

# Hitachi Compute Blade Emulex Adapter User's Guide (Support Matrix Edition)

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# Preface

Thank you very much for purchasing the Hitachi Compute blade. This manual describes operation methods, restrictions, and other information of Support Matrix for the Emulex 10Gb Converged Network products and the Fibre Channel products.

This preface includes the following information:

- [Document Conventions](#)
- [Getting Help](#)
- [Comments](#)

## Document Conventions





The term "Compute Blade" refers to all the models of the Compute Blade, unless otherwise noted.

The Hitachi Virtualization Manager (HVM) name has been changed to Hitachi logical partitioning manager (LPAR manager, or LP). If you are using HVM based logical partitioning feature, substitute references to Hitachi logical partitioning manager (LPAR manager, or LP) with HVM.

This document uses the following typographic conventions:

Convention	Description
<b>Bold</b>	Indicates text on a window, other than the window title, including menus, menu options, fields, and labels. Example: Click <b>OK</b> .
<i>Italic</i>	Indicates a variable, which is a placeholder for actual text provided by the user or system. Example: <i>copy source-file target-file</i> <b>Note:</b> Angled brackets (< >) are also used to indicate variables.
screen/code	Indicates text that is displayed on screen or entered by the user. Example: # <code>pairdisplay -g oradb</code>
< > angled brackets	Indicates a variable, which is a placeholder for actual text provided by the user or system. Example: # <code>pairdisplay -g &lt;group&gt;</code> <b>Note:</b> Italic font is also used to indicate variables.
[ ] square brackets	Indicates optional values. Example: [ a   b ] indicates that you can choose a, b, or nothing.
{ } braces	Indicates required or expected values. Example: { a   b } indicates that you must choose either a or b.
vertical bar	Indicates that you have a choice between two or more options or arguments. Examples: [ a   b ] indicates that you can choose a, b, or nothing. { a   b } indicates that you must choose either a or b.
<u>underline</u>	Indicates the default value. Example: [ <u>a</u>   b ]

This document uses the following icons to draw attention to information:

Icon	Meaning	Description
	WARNING	This indicates the presence of a potential risk that might cause death or severe injury.
	CAUTION	This indicates the presence of a potential risk that might cause relatively mild or moderate injury.
<b>NOTICE</b>	NOTICE	This indicates the presence of a potential risk that might cause severe damage to the equipment and/or damage to surrounding properties.
	Note	This indicates notes not directly related to injury or severe damage to equipment.
	Tip	This indicates advice on how to make the best use of the equipment.

## Abbreviated Notations of Operating Systems (OS)

In this manual, OS names are expressed as follows:

- Microsoft(R) Windows Server(R) 2016 Standard  
(Windows Server 2016)
- Microsoft(R) Windows Server(R) 2016 Datacenter  
(Windows Server 2016)
- Microsoft(R) Windows Server(R) 2012 R2 Standard  
(Windows Server 2012 R2)
- Microsoft(R) Windows Server(R) 2012 R2 Datacenter  
(Windows Server 2012 R2)
- Microsoft(R) Windows Server(R) 2012 Standard  
(Windows Server 2012)
- Microsoft(R) Windows Server(R) 2012 Datacenter  
(Windows Server 2012)
- Microsoft(R) Windows Server(R) 2008 Standard 32-bit  
(Windows Server 2008 (32bit))
- Microsoft(R) Windows Server(R) 2008 Enterprise 32-bit  
(Windows Server 2008 (32bit))
- Microsoft(R) Windows Server(R) 2008 Standard  
(Windows Server 2008)
- Microsoft(R) Windows Server(R) 2008 Enterprise  
(Windows Server 2008)
- Microsoft(R) Windows Server(R) 2008 Standard  
without Hyper-V(TM) 32-bit  
(Windows Server 2008 (32bit))
- Microsoft(R) Windows Server(R) 2008 Enterprise  
without Hyper-V(TM) 32-bit  
(Windows Server 2008 (32bit))
- Microsoft(R) Windows Server(R) 2008 Standard  
without Hyper-V(TM)  
(Windows Server 2008)
- Microsoft(R) Windows Server(R) 2008 Enterprise  
without Hyper-V(TM)  
(Windows Server 2008)
- Microsoft(R) Windows Server(R) 2008 R2 Standard  
(Windows Server 2008 R2)
- Microsoft(R) Windows Server(R) 2008 R2 Enterprise  
(Windows Server 2008 R2)
- Microsoft(R) Windows Server(R) 2008 R2 Datacenter  
(Windows Server 2008 R2)
- Red Hat(R) Enterprise Linux(R) Server 7.9  
(RHEL7.9)
- Red Hat(R) Enterprise Linux(R) Server 7.6  
(RHEL7.6)
- Red Hat(R) Enterprise Linux(R) Server 7.5  
(RHEL7.5)

