6	12.0.0.5
	RHEL 8.1	12.2.0.3
	SLES 12 SP2	11.1.0.1
	SLES 12 SP3	11.4.0.7-4
	SLES 15 SP1	12.6.0.0
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware		12.2.299.14
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP2 or SLES 12 SP3 or SLES 12 SP4 or SLES 15 SP1
Red Hat Enterprise Linux Server		7.4 or 7.6 or 8.1

\*\* With partitions containing multiple nodes, WEO BCM sometimes might show on master module as 1.00 and on slave module as FF.0F. This can be ignored.

## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using the Hitachi Advanced Server DS7000 series as vHANA

*Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using the Hitachi Advanced Server DS7000 series with Intel Cascade Lake Processors in a scale-up configuration using Hitachi Virtual Storage Platform F700, VSP G700.*

DS7000 Server		DS7020/DS7040/DS7080
Component		Version
Hitachi Advanced Server DS7000	Technical set	TS 34.04
	BMC firmware version	33.54.03 (Build 17)
	BIOS version	BIOS_PUR043.39.05.123
	Main FPGA	3.1.4.DBG0
	MP3CPLD	2.5.1.0
	MP3IOPLD	2.7.0.0
	WEO FPGA	0.0.0.0 or higher ( Unavailable)
	WEO BCM	FF.0F or higher *
	NBB CPLD Rear	Unavailable
	NBB CPLD Front	Unavailable
PEB FLASH	2.B.9 or higher	
Hitachi Virtual Storage Platform Fx00 or VSP Gx00 (for TDI)		88-04-02-x0/00 or higher
SAP HANA (VM OS)	SLES 12 SP4	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 15 SP1	
	RHEL 7.6	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 8.1	
Mellanox MT27710 10/25 GbE PCIe card driver	VMware ESXi 6.7u3	4.17.15.16
	VMware ESXi 7.0 U2a	4.21.71.1-1OEM.702.0.0.17473468
Mellanox MT27710 10/25 GbE PCIe card firmware		14.25.1020
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver	VMware ESXi 6.7u3	12.2.373.1
	VMware ESXi 7.0 U2a	12.8.351.30-1OEM.700.1.0.15843807
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware		12.6.240.40
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP4 or SLES 15 SP1/SP2
Red Hat Linux Enterprise Server for SAP Applications		RHEL 7.6 or RHEL 8.1

\* With partitions containing multiple nodes, WEO BCM sometimes might show on master module as 1.00 and on slave module as FF.0F. This can be ignored.

## Hitachi Solution for SAP HANA on Hitachi Unified Compute Platform HC using Hitachi Advanced Server DS240

*Required software and firmware levels for Hitachi Solution for SAP HANA on Hitachi Unified Compute Platform HC using Hitachi Advanced Server DS240 with Intel Cascade Lake procesors.*

Component		Version
Hitachi Advanced Server DS240 Hitachi Rebranded BMC firmware revision		4.64.06
Hitachi Advanced Server DS240 Hitachi Rebranded BIOS version		S7DH3B16.H00
VMware vCenter		6.7U3 (Build # 15976714)
VMware ESXi	6.7 U3	build 15160138
VMware ESXi vSAN		6.7.0-3.89.14840358
SAP HANA	SLES 12 SP4	Refer to SAP Note 2235581 (attachment
SAP HANA	RHEL 8.1	Refer to SAP Note 2235581 (attachment
Mellanox GbE PCIe card driver	VMware ESXi 6.7u3	4.17.14.2-1OEM.670.0.0.8169922
Mellanox MT27710 Family [ConnectX-4 Lx] 10/25 GbE PCIe card firmware		14.23.1020
Mellanox MT27800 Family [ConnectX-5] 100 GbE PCIe card firmware		16.23.1020
Intel P4800X Optane		E2010435
Intel P4510 NVMe drive firmware version		VDV10170
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP4
Red Hat Linux Enterprise Server for SAP Applications		RHEL 8.1

\* Indicates pending operating system (OS) certification

## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using Hitachi Advanced Server DS220

*Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS220 with Intel Cascade Lake processors in a scale-up configuration using internal or external storage.*

Component		Version
Hitachi Advanced Server DS220 Hitachi Rebranded BMC firmware revision		4.68.06
Hitachi Advanced Server DS220 Hitachi Rebranded BIOS version		S5BH3B19.H00
Hitachi Virtual Storage Platform Fx00 or VSP Gx00 (for TDI)		88-03-22-x0/00 or higher
SAP HANA	SLES 12 SP4	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 15 SP1	
	SLES 15 SP2	
	RHEL 7.6	
	RHEL 8.1	
	RHEL 8.2	
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) driver	SLES 12 SP4	2.3.2-k
	SLES 15 SP1	2.8.20-k
	SLES 15 SP2	2.8.20-k
	RHEL 7.6	2.3.2-k
	RHEL 8.1	2.8.20-k
	RHEL 8.2	2.8.20-k
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) firmware		5.51
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver (for external storage only)	SLES 12 SP4	12.0.0.10
	SLES 15 SP1	12.6.0.0 or higher
	SLES 15 SP2	12.8.0.3
	RHEL 7.6	12.0.0.5
	RHEL 8.1	12.2.0.3
	RHEL 8.2	12.6.0.2
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware (for external storage only)		12.0.261.15
QS3516 MegaRAID storage controller (RAID) card Driver (for internal SSD only)	SLES 12 SP4	07.704.04.00-rc1
	SLES 15 SP1	07.707.51.00-rc1
	SLES 15 SP2	07.713.01.00-rc1
	RHEL 7.6	07.705.02.00-rh1
	RHEL 8.1	07.707.51.00-rc1
	RHEL 8.2	07.710.50.00-rc1
QS3516 MegaRAID storage controller (RAID) card firmware (for internal SSD only)	Package Version	50.6.0-1482 (MR 7.6)
	Firmware Version	5.060.00-1455
Intel S4510 SSD drive firmware version		XCV10110
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP4 , SLES 15 SP1, <span style="color: red;">SLES 15 SP2</span>
Red Hat Linux Enterprise Server for SAP Applications		RHEL 7.6, RHEL 8.1, <span style="color: red;">RHEL 8.2</span>

\* Indicates pending operating system (OS) certification

## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using Hitachi Advanced Server DS220

*Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS220 in a scale-up configuration using internal or external storage.*

Component	Version	
Hitachi Advanced Server DS220 Hitachi Rebranded BMC Firmware	4.68.06	
Hitachi Advanced Server DS220 Hitachi Rebranded BIOS Version	S5BH3B19.H00	
Hitachi Virtual Storage Platform Fx00 or VSP Gx00 (for TDI)	88-03-22-x0/00 or higher	
SAP HANA	SLES 12 SP2	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 15 SP1	
	SLES 15 SP2	
	RHEL 7.3	
	SLES 12 SP3	
	SLES12 SP4	
	RHEL7.4	
	RHEL7.6	
	RHEL8.1	
RHEL 8.2		
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) Driver	SLES 12 SP2	2.1.26
	RHEL 7.3	1.6.27-k_dup7.3 or higher
	SLES 12 SP3	1.6.27-k
	SLES12 SP4	2.3.2-k
	SLES 15 SP1,	2.8.20-k
	SLES 15 SP2	
	RHEL 7.4	2.1.14-k_dup7.4
	RHEL 7.6	2.3.2-k
	RHEL8.1,	2.8.20-k
RHEL 8.2		
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) firmware	5.51	
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver	SLES 12 SP2	11.1.0.1
	RHEL 7.3	11.1.0.2 or higher
	SLES 12 SP3	11.4.0.7-4
	RHEL 7.4	11.2.0.6 or higher
	SLES12 SP4	12.0.0.10 or higher
	SLES 15 SP1	12.6.0.0 or higher
	SLES 15 SP2	12.8.0.3
	RHEL 7.6	12.0.0.5 or higher
	RHEL8.1	12.2.0.3 or higher
RHEL 8.2	12.6.0.2	
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware	12.0.261.15	
Broadcom 9460-16i MegaRAID storage controller (RAID) PCIe card driver	SLES 12 SP2	07.702.06.00
	RHEL 7.3	07.702.06.00 or higher
	SLES 12 SP3	07.701.17.00-rc1
	RHEL 7.4	07.704.04.00 or higher
	SLES12 SP4	07.704.04.00-rc1
	SLES 15 SP1	07.707.51.00-rc1
	SLES 15 SP2	07.713.01.00-rc1
	RHEL 7.6	07.705.02.00-rh1
	RHEL8.1	07.707.51.00-rc1
RHEL 8.2	07.710.50.00-rc1	
Broadcom 9460-16i MegaRAID storage controller (RAID) PCIe card firmware	Package version	50.3.0-0707 (MR 7.3)
	Firmware version	50.30.00-0945 or higher
Intel S4500 SSD firmware version	SCV10121	
SUSE Linux Enterprise Server for SAP Applications	SLES 12 SP2, SLES12 SP3, or SLES12 SP4, SLES 15 SP1, <span style="color: red;">SLES 15 SP2</span>	
Red Hat Enterprise Linux Server	RHEL 7.3, RHEL 7.4, RHEL 7.6, RHEL 8.1, <span style="color: red;">RHEL 8.2</span>	

\* Indicates pending operating system (OS) certification



## Hitachi Solution for the SAP HANA Platform in a Scale-out Configuration using Hitachi Advanced Server DS7040

*Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS7040 in a scale-out configuration using Hitachi Virtual Storage Platform F700 or VSP G700.*

Component		Version
Hitachi Advanced Server DS7040	Technical set	7.2 or higher
	BMC firmware version	33.27.02 (Build 6) or higher
	BIOS version	BIOS_SKL040.59.01.104 or higher
	Main FPGA	2.5.9.DBG1 or higher
	MP3CPLD	2.4.8.0 or higher
	MP3IOCPD	2.6.0 or higher
	WEO FPGA	0.0.0.0 or higher
	WEO BCM	FF.0F or higher
	PEB FLASH	2.B.9 or higher
Hitachi Virtual Storage Platform F700 or VSP G700		88-03-22-60/00 or higher
SAP HANA	HANA 2.0 SPS02	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	HANA 2.0 SPS03	
Mellanox MT27710 10/25 GbE PCIe card driver	SLES 12 SP2	4.1-1.0.2
	SLES 12 SP3	4.4-2.0.7
	RHEL 7.4	4.4-2.0.7 or higher
Mellanox MT27710 10/25 GbE PCIe card firmware	SLES 12 SP2	14.21.1000
	SLES 12 SP3	
	RHEL 7.4	14.23.1020 (MT_2420110004)
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver	SLES12SP2	11.1.0.1
	SLES12SP3	11.4.0.7-4
	RHEL 7.4	11.2.0.6 or higher
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware		11.4.204.34
Cisco 93180YC-EX switch	BIOS version	07.56 or higher
	NXOS version	7.0(3)4(7) or higher
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP2 with High Availability Extension SLES 12 SP3 with High Availability Extension
Red Hat Enterprise Linux Server		RHEL 7.4 with High Availability Add-on

## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using Hitachi Advanced Server DS240 on Cascade Lake and Skylake CPUs

*Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS240 in a scale-up configuration using internal or external storage.*