- Red Hat(R) Enterprise Linux(R) Server 7.4 (RHEL7.4)
- Red Hat(R) Enterprise Linux(R) Server 7.3 (RHEL7.3)
- Red Hat(R) Enterprise Linux(R) Server 7.2 (RHEL7.2)
- Red Hat(R) Enterprise Linux(R) Server 7.1 (RHEL7.1)
- Red Hat(R) Enterprise Linux(R) Server 6.10 (RHEL6.10)
- Red Hat(R) Enterprise Linux(R) Server 6.9 (RHEL6.9)
- Red Hat(R) Enterprise Linux(R) Server 6.8 (RHEL6.8)
- Red Hat(R) Enterprise Linux(R) Server 6.7 (RHEL6.7)
- Red Hat(R) Enterprise Linux(R) Server 6.6 (RHEL6.6)
- Red Hat(R) Enterprise Linux(R) Server 6.5 (RHEL6.5)
- Red Hat(R) Enterprise Linux(R) Server 6.4 (RHEL6.4)
- Red Hat(R) Enterprise Linux(R) Server 6.2 (RHEL6.2)
- Red Hat(R) Enterprise Linux(R) Server 5.9 (RHEL5.9)
- Red Hat(R) Enterprise Linux(R) Server 5.7 (RHEL5.7)
- VMware vSphere(R) ESXi 6.7 Update 1 (VMware6.7 U1)
- VMware vSphere(R) ESXi 6.7 Update 2 (VMware6.7 U2)
- VMware vSphere(R) ESXi 6.7 Update 3 (VMware6.7 U3)
- VMware vSphere(R) ESXi 6.5 (VMware6.5)
- VMware vSphere(R) ESXi 6.5 Update 1 (VMware6.5 U1)
- VMware vSphere(R) ESXi 6.5 Update 2 (VMware6.5 U2)
- VMware vSphere(R) ESXi 6.5 Update 3 (VMware6.5 U3)
- VMware vSphere(R) ESXi 6.0 (VMware6.0)
- VMware vSphere(R) ESXi 6.0 Update 1 (VMware6.0 U1)



- VMware vSphere(R) ESXi 6.0 Update 2 (VMware6.0 U2)
- VMware vSphere(R) ESXi 6.0 Update 3 (VMware6.0 U3)
- VMware vSphere(R) ESXi 5.5 (VMware5.5)
- VMware vSphere(R) ESXi 5.1 (VMware5.1)

### Abbreviations for 10Gb Converged Network Expansion Cards

Abbreviations for the following card model names are written in this manual.

- Abbreviation "onboard CNA" :  
CB500 series server blade onboard CNA  
CB2500 series server blade onboard CNA
- Abbreviation "CNA expansion card" :  
CB500 4-port converged network expansion card  
CB2000 2/4-port converged network expansion card
- Abbreviation "LAN expansion card" :  
CB500 10Gb 4-port LAN expansion card  
CB2000 10Gb 2/4-port LAN expansion card
- Abbreviation "CNA board" :  
CB2000 CNA board (PCI express adapter type)  
CB2500 CNA board (PCI express adapter type)

### Abbreviation for Fibre Channel (FC) Card

Abbreviation for the following FC card model name is written in this manual.

- Abbreviation "8Gb FC expansion card"  
CB500 8Gb 2-port Fibre Channel expansion card  
CB2000 8Gb 2-port Fibre Channel expansion card
- Abbreviation "8Gb FC board"  
CB2000 8Gb 2-port Fibre Channel board (PCI express adapter type)  
CB2500 8Gb 2-port Fibre Channel board (PCI express adapter type)
- Abbreviation "16Gb FC expansion card"  
CB500 16Gb 2-port Fibre Channel expansion card
- Abbreviation "16Gb FC board"  
CB2000 16Gb 2-port Fibre Channel board (PCI express adapter type)  
CB2500 16Gb 2-port Fibre Channel board (PCI express adapter type)
- Abbreviation "FC expansion card"  
8Gb FC expansion card  
16Gb FC expansion card
- Abbreviation "FC board"  
8Gb FC board  
16Gb FC board

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## Comments

Please send us your comments on this document: [doc.comments@hds.com](mailto:doc.comments@hds.com). Include the document title and number including the revision level (for example, -07), and refer to specific sections and paragraphs whenever possible. All comments become the property of Hitachi Data Systems Corporation. **Thank you!**

# Overview of This Manual

This manual describes the Support Matrix Edition of the Emulex products.

- [1.1 Hitachi Compute Blade Emulex Adapter User's Guide](#)

## 1.1 Hitachi Compute Blade Emulex Adapter User's Guide

Hitachi Compute Blade Emulex Adapter User's Guide is the manual for the following products.

#	System Model	Products	Product Code	Remarks
1	CB500 series	CB540A B1 Onboard CNA	GGAGD0B1-TNNX14Y	
2		CB520H B1 Onboard CNA	GGAGC0B1-TNNX14Y	
3		CB520H B2 Onboard CNA	GG-RV3XGC0B2X1-Y	
4		CB520H B3 Onboard CNA	GG-RV3XGC0B3X1-Y	
5		CB520H B4 Onboard CNA	GG-RV3XGC0B4X1-Y	
6		CB520X B1 Onboard CNA	GG-RV3XGE0B1X1-Y	
7		CB520X B2 Onboard CNA	GG-RV3XGE0B2X1-Y	
8		CB520X B3 Onboard CNA	GG-RV3XGE0B3X1-Y	
9		CNA expansion card	GG-CN3MXG2X1-Y	
10			GGX-CN3MXG2X1[EX]	
11			GGX-CN3MXG2X3[EX]	
12		LAN expansion card	GG-CN3MXG2X2-Y	
13			GGX-CN3MXG2X2[EX]	
14			GGX-CN3MXG2X4[EX]	
15		8Gb FC expansion card	GG-CC3M8G1X1-Y	
16			GGX-CC3M8G1X1[EX]	
17		16Gb FC expansion card	GG-CC3M161X1-Y	
18			GGX-CC3M161X1[EX]	
19	CB2000 series	CNA board (for chassis)	GV-CN2NXG3X1-Y	
20			GV-CN2NXG3XR-Y	for RoHS
21			GVX-CN2NXG3X1[BX]	
22			GVX-CN2NXG3X2[BX]	
23		CNA board (for I/O slot expansion unit)	GV-CN2DXG3X1-Y	
24			GVX-CN2DXG3X1[EX]	
25			GVX-CN2DXG3X2[EX]	
26		LAN expansion card (2-port)	GV-CN2MXG1X1-Y	
27			GVX-CN2MXG1X1[EX]	
28			GVX-CN2MXG1X2[EX]	
29		LAN expansion card (4-port)	GV-CN2MXG2X1-Y	
30			GVX-CN2MXG2X1[EX]	
31			GVX-CN2MXG2X2[EX]	
32		CNA expansion card (2-port)	GV-CN2MXG3X1-Y	
33			GVX-CN2MXG3X1[EX]	
34			GVX-CN2MXG3X2[EX]	
35		CNA expansion card (4-port)	GV-CN2MXG4X1-Y	
36			GVX-CN2MXG4X1[EX]	
37			GVX-CN2MXG4X2[EX]	
38		8Gb FC board (for chassis)	GV-CC2N8G3X1-Y	
39			GV-CC2N8G3XR-Y	for RoHS
40			GVX-CC2N8G3X1[BX]	
41		8Gb FC board (for I/O slot expansion unit)	GV-CC2D8G3X1-Y	
42			GVX-CC2D8G3X1[EX]	
43		8Gb FC expansion card	GV-CC2M8G3X1-Y	
44			GV-CC2M8G3XR-Y	for RoHS
45			GVX-CC2M8G3X1[EX]	
46		16Gb FC board (for chassis)	GV-CC2N163X1-Y	
47			GVX-CC2N163X1[BX]	
48		16Gb FC board (for I/O slot expansion unit)	GV-CC2D163X1-Y	
49			GVX-CC2D163X1[EX]	

50	CB2500 series	CB520X B1 Onboard CNA	GG-RV3XGE0B1X1-Y	
51		CB520X B2 Onboard CNA	GG-RV3XGE0B2X1-Y	
52		CB520X B3 Onboard CNA	GG-RV3XGE0B3X1-Y	
53		CB520H B3 Onboard CNA	GG-RV3XGC0B3X1-Y	
54		CB520H B4 Onboard CNA	GG-RV3XGC0B4X1-Y	
55		CNA board	GG-CN4NXG3X1-Y	
56		8Gb FC board	GG-CC4N8G3X1-Y	
57		16Gb FC board	GG-CC4N163X1-Y	

Hitachi Compute Blade Emulex Adapter User's Guide has four parts : for Driver, for Hardware, for Utility and Support Matrix Edition.

See the document "Hitachi Compute Blade LAN Advanced Function Manual for Emulex (MK-99COM082)" for how to setup the NIC teaming and how to setup the VLAN.

#	Document Name	Contents
1	Hitachi Compute Blade Emulex Adapter User's Guide for Driver (MK-99COM103)	How to install the drivers of the adapters. How to setup the drivers.
2	Hitachi Compute Blade Emulex Adapter User's Guide for Hardware (MK-99COM104)	Outline of Emulex adapters. BIOS parameter list and the way to configure the parameters.
3	Hitachi Compute Blade Emulex Adapter User's Guide for Utility (MK-99COM105)	How to install and to operate the utility that manages the Emulex adapters. How to configure the parameters with the utility.
4	Hitachi Compute Blade LAN Advanced Function Manual for Emulex (MK-99COM082)	How to setup the NIC teaming. How to setup the VLAN.
5	Hitachi Compute Blade Emulex Adapter User's Guide (Support Matrix Edition) (MK-99COM196)	This document. Description of the driver version and firmware version that Hitachi supports. Description of the OneCommand Manager version that Hitachi supports. Description of the OneCapture version that Hitachi supports.