Component	Version
Hitachi Advanced Server DS240 Rebranded BMC Firmware Revision	4.68.06
Hitachi Advanced Server DS240 Rebranded BIOS Version	S5BH3B19.H00
SAP HANA	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 12 SP3
	<b>SLES 15 SP1*</b>
	RHEL 7.4
	<b>RHEL 8.1*</b>
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) driver	SLES 12 SP3 RHEL 7.4
	1.6.27-k 2.1.14-k_dup7.4 or higher
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) firmware	6.02
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver (for external storage only)	SLES 12 SP3 RHEL 7.4
	11.4.0.7-2 11.2.0.6 or higher
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware (for external)	11.4.204.34
QS3516 MegaRAID storage controller (RAID) card driver (for internal SSD only)	SLES 12 SP3 RHEL 7.4
	07.701.17.00-rc1 07.704.04.0
QS3516 MegaRAID storage controller (RAID) card firmware (for internal SSD only)	Package Version Firmware Version
	50.4.0-1036 5.040.00-1123
Intel S4500 SSD Firmware Version	SCV10121
SUSE Linux Enterprise Server for SAP Applications	SLES 12 SP3
Red Hat Enterprise Linux Server	RHEL 7.4

\* Completed Media testing only

## Hitachi Unified Compute Platform 1000 for SAP HANA in a Scale-up Configuration using Haswell (HSW) or Broadwell (BDW) Processors in the Rack Optimized Server for Solutions, 2U Single Node

*Required software and firmware levels for Hitachi Unified Compute Platform 1000 for the SAP HANA Platform in a scale-up configuration using Haswell (HSW) or Broadwell (BDW) processors in the rack optimized server for solutions, 2U single node.*

Component	Version	
BMC firmware revision	HSW D51B-2U	3.73.00 or higher
	BDW D51B-2U	3.73.00 or higher
BIOS version	HSW D51B-2U	S2B_3B19.02 or higher
	BDW D51B-2U	S2B_3B19.02 or higher
BMC chipset	HSW D51B-2U	AST2400 or higher
	BDW D51B-2U	AST2400 or higher
SAP HANA	SLES 12	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 12 SP1	
	SLES 12 SP2	
	SLES 12 SP3	
	SLES 12 SP4	
	SLES 12 SP5*	
	RHEL 7.2	
	RHEL 7.4	
Qlogic 2-port 16 Gb/sec PCIe HBA card	RHEL 7.6	
	RHEL 7.7	10.00.00.12.07.7-k
LSI SAS3108 12Gbps 1GB RAID Controller Mezzanine Card	RHEL 7.6	07.705.02.00-rh1
	RHEL 7.7	07.707.50.00-rh1
Dual port 10 GbE 82599ES SFP+ PCIe NIC card	RHEL 7.6	5.5.2-h1
	RHEL 7.7	5.1.0-k-rh7.7
LSI/Avago MegaRAID CacheCade		CacheCade Pro 2.0 or higher
SUSE Linux Enterprise Server for SAP Applications		SLES 12, SLES 12 SP1, SLES 12 SP2, or SLES 12 SP3
Red Hat Enterprise Linux Server		RHEL 7.2, RHEL 7.4, RHEL 7.6, RHEL 7.7
* Pending Operating System (OS) Certification on Haswell Nitro.		

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-up Configuration using Hitachi Compute Blade 2500 Chassis with 520X B2 Server Blades and Hitachi Virtual Storage Platform G200

**Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-up configuration using Hitachi Compute Blade 2500 chassis with 520X B2 server blades and Hitachi Virtual Storage Platform G200.**

Component	Version	
Hitachi Compute Blade 2500 SVP Firmware	A0325 or higher	
Hitachi Compute Blade 2500 SEL Dictionary	A0105 or higher	
520x B2 server blade BMC Integrated Firmware	09-65 or higher	
520x B2 server blade EFI Firmware	09-70 or higher	
Hitachi Virtual Storage Platform G200 storage	83-05-29-x0/00 or higher	
Hitachi 16 Gb/s Fibre Channel Adapter Driver	SLES 11 SP3	4.11.18.3038
	RHEL 6.6	4.6.18.2766 or higher
	SLES 12	4.12.18.3146
	SLES 12 SP1 (no OS certification)	4.12.20.4110
	RHEL 7.2	4.7.18.3234 or higher
	SLES 12 SP2	4.12.21.4252
	SLES 12 SP3	4.12.21.4310 (not retpoline), 4.12.22.4334 (retpoline, no OS certification)
	RHEL 7.3	4.7.21.4294 or higher
	RHEL 7.4	4.7.21.4294 or higher
	RHEL 7.6	4.7.22.4328 or higher
	RHEL 7.7	4.7.22.4346
	SLES 12 SP4	4.12.22.4340
	SLES 12 SP5	4.12.22.4346
	SLES 15 SP2	4.15.22.4364
Hitachi 16 Gb/s Fibre Channel Adapter Firmware	40-07-01	
Intel 10 GbE ixgbe LAN Adapter Driver	SLES 11 SP3	3.21.2-h1
	RHEL 6.6	3.23.2-h1
	SLES 12 or SLES 12 SP1 or SLES 12 SP2	4.4.6.-h1
	RHEL 7.2	4.4.6.-h1 or higher
	SLES 12 SP3	5.3.5-h1 (not retpoline), 5.3.5-h1a (retpoline, no OS certification)
	RHEL 7.3	4.5.4-h1 or higher
	RHEL 7.4	5.2.4-h1 or higher
	RHEL 7.6	5.5.2-h1 or higher
	RHEL 7.7	5.6.3-h1
	SLES 12 SP4	5.6.1-h1b
	SLES 12 SP5	5.6.5-h1b
SLES 15 SP2	5.8.1-h1b	
Intel 10 GbE ixgbe LAN Adapter Firmware	0x61bf0001	
Intel 10 GbE ixgbev LAN Driver (LPAR only)	SLES 12	2.16.4
	SLES 12 SP1 (no OS certification)	3.2.2
	RHEL 7.2	2.16.4 or higher
	SLES 12 SP3	4.5.1-h2
	RHEL 7.3	4.0.3 or higher
	RHEL 7.4	TBD
	RHEL 7.6	TBD
	SLES 12 SP4	ixgbev-4.6.1-h2
SLES 12 SP5	4.1.0-k	
SAP HANA	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12	
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
	RHEL 7.3	
	RHEL 7.4	
	RHEL 7.6	
	SLES 12 SP4	
SLES 12 SP5		
SLES 15 SP2		
SUSE Linux Enterprise Server for SAP Applications	SLES 11 SP3, SLES 12, SLES 12 SP1, SLES 12 SP2, SLES 12 SP3, SLES 12 SP4, SLES 12 SP5 or SLES 15 SP2	
Red Hat Enterprise Linux Server	RHEL 6.6, RHEL 7.2, RHEL 7.3, RHEL 7.4, RHEL 7.6 , or RHEL 7.7	

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-up Configuration using Hitachi Compute Blade 2500 Chassis, 520x B3 Server Blade, and Hitachi Virtual Storage Platform G200

**Required software and firmware levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-up configuration using Hitachi Compute Blade 2500 with 520x B3 server blades and Hitachi Virtual Storage Platform G200.**

Component	Version	
Hitachi Compute Blade 2500 SVP Firmware	A0325 or higher	
Hitachi Compute Blade 2500 SEL Dictionary	A0105 or higher	
520x B3 server blade BMC integrated Firmware	11-25 or higher	
520x B3 server blade EFI Firmware	11-28 or higher	
Hitachi Virtual Storage Platform G200	83-05-29-x0/00 or higher	
Rack Optimized Server for Solutions, 2U four node (optional server)	3.16.00 or higher	
Hitachi 16 Gb/s Fibre Channel Adapter Driver	SLES 12	4.12.18.3146
	SLES 12 SP1	4.12.20.4110
	RHEL 7.2	4.7.18.3234 or higher
	SLES 12 SP2	4.12.21.4252
	SLES 12 SP3	4.12.22.4334 (retpoline)
	RHEL 7.3	4.7.21.4294 or higher
	RHEL 7.4	4.7.21.4294 or higher
	RHEL 7.6	4.7.22.4328 or higher
	RHEL 7.7	4.7.22.4346
	SLES 12 SP4	4.12.22.4340
	SLES 12 SP5	4.12.22.4346
	SLES 15 SP2	4.15.22.4364
	Hitachi 16 Gb/s Fibre Channel Adapter Firmware	40-07-01
Intel 10 GbE ixgbe LAN Adapter Driver	SLES 12 or SLES 12 SP1 or SLES 12 SP2	4.4.6-h1
	RHEL 7.2	4.4.6-h1 or higher
	SLES 12 SP3	5.3.5-h1a
	RHEL 7.3	4.5.4-h1 or higher
	RHEL 7.4	5.2.4-h1 or higher
	RHEL 7.6	5.5.2-h1 or higher
	RHEL 7.7	5.6.3-h1
	SLES 12 SP4	5.6.1-h1b
	SLES 12 SP5	5.6.5-h1b
	SLES 15 SP2	5.8.1-h1b
Intel 10 GbE ixgbe LAN Adapter Firmware	0x61bf0001	
Intel 10 GbE ixgbev LAN Driver (LPAR only)	SLES 12	2.16.4
	SLES 12 SP1	3.2.2
	RHEL 7.2	2.16.4 or higher
	SLES 12 SP3	4.5.1-h2
	RHEL 7.3	4.0.3 or higher
	RHEL 7.4	TBD
	RHEL 7.6	TBD
	SLES 12 SP4	ixgbev-4.6.1-h2
	SLES 12 SP5	4.1.0-k
SAP HANA	SLES 12	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
	RHEL 7.3	
	RHEL 7.4	
	RHEL 7.6	
	SLES 12 SP4	
SLES 12 SP5		
SLES 15 SP2		
Microsoft® Windows Server® 2012 R2	Standard Edition	
SUSE Linux Enterprise Server for SAP Applications	For the management server, a rack optimized server for solutions, 2U four node SLES 12, SLES 12 SP1, SLES 12 SP2, SLES 12 SP3, SLES 12 SP4, SLES 12 SP5 or SLES 15 SP2	
Red Hat Enterprise Linux Server	RHEL 7.2, RHEL 7.3, RHEL 7.4, RHEL 7.6 or RHEL 7.7	

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-out Configuration using Hitachi Compute Blade 2500 with 520X B3 Server Blades and Hitachi Virtual Storage Platform G800

**Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using Hitachi Compute Blade 2500 with 520X B3 server blades and Hitachi Virtual Storage Platform G800.**