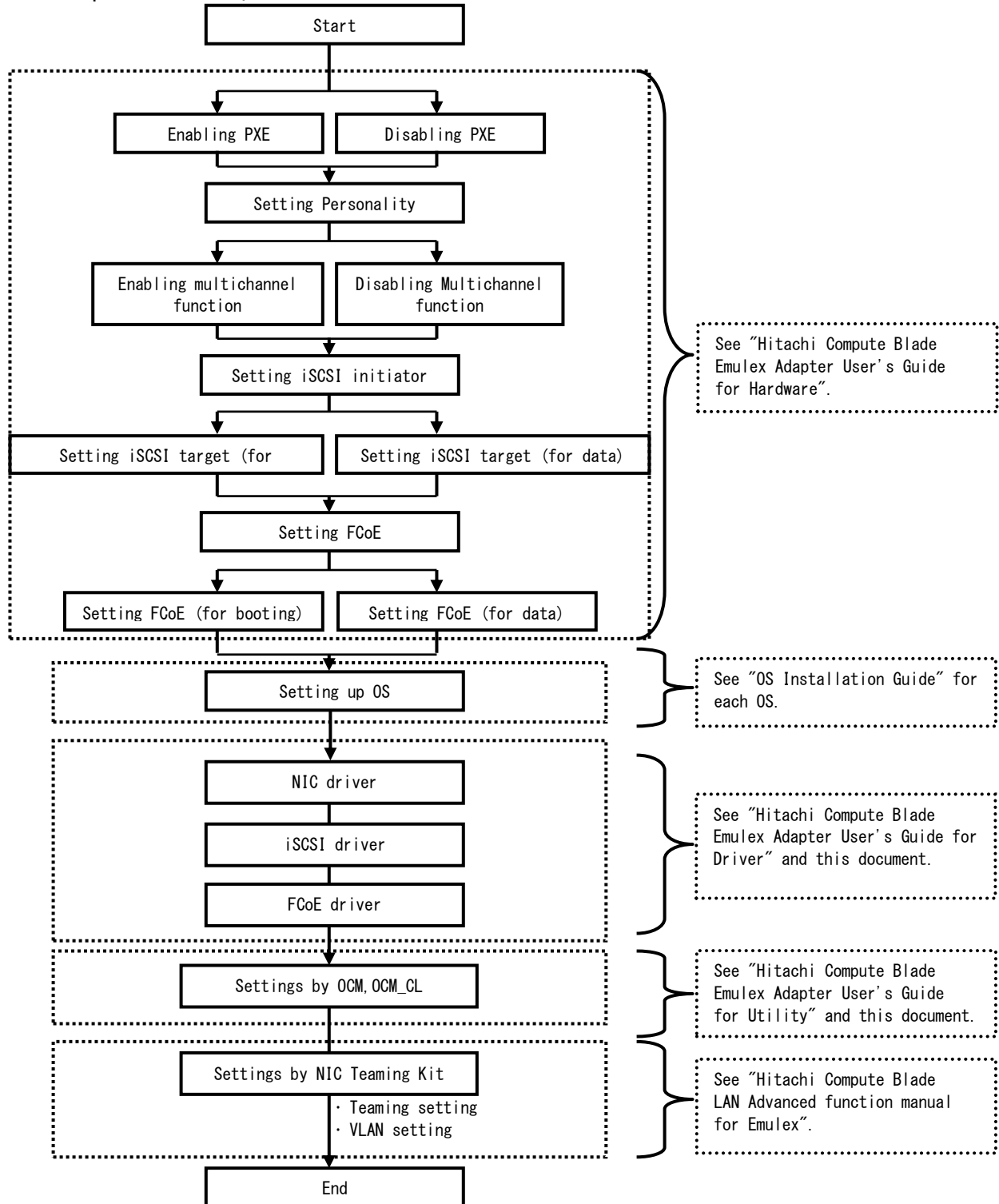
## Flow Chart of Setting up

This chapter describes the flow chart of setting up for Emulex adapters.

- [2.1 The Flow Chart of Setting up for Onboard CNA / CNA expansion card / LAN expansion card / CNA board](#)
- [2.2 The Flow Chart of Setting up for FC expansion card / FC board](#)