Component	Version	
Hitachi Compute Blade 2500 SVP Firmware	A0325-A-1578 or higher	
Hitachi Compute Blade 2500 SEL Dictionary	A0105 or higher	
520x B3 server blade BMC Integrated Firmware	11-25 or higher	
520x B3 server blade EFI Firmware	11-26 or higher	
Hitachi Virtual Storage Platform G800	83-05-40-60/00 or higher	
Hitachi NAS Platform 4060	For HNAS based Solution	13.8.6320.xx
	For GFS2 based Solution	N/A
SMU Software	For HNAS based Solution	13.8.6320.xx
	For GFS2 based Solution	N/A
SMU CentOS	For HNAS based Solution	6.2
	For GFS2 based Solution	N/A
Rack Optimized Server for Solutions, 2U four node	3.16.00 or higher	
Hitachi 16 Gb/s Fibre Channel Adapter Driver	SLES 12	4.12.18.3146
	SLES 12 SP1	4.12.20.4110
	RHEL 7.2	4.7.18.3234 or higher
	SLES 12 SP2	4.12.21.4252
	SLES 12 SP3	4.12.21.4310
	RHEL 7.3 / 7.4	4.7.21.4294 or higher
	RHEL 7.6	4.7.22.4328
	SLES 12 SP4	4.12.22.4340
	RHEL 7.7	4.7.22.4346
	SLES 12 SP5	4.12.22.4346
Hitachi 16 Gb/s Fibre Channel Adapter Firmware	40-07-01	
Intel10 GbE ixgbe LAN driver	SLES 12 or SLES 12 SP1 or SLES 12 SP2	4.4.6.-h1
	RHEL 7.2	4.4.6.-h1 or higher
	SLES 12 SP3	5.3.5-h1
	RHEL 7.3	4.5.4-h1 or higher
	RHEL 7.4	5.2.4-h1 or higher
	RHEL 7.6	5.5.2-h1 or higher
	SLES 12 SP4	5.6.1-h1a or higher
	RHEL 7.7	5.6.3-h1
	SLES 12 SP5	5.6.5-h1b
	SLES 15 SP2	5.8.1-h1b
Intel 10 GbE ixgbe LAN Adapter Firmware	0x61bf0001	
Intel 10 GbE ixgbev LAN driver (LPAR only) <b>NOT USED</b>	SLES 12	2.16.4
	SLES 12 SP1	3.2.2
	RHEL 7.2	2.16.4 or higher
	SLES 12 SP3	TBD
	RHEL 7.3	4.0.3 or higher
	RHEL 7.4	TBD
SLES 12 SP4	TBD	
Brocade ICX switch	8.0.20c or higher	
Brocade VDX switches	7.0.0a or higher	
SAP HANA	SLES 12	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
	RHEL 7.6	
	SLES 12 SP4	
	RHEL 7.7	
SLES 12 SP5		
SLES 15 SP2		
Microsoft® Windows Server® 2012 R2	Standard Edition	
VMware vSphere (for configuration using vSMU/HNAS only)	5.5 update 2 or 6.0 update 2	
SUSE Linux Enterprise Server for SAP Applications	For HNAS based Solution	SLES 12, SLES 12 SP1, SLES 12 SP2, SLES 12 SP3, SLES 12 SP4, SLES 12 SP5 or SLES 15 SP2
	For GFS2 based Solution	SUSE 12 SP1 or SLES 12 SP2 with High Availability Extension (HAE)
Red Hat Enterprise Linux Server	For HNAS based Solution	RHEL 7.2, RHEL 7.3, RHEL 7.4, RHEL 7.6, RHEL 7.7
	For GFS2 based Solution	RHEL 7.2

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-out Configuration using Hitachi Compute Blade 2500 with 520X B2 Server Blades and Hitachi Virtual Storage Platform G800

*Required software and firmware levels Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using Hitachi Compute Blade 2500 with 520X B2 server blades and Hitachi Virtual Storage Platform G800.*

Component	Version	
Hitachi Compute Blade 2500 SVP Firmware	A0325-A-1578 or higher	
Hitachi Compute Blade 2500 SEL Dictionary	A0105 or higher	
520x B2 server blade BMC Integrated Firmware	09-65 or higher	
520x B2 server blade EFI Firmware	09-67 or higher	
Hitachi Virtual Storage Platform G800	83-05-40-60/00 or higher	
Hitachi NAS Platform 4060	13.8.6320.xx	
SMU Software	13.8.6320.xx	
SMU CentOS	6.2	
Rack Optimized Server for Solutions, 2U four node	3.16.00 or higher	
Hitachi 16 Gb/s Fibre Channel Adapter Driver	SLES 11 SP3	4.11.18.3038
	RHEL 6.6	4.6.18.2766 or higher
	SLES 12	4.12.18.3146
	SLES 12 SP1	4.12.20.4110
	RHEL 7.2	4.7.18.3234 or higher
	SLES 12 SP2	4.12.21.4252
	SLES 12 SP3	4.12.21.4310
	SLES 12 SP4	4.12.22.4340
	RHEL 7.3/7.4	4.7.21.4294 or higher
	RHEL 7.6	4.7.22.4328
Hitachi 16 Gb/s Fibre Channel Adapter Firmware	SLES 12 SP5	4.12.22.4346
	RHEL 7.7	4.7.22.4346
Intel10 GbE ixgbe LAN Driver	40-05-07 or higher	
	SLES 11 SP3	3.21.2-h1
	RHEL 6.6	3.23.2-h1 or higher
	SLES 12, SLES 12 SP1, SLES 12 SP2	4.4.6.-h1
	RHEL 7.2	4.4.6.-h1 or higher
	SLES 12 SP3	ixgbe-5.3.5-h1
	SLES 12 SP4	ixgbe-5.6.1-h1a
	RHEL 7.3	4.5.4-h1 or higher
	RHEL 7.4	5.2.4-h1 or higher
	RHEL 7.6	5.5.2-h1 or higher
Intel 10 GbE ixgbevf LAN Driver (LPAR only) <b>NOT USED</b>	SLES 12 SP5	5.6.5-h1b
	RHEL 7.7	ixgbe-5.6.3-h1
	SLES 12	2.16.4
	SLES 12 SP1	3.2.2
	RHEL 7.2	2.16.4 or higher
	SLES 12 SP3	TBD
Brocade ICX switch	RHEL 7.3	4.0.3 or higher
	RHEL 7.4	TBD
Brocade VDX switches	08.0.20cT311 or higher	
SAP HANA	7.0.0a or higher	
	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12	
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
	SLES 12 SP4	
	RHEL 7.3	
	RHEL 7.4	
RHEL 7.6		
Microsoft® Windows Server® 2012 R2	SLES 12 SP5	
	RHEL 7.7 (TBD)	
Standard Edition		
For the management server, a rack optimized server for solutions, 2U four node		
SUSE Linux Enterprise Server for SAP Applications	SLES 11 SP3, SLES 12, SLES 12 SP1, SLES 12 SP2, SLES 12 SP3, or SLES 12 SP4, SLES 12 SP5	
Red Hat Enterprise Linux Server	RHEL 6.6, RHEL 7.2, RHEL 7.3, RHEL 7.4, RHEL 7.6, or RHEL 7.7	