## 2.1 The Flow Chart of Setting up for Onboard CNA / CNA expansion card / LAN expansion card / CNA board

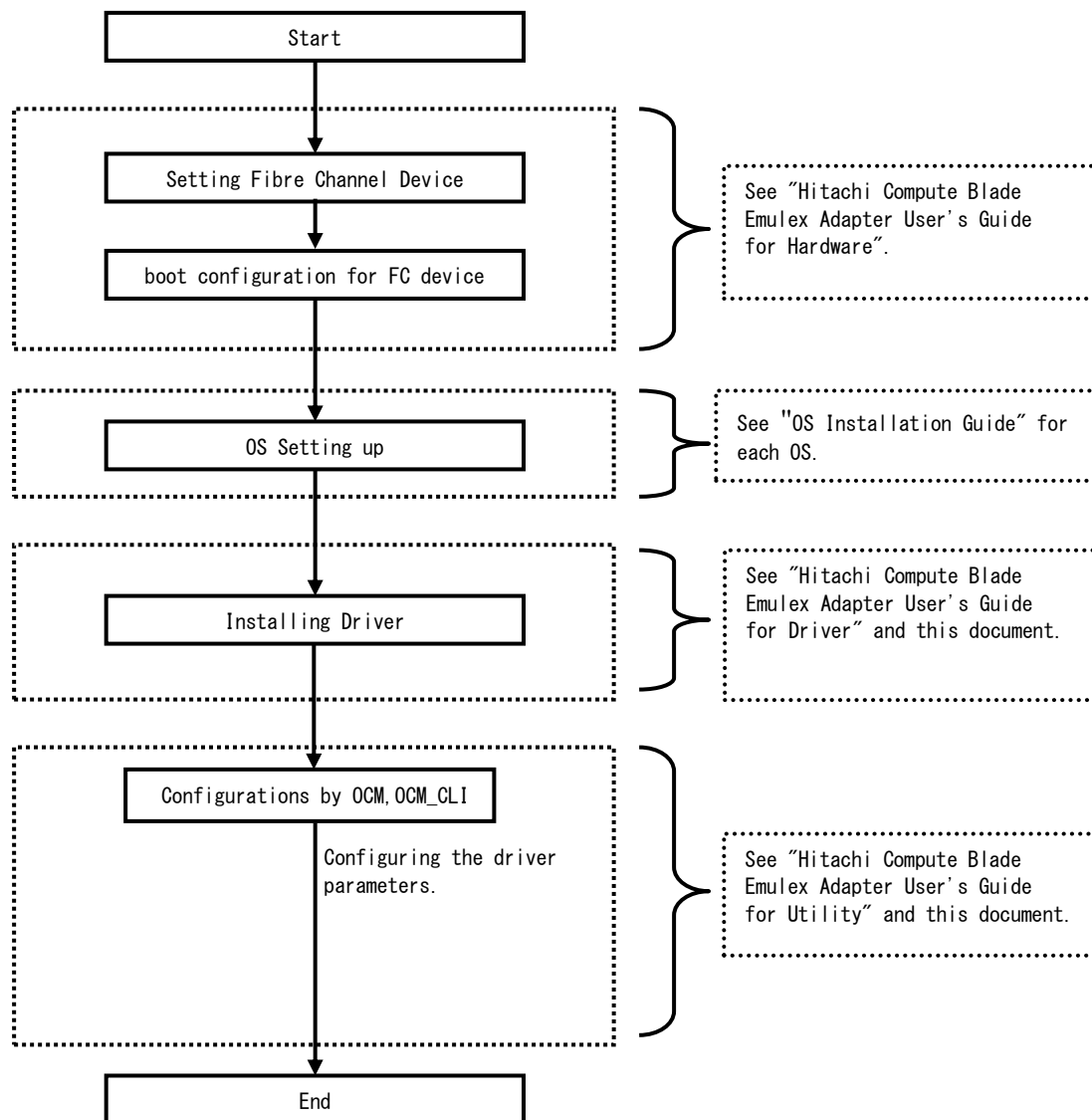
The flow chart of setting up for onboard CNA / CNA expansion card / LAN expansion card / CNA board is as follows.





## 2.2 The Flow Chart of Setting up for FC expansion card / FC board

The setting flow of 8Gb/16Gb FC expansion card / FC board is as follows.





## Supported Driver Version

This chapter defines the driver version of the Emulex adapters that Hitachi supports. A version or a combination between a firmware and a driver, which Hitachi does not define in this document, is not supported.

### 3.1 Basic environment

This section defines the supported driver version under Windows, RHEL or VMware environment.

#### 3.1.1 Windows Server

Windows Server drivers are listed below.

**Table 3-1: CNA drivers for CB2500 series CNA board**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 CNA board	CB520X B2 CNA board	CB520X B3 CNA board	CB520H B3 CNA board	CB520H B4 CNA board
1	10.2.340.10	10.2.298.37	10.2.254.0 (*2)	10.2.261.4	Windows Server 2008 R2 (*1)	✓				
2		10.2.298.37 10.2.478.1 (*3)	10.2.254.0 (*2)	10.2.261.4	Windows Server 2012 (*1) Windows Server 2012 R2	✓	✓		✓	
3	10.6.144.2702 (*4)	10.6.126.0	10.6.116.0	10.6.114.0	Windows Server 2008 R2 (*1)	✓				
4					Windows Server 2012 (*1) Windows Server 2012 R2	✓	✓	✓	✓	✓
5	11.1.215.0 (*4)(*5)	11.1.145.30	N/A	N/A	Windows Server 2012 (*1) Windows Server 2012 R2	✓	✓	✓	✓	✓
6		11.1.196.4	N/A	N/A	Windows Server 2016		✓	✓	✓	✓

(\*1) Before installing the NIC driver, the following hotfix is required to apply. Otherwise, the installation will fail.

<https://support.microsoft.com/en-us/kb/2846340>

(\*2) When using for iSCSI boot, producing a page file to an internal HDD is required for memory dump.

See the appendix in "Emulex Adapter User's Guide for Hardware (MK-99COM104-07 or later)"

(\*3) This version supports VMQ (Virtual Machine Queue) feature in Hyper-V environment.

(This version is not supported in LPAR manager environment.)

(\*4) When using this firmware, the firmware parameter "Advanced Mode Support" is recommended to set "Enabled".

See "Emulex Adapter User's Guide for Hardware (MK-99COM104-19 or later)"

(\*5) SR-IOV is not supported.

**Table 3-2: CNA drivers for CB2500 series Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 Onboard CNA	CB520X B2 Onboard CNA	CB520X B3 Onboard CNA	CB520H B3 Onboard CNA	CB520H B4 Onboard CNA
1	10.2.370.16	10.2.298.37	10.2.254.0 (*2)	10.2.261.4	Windows Server 2008 R2 (*1)	✓				
2	10.2.370.1601	10.2.298.37 10.2.478.1 (*3)	10.2.254.0 (*2)	10.2.261.4	Windows Server 2012 (*1) Windows Server 2012 R2	✓	✓		✓	
3	10.6.144.2704	10.6.126.0	10.6.116.0	10.6.114.0	Windows Server 2008 R2 (*1)	✓				
4		10.6.126.0	10.6.116.0	10.6.114.0	Windows Server 2012 (*1) Windows Server 2012 R2	✓	✓		✓	✓
5		10.6.126.0	10.6.116.0	N/A	Windows Server 2012 (*1) Windows Server 2012 R2			✓		
6	11.1.215.0 (*4)	11.1.145.30	N/A	N/A	Windows Server 2012 (*1) Windows Server 2012 R2	✓	✓	✓	✓	✓
7		11.1.196.4	N/A	N/A	Windows Server 2016		✓	✓	✓	✓

(\*1) Before installing the NIC driver, the following hotfix is required to apply. Otherwise, the installation will fail.

<https://support.microsoft.com/en-us/kb/2846340>

(\*2) When using for iSCSI boot, producing a page file to an internal HDD is required for memory dump.  
See the appendix in "Emulex Adapter User's Guide for Hardware (MK-99COM104-07 or later)"

(\*3) This version supports VMQ (Virtual Machine Queue) feature in Hyper-V environment.  
(This version is not supported in LPAR manager environment.)

(\*4) SR-IOV is not supported.

**Table 3-3: FC drivers for CB2500 series**

No.	FC Firmware Version	FC Driver Version	Supported OS	CB520X B1 8Gb FC board	CB520X B2 8Gb FC board	CB520X B3 8Gb FC board	CB520H B3 8Gb FC board	CB520H B4 8Gb FC board	CB520X B1 16Gb FC board	CB520X B2 16Gb FC board	CB520X B3 16Gb FC board	CB520H B3 16Gb FC board	CB520H B4 16Gb FC board
1	2.01a12	10.2.261.4	Windows Server 2008 R2	✓									
2			Windows Server 2012	✓	✓		✓						
			Windows Server 2012 R2										
3		10.6.114.0	Windows Server 2008 R2	✓									
4			Windows Server 2012	✓	✓	✓	✓	✓					
			Windows Server 2012 R2										
5		11.1.145.16	Windows Server 2012	✓	✓	✓	✓	✓					
			Windows Server 2012 R2										
6			Windows Server 2016		✓	✓	✓	✓					
7	10.2.340.10	10.2.261.4	Windows Server 2008 R2						✓				
8			Windows Server 2012						✓	✓		✓	
			Windows Server 2012 R2										
9	10.6.144.21	10.6.114.0	Windows Server 2008 R2						✓				
10			Windows Server 2012						✓	✓	✓	✓	✓
			Windows Server 2012 R2										
11	11.1.215.0	11.1.145.16	Windows Server 2012						✓	✓	✓	✓	✓
			Windows Server 2012 R2										
12			Windows Server 2016							✓	✓	✓	✓