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-out Configuration using Hitachi Compute Blade 2500 with 520X B2 Server Blades and Hitachi Virtual Storage Platform G1000

*Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using Hitachi Compute Blade 2500 with 520X B2 server blades and Hitachi Virtual Storage Platform G1000.*

Component	Version	
Hitachi Compute Blade 2500 SVP Firmware	A0322-A-1572 or higher	
Hitachi Compute Blade 2500 SEL Dictionary	A0105 or higher	
520x B2 server blade BMC Integrated Firmware	09-65 or higher	
520x B2 server blade EFI Firmware	09-66 or higher	
Hitachi Virtual Storage Platform G1000	80-06-65-00/00 or higher	
Hitachi NAS Platform 4060	13.8.6320.xx	
SMU Software	13.8.6320.xx	
SMU CentOS	6.2	
Rack Optimized Server for Solutions, 2U four node	3.16.00 or higher	
Hitachi 16 Gb/s Fibre Channel Adapter Driver	SLES 11 SP3	4.11.18.3038
	RHEL 6.6	4.6.18.2766 or higher
	SLES 12	4.12.18.3146
	SLES 12 SP1	4.12.20.4110
	RHEL 7.2	4.7.18.3234 or higher
	SLES 12 SP2	4.12.21.4252
	SLES 12 SP3	4.12.21.4310
	SLES 12 SP4	4.12.22.4340
	RHEL 7.3	4.7.21.4294 or higher
Hitachi 16 Gb/s Fibre Channel Adapter Firmware	40-05-00	
Intel10 GbE ixgbe LAN Driver	SLES 11 SP3	3.21.2-h1
	RHEL 6.6	3.23.2-h1 or higher
	SLES 12, SLES 12 SP1, SLES 12 SP2	4.4.6.-h1
	RHEL 7.2	4.4.6.-h1 or higher
	SLES 12 SP3	ixgbe-5.3.5-h1
	SLES 12 SP4	ixgbe-5.6.1-h1a
	RHEL 7.3	4.5.4-h1 or higher
	RHEL 7.4	5.2.4-h1 or higher
	SLES 12	2.16.4
Intel 10 GbE ixgbev LAN Driver (LPAR only) <b>NOT USED</b>	SLES 12 SP1	3.2.2
	RHEL 7.2	2.16.4 or higher
	SLES 12 SP3	TBD
	RHEL 7.3	4.0.3 or higher
	RHEL 7.4	TBD
Brocade ICX switch	08.0.20cT311 or higher	
Brocade VDX switches	6.0.2a or higher	
SAP HANA	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12	
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
	SLES 12 SP4	
RHEL 7.3		
RHEL 7.4		
Microsoft® Windows Server® 2012 R2	Standard Edition For the management server, either the rack optimized server for solutions, 2U four node, or CR	
VMware vSphere (for configuration using vSMU or Hitachi NAS Platform only)	5.5 update 2 or 6.0 update 2	
SUSE Linux Enterprise Server for SAP Applications	SLES 11 SP3, SLES 12, SLES 12 SP1, SLES 12 SP2, SLES 12 SP3, or SLES 12 SP4	
Red Hat Enterprise Linux Server	RHEL 6.6, RHEL 7.2, RHEL 7.3, or RHEL 7.4	



## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-up Configuration using 520X B1 Server Blades and Hitachi Unified Storage VM

*Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-up configuration using 520X B1 server blades  
and Hitachi Unified Storage VM.*

Component		Version
Hitachi Compute Blade 500 SVP Firmware		A0375 or higher
Hitachi Compute Blade 500 SEL Dictionary		A0203 or higher
Hitachi Compute Blade 500 Equipment Parameter		1026 or higher
520X Server Blade BMC Integrated Firmware		07-75 or higher
520X Server Blade EFI Firmware		07-76 or higher
Hitachi Unified Storage VM		73-03-63 or higher
Hitachi 8 Gb/s Fibre Channel mezzanine Driver	SLES 11 SP3	4.11.17.2166
	RHEL 6.6	4.6.18.2746 or higher
	SLES 12 (no OS certification)	4.12.18.3146
	SLES 12 SP1	4.12.20.4110
	RHEL 7.2	4.7.18.3172 or higher
	SLES 12 SP2	4.12.21.4284
	SLES 12 SP3	4.12.22.4334 (retpoline)
	RHEL 7.4	4.7.21.4294 or higher
	RHEL 7.6	4.7.22.4328 or higher
	SLES 12 SP4	4.12.22.4340
Hitachi 8 Gb/s Fibre Channel mezzanine firmware		39-05-16
Be2net Driver	SLES 11 SP3	10.0.800.0_3.0.76
	RHEL 6.6	10.0.800.0_3.0.76 or higher
	SLES 12 (no OS certification)	10.6.144.21
	SLES 12 SP1	11.1.207.0
	RHEL 7.2	10.6.144.2707 or higher
	SLES 12 SP2	11.1.215.11
	SLES 12 SP3	11.4.1186.0-1 which is not supported for retpoline. 11.1.0.0 which is supported for retpoline.
	RHEL 7.4	11.4.1178.0 or higher
	RHEL 7.6	12.0.1207.0 or higher
	SLES 12 SP4	12.0.0.0
LoM firmware	SLES 11 SP3 or RHEL 6.6	10.2.370.16
	RHEL 7.2	10.6.144.2704
	SLES 12 (no OS certification)	10.6.144.2704
	SLES 12 SP1 or SLES12 SP2	11.1.215.0
	SLES 12 SP3	11.4.1179.0 when Skyhawk driver is 11.4.1186.0-1 11.1.215.0 when Skyhawk driver is 11.1.0.0
	RHEL 7.4, RHEL 7.6, or SLES 12 SP4	11.4.1179.0
SAP HANA	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12 (no OS certification)	
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
	RHEL 7.4	
	RHEL 7.6	
SLES 12 SP4		
SUSE Linux Enterprise Server for SAP Applications		SLES 11 SP3, SLES 12, SLES 12 SP1, SLES 12 SP2, SLES 12 SP3, SLES 12 SP4
Red Hat Enterprise Linux Server		RHEL 6.6, RHEL 7.2, RHEL 7.4, or RHEL 7.6