**Table 3-4: CNA drivers for CB500 series CNA/LAN expansion card,CB540A B1/CB520H B1/CB520H B2 Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520A A1 CNA/LAN expansion card (*6)	CB540A B1 Onboard CNA (*6)	CB540A x1 CNA/LAN expansion card(*6)	CB520H B1 Onboard CNA (*6)	CB520H x1 CNA/LAN expansion card (*6)	CB520H B2 Onboard CNA (*6)	CB520H x2 CNA/LAN expansion card (*6)	CB520X B1 CNA/LAN expansion card (*6)	CB520X B2 CNA/LAN expansion card (*6)	CB520H B3 CNA/LAN expansion card (*6)	CB520H B4 CNA/LAN expansion card (*6)
1	4.1.334.28	4.1.334.25	4.1.334.0	5.2.70.018	Windows Server 2008 (32bit)	✓	✓	✓	✓	✓						
2	4.1.334.2801			7.2.70.018	Windows Server 2008 (64bit)	✓	✓	✓	✓	✓						
3		4.1.334.25 4.2.313.0	4.2.281.0	2.72.012.001	Windows Server 2012	✓	✓	✓	✓	✓						
4	4.2.433.604	4.1.334.25	4.1.334.0	5.2.70.018	Windows Server 2008 (32bit)	✓	✓	✓	✓	✓						
5				7.2.70.018	Windows Server 2008 (64bit)	✓	✓	✓	✓	✓						
6		4.2.390.6	4.1.334.0	5.2.70.018	Windows Server 2008 (32bit)	✓	✓	✓	✓	✓	✓	✓				
7				7.2.70.018	Windows Server 2008 (64bit)	✓	✓	✓	✓	✓	✓	✓				
8		4.1.334.25 4.2.313.0 4.2.390.6	4.2.281.0	2.72.012.001	Windows Server 2012	✓	✓	✓	✓	✓						
9		4.2.390.6	4.2.281.0	2.72.012.001	Windows Server 2012						✓	✓				
10	4.6.348.0	4.6.142.8	4.6.130.0	2.74.14.1	Windows Server 2008 (32bit)	✓	✓	✓	✓	✓	✓	✓				
11					Windows Server 2008 (64bit)	✓	✓	✓	✓	✓	✓	✓				
12		4.6.142.8 10.0.835.0 (*1) 10.2.478.1 (*1) (*3)	4.6.130.0	2.74.14.1	Windows Server 2012	✓	✓	✓	✓	✓	✓	✓				
13		10.0.430.1003 10.0.835.0 10.2.478.1 (*3)	4.9.160.0	2.76.002.001	Windows Server 2012 R2	✓	✓	✓	✓	✓	✓	✓				
14		4.6.142.8 10.0.835.0 (*1)	4.6.130.0	2.74.14.1	Windows Server 2012								✓			
15		10.0.430.1003 10.0.835.0	4.9.160.0	2.76.002.001	Windows Server 2012 R2								✓			
16	10.2.340.10	4.6.142.8	4.6.130.0	2.74.14.1	Windows Server 2008 (32bit)		✓	✓	✓	✓	✓	✓				
17		10.0.835.0 10.2.478.1 (*3)	4.6.130.0	2.74.14.1	Windows Server 2012 (*1)		✓	✓	✓	✓	✓	✓				
18		10.0.835.0 10.2.478.1 (*3)	4.9.160.0	2.76.002.001	Windows Server 2012 R2		✓	✓	✓	✓	✓	✓				
19		10.2.298.37	10.2.254.0 (*2)	10.2.261.4	Windows Server 2008 R2 (*1)								✓			
20		10.2.298.37	10.2.254.0 (*2)	10.2.261.4	Windows Server 2012 (*1)								✓	✓	✓	
21		10.2.478.1 (*3)			Windows Server 2012 R2											
22		10.2.298.37	N/A	N/A	Windows Server 2008 R2 (*1)										✓	
23	10.6.144.2702 (*4)	10.6.126.0	10.6.116.0	10.6.114.0	Windows Server 2008 R2 (*1)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
					Windows Server 2012 (*1)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					Windows Server 2012 R2											
24	11.1.215.0 (*4)(*5)	11.1.145.30	N/A	N/A	Windows Server 2008 R2 (*1)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
25					Windows Server 2012	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
26		11.1.196.4	N/A	N/A	Windows Server 2016										✓	✓

(\*1) Before installing the NIC driver, the following hotfix is required to apply. Otherwise, the installation will fail.

<https://support.microsoft.com/en-us/kb/2846340>

(\*2) When using for iSCSI boot, producing a page file to an internal HDD is required for memory dump.

See the appendix in "Emulex Adapter User's Guide for Hardware (MK-99COM104-07 or later)"

(\*3) This version supports VMQ (Virtual Machine Queue) feature in Hyper-V environment. (This version is not supported in LPAR manager environment.)

(\*4) When using this firmware, the firmware parameter "Advanced Mode Support" is recommended to set "Enabled".

See "Emulex Adapter User's Guide for Hardware (MK-99COM104-19 or later)"

(\*5) SR-IOV is not supported.

(\*6) When using CNA/LAN expansion cards and 520H B1/520H B2/540A B1 blade onboard CNA, Wake on LAN function is always enabled.

Even if the function is disabled with the driver's setting, the server is awakened by receiving the magic packet.