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-out Configuration using 520X B1 Server Blades and Hitachi Virtual Storage Platform G1000

*Minimum software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using 520X B1 server blades and Hitachi Virtual Storage Platform G1000.*

Component	Version	
Hitachi Compute Blade 500 SVP Firmware	A0375-A-10962 or higher	
Hitachi Compute Blade 500 SEL Dictionary	A0203 or higher	
Hitachi Compute Blade 500 Equipment Parameter	1026 or higher	
520X B1 Server Blade BMC Integrated Firmware	07-75 or higher	
520X B1 Server Blade EFI Firmware	07-76 or higher	
Hitachi Virtual Storage Platform G1000	80-06-65-00/00 or higher	
Hitachi Compute Rack 210H	01-08-00 or higher	
Hitachi NAS Platform 4060	13.4.5118.xx	
SMU Software	13.4.5118.xx	
SMU CentOS	6.2	
Rack Optimized Server for Solutions, 2U four node	3.16.00 or higher	
Hitachi 8 Gb/s Fibre Channel Mezzanine Driver	SLES 11 SP3	4.11.17.2166
	RHEL 6.6	4.6.18.2746 or higher
	SLES 12 (no OS	4.12.18.3146
	SLES 12 SP1	4.12.20.4110
	RHEL 7.2	4.7.18.3172 or higher
	SLES 12 SP2	4.12.21.4284
	SLES 12 SP3	4.12.22.4334 (retpoline)
	RHEL 7.4	4.7.21.4294 or higher
	SLES 12 SP4	4.12.22.4340 (retpoline)
Hitachi 8 Gb/s Fibre Channel Mezzanine Firmware	39-05-16	
Be2net Driver	SLES 11 SP3	10.0.800.0_3.0.76
	RHEL 6.6	10.0.800.0_3.0.76 or higher
	SLES 12	10.6.144.21
	SLES 12 SP1	11.1.207.0
	RHEL 7.2	10.6.144.2707 or higher
	SLES 12 SP2	11.1.215.11
	SLES 12 SP3	11.4.1186.0-1
	RHEL 7.3	11.1.215.8 or higher
	RHEL 7.4	11.4.1178.0 or higher
LAN on Motherboard (LoM) firmware	SLES 11 SP3/ RHEL 6.6	10.2.370.16
	RHEL 7.2	10.6.144.2704
	SLES 12 (no OS	10.6.144.2704
	SLES 12 SP1	11.1.215.0
	SLES 12 SP2	11.1.215.0
	SLES 12 SP3	11.4.1179.0
	RHEL 7.3	11.1.215.0
	RHEL 7.4 /7.6	11.4.1179.0
SLES 12 SP4	11.4.1179.0	
Brocade ICX switch	7.4.00 or higher	
Brocade VDX switches	6.0.2a or higher	
SAP HANA	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12	
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
	RHEL 7.4	
	RHEL 7.6	
SLES 12 SP4		
Microsoft® Windows Server® 2012 R2	Standard Edition For use on the management server, either the rack optimized server for solutions, 2U four node, or CR 210H	
SUSE Linux Enterprise Server for SAP Applications	SLES 11 SP3, SLES 12, SLES 12 SP1, SLES 12 SP2, SLES 12 SP3, or SLES 12 SP4	
Red Hat Enterprise Linux Server	RHEL 6.6, RHEL 7.2, RHEL 7.3, RHEL 7.4, or RHEL 7.6	

## Hitachi Unified Compute Platform for SAP HANA in a Scale-out Configuration using 520X B1 Server Blades and Hitachi Unified Storage VM

*Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using 520X B1 server blades and Hitachi Unified Storage VM.*

Component	Version		
Hitachi Compute Blade 500 SVP Firmware	A0375-A-10962 or higher		
Hitachi Compute Blade 500 SEL Dictionary	A0203 or higher		
Hitachi Compute Blade 500 Equipment Parameter	1026 or higher		
520X B1 Server Blade BMC Integrated Firmware	07-75 or higher		
520X B1 Server Blade EFI Firmware	07-76 or higher		
Hitachi Unified Storage VM	73-03-65 or higher		
Hitachi Compute Rack 210H	01-08-00 or higher		
Hitachi NAS Platform 4060	13.4.5118.xx		
SMU Software	13.4.5118.xx		
SMU CentOS	6.2		
Rack Optimized Server for Solutions, 2U four node	3.16.00 or higher		
Hitachi 8 Gb/s Fibre Channel mezzanine Driver	SLES 11 SP3	4.11.17.2166	
	RHEL 6.6	4.6.18.2746 or higher	
	SLES 12 (no OS certification)	4.12.18.3146	
	SLES 12 SP1	4.12.20.4110	
	RHEL 7.2	4.7.18.3172 or higher	
	SLES 12 SP2	4.12.21.4284	
	SLES 12 SP3	4.12.22.4334 (retpoline)	
	RHEL 7.4	4.7.21.4294 or higher	
Hitachi 8 Gb/s Fibre Channel mezzanine Firmware	RHEL 7.6	4.7.22.4328 (retpoline)	
	SLES 12 SP4	4.12.22.4340 (retpoline)	
	39-05-16		
	Be2net Driver	SLES 11 SP3	10.0.800.0_3.0.76
		RHEL 6.6	10.2.469.0 or higher
		SLES 12	10.6.144.21
		SLES 12 SP1	11.1.207.0
		RHEL 7.2	10.6.144.2707 or higher
SLES 12 SP2		11.1.215.11	
SLES 12 SP3		11.4.1186.0-1	
RHEL 7.4		11.4.1178.0 or higher	
LAN on Motherboard (LoM) firmware	RHEL 7.6	12.0.1207.0	
	SLES 12 SP4	12.0.0.0	
	SLES 11 SP3/ RHEL 6.6	10.2.370.16	
	RHEL 7.2	10.6.144.2704	
	SLES 12 (no OS certification)	10.6.144.2704	
	SLES 12 SP1	11.1.215.0	
	SLES 12 SP2	11.1.215.0	
	SLES 12 SP3	11.4.1179.0	
Brocade ICX switch	RHEL 7.3	11.1.215.0	
	RHEL 7.4/ 7.6	11.4.1179.0	
	SLES 12 SP4	11.4.1179.0	
	7.4.00 or higher		
	6.0.2a or higher		
	Brocade VDX switches	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)	
		SLES 11 SP3	
		RHEL 6.6	
SLES 12 (no OS certification)			
SLES 12 SP1 or RHEL 7.2			
SLES 12 SP2			
SLES 12 SP3			
RHEL 7.3			
SAP HANA	RHEL 7.4		
	RHEL 7.6		
	SLES 12 SP4		
	Standard Edition		
	For use on the management server, either the rack optimized server for solutions, 2U four node, or Hitachi Compute Rack 210H		
	SLES 11 SP3, SLES 12, SLES 12 SP1, SLES 12 SP2, SLES 12 SP3, or SLES 12 SP4		
	RHEL 6.6, RHEL 7.2, RHEL 7.4, or RHEL 7.6		
	Microsoft® Windows Server® 2012 R2		
SUSE Linux Enterprise Server for SAP Applications			
Red Hat Enterprise Linux Server			

## Hitachi Unified Compute Platform for SAP HANA in a Scale-up Configuration using X57 A2 Server Blades and Hitachi Unified Storage 130

*Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-up configuration using X57 A2 server blades and Hitachi Unified Storage 130.*

Component		Version
Hitachi Compute Blade 2000 SVP Firmware		A0355-D-7333 or higher
Hitachi Compute Blade 2000 X57A2 BMC Firmware		06-02 or higher
Hitachi Compute Blade 2000 X57A2 EFI Firmware		07-49 or higher
Hitachi Unified Storage 130		0955/A or higher
Emulex Fibre Channel HBA driver	SLES 11 SP2	8.3.5.48.3p
	SLES 11 SP3	8.3.7.10.7p
	SLES 11 SP4	10.4.8000.0
Intel10 GbE LAN driver	SLES 11 SP2	3.14.5
	SLES 11 SP3	3.21.2-h1
	SLES 11 SP4	4.3.13
SAP HANA	SLES 11 SP2	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 11 SP3	
	SLES 11 SP4	
SUSE Linux Enterprise Server for SAP Applications		SLES 11 SP2, SLES11 SP3, or SLES 11 SP4
Fusion-io ioDrive2	SLES 11 SP2	3.2.4
	SLES 11 SP3	3.2.6
	SLES 11 SP4	3.2.14

## Hitachi Unified Compute Platform for SAP HANA in a Scale-out Configuration using X57 A2 Server Blades and Hitachi Virtual Storage Platform

*Required software and firmware levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using X57 A2 server blades and Hitachi Virtual Storage Platform.*

Component		Version
Hitachi Compute Blade 2000 SVP Firmware		A0355-D-7333 or higher
Hitachi Compute Blade 2000 X57A2 BMC		06-02 or higher
Hitachi Compute Blade 2000 X57A2 EFI		07-49 or higher
Hitachi Virtual Storage Platform		70-06-02-00 or higher
Hitachi NAS Platform 3080 or NAS Platform		12.5.4038.xx
SMU Software		12.5.4038.xx
SMU CentOS		6.2
SUSE Linux Enterprise Server for SAP		SLES 11 SP2, SLES 11 SP3, or SLES 11 SP4
Hitachi Compute Rack 210H		1205-10-02 or higher
Emulex Fibre Channel HBA Driver	SLES 11 SP2	8.3.5.48.3p
	SLES 11 SP3	8.3.7.10.7p
	SLES 11 SP4	10.4.8000.0
Intel10 GbE LAN driver	SLES 11 SP2	3.14.5
	SLES 11 SP3	3.21.2-h1
	SLES 11 SP4	4.3.13
Rack Optimized Server for Solutions, 2U four		3.16.00 or higher
Brocade ICX switch		7.4.00 or higher
Brocade VDX switches		4.1.3b or higher
SAP HANA	SLES 11 SP2	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 11 SP3	
	SLES 11 SP4	
Microsoft® Windows Server® 2012 R2		Standard Edition For use on the management server, either the rack optimized server for solutions, 2U four node, or Hitachi Compute Rack 210H
SUSE Linux Enterprise Server for SAP		SLES 11 SP2, SLES 11 SP3, or SLES 11 SP4