**Table 3-5: CNA drivers for CB500 series CB520X B1/CB520X B2/CB520H B3/CB520H B4 Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 Onboard CNA	CB520X B2 Onboard CNA	CB520H B3 Onboard CNA	CB520H B4 Onboard CNA
1	10.2.370.16 10.2.370.1601	10.2.298.37	10.2.254.0 (*2)	10.2.261.4	Windows Server 2008 R2 (*1)	✓			
2		10.2.298.37 10.2.478.1 (*3)	10.2.254.0 (*2)	10.2.261.4	Windows Server 2012 (*1) Windows Server 2012 R2	✓	✓	✓	
3	10.2.370.1601	10.2.298.37	N/A	N/A	Windows Server 2008 R2 (*1)			✓	
4	10.6.144.2704	10.6.126.0	10.6.116.0	10.6.114.0	Windows Server 2008 R2 (*1)	✓		✓	
5					Windows Server 2012 (*1) Windows Server 2012 R2	✓	✓	✓	✓
6	11.1.215.0 (*4)	11.1.145.30	N/A	N/A	Windows Server 2008 R2 (*1)	✓		✓	
7					Windows Server 2012 Windows Server 2012 R2	✓	✓	✓	✓
8		11.1.196.4	N/A	N/A	Windows Server 2016		✓	✓	✓

(\*1) Before installing the NIC driver, the following hotfix is required to apply. Otherwise, the installation will fail.

<https://support.microsoft.com/en-us/kb/2846340>

(\*2) When using for iSCSI boot, producing a page file to an internal HDD is required for memory dump.

See the appendix in "Emulex Adapter User's Guide for Hardware (MK-99COM104-07 or later)"

(\*3) This version supports VMQ (Virtual Machine Queue) feature in Hyper-V environment.

(This version is not supported in LPAR manager environment.)

(\*4) SR-IOV is not supported.



Table 3-6: FC drivers for CB500 series

No.	FC Firmware Version	FC Driver Version	Supported OS	CB520A A1 8Gb FC expansion card	CB540A x1 8Gb FC expansion card	CB520H x1 8Gb FC expansion card	CB520H x2 8Gb FC expansion card	CB520X B1 8Gb FC expansion card	CB520X B2 8Gb FC expansion card	CB520H B3 8Gb FC expansion card	CB520H B4 8Gb FC expansion card	CB520H x2 16Gb FC expansion card	CB520X B1 16Gb FC expansion card	CB520X B2 16Gb FC expansion card	CB520H B3 16Gb FC expansion card	CB520H B4 16Gb FC expansion card
1	2.01a3	5.2.70.18	Windows Server 2008 (32bit)	✓	✓	✓										
2		7.2.70.18	Windows Server 2008 (64bit) Windows Server 2008 R2	✓	✓	✓										
3		2.72.12.1	Windows Server 2012	✓	✓	✓										
4		2.74.14.1	Windows Server 2008 (32bit) Windows Server 2008 (64bit) Windows Server 2008 R2 Windows Server 2012				✓									
5	2.01a12	2.74.14.1	Windows Server 2008 (32bit) Windows Server 2008 (64bit) Windows Server 2008 R2 Windows Server 2012	✓	✓	✓	✓									
6		2.76.002.001	Windows Server 2012 R2	✓	✓	✓	✓									
7		10.0.720.0	Windows Server 2008 R2 Windows Server 2012 Windows Server 2012 R2				✓	✓								
8		10.2.261.4	Windows Server 2008 R2					✓								
9			Windows Server 2012 Windows Server 2012 R2					✓	✓	✓						
10		10.6.114.0	Windows Server 2008 R2	✓	✓	✓	✓	✓		✓						
11			Windows Server 2012	✓	✓	✓	✓	✓	✓	✓	✓					
12			Windows Server 2012 R2	✓	✓	✓	✓	✓	✓	✓	✓					
13		11.1.145.16	Windows Server 2008 R2	✓	✓	✓	✓	✓		✓						
14			Windows Server 2012 Windows Server 2012 R2	✓	✓	✓	✓	✓	✓	✓	✓					
15			Windows Server 2016						✓	✓	✓					
16	10.0.803.25	10.0.720.0	Windows Server 2008 R2 Windows Server 2012 Windows Server 2012 R2									✓	✓			
17	10.2.340.10	10.0.720.0	Windows Server 2008 R2									✓	✓			
18			Windows Server 2012 Windows Server 2012 R2									✓				
19		10.2.261.4	Windows Server 2012 Windows Server 2012 R2										✓	✓	✓	
20	10.6.144.21	10.6.114.0	Windows Server 2008 R2									✓	✓		✓	
21			Windows Server 2012 Windows Server 2012 R2									✓	✓	✓	✓	✓
22	11.1.215.0	11.1.145.16	Windows Server 2008 R2									✓	✓		✓	
23			Windows Server 2012 Windows Server 2012 R2									✓	✓	✓	✓	✓
24			Windows Server 2016											✓	✓	✓

**Table 3-7: CNA drivers for CB2000 series**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	Standard server blade S3, R3 CNA/LAN expansion card, CNA board	Standard server blade R4 CNA/LAN expansion card, CNA board	High performance server blade A2 CNA/LAN expansion card, CNA board
1	4.2.433.604	4.2.390.6	4.1.334.0	5.2.70.018	Windows Server 2008 (32bit)	✓	✓	✓
2		4.2.390.6	4.1.334.0	7.2.70.018	Windows Server 2008 (64bit) Windows Server 2008 R2	✓	✓	✓
3		4.2.390.6	4.2.281.0	2.72.012.001	Windows Server 2012	✓	✓	✓
4	4.6.348.0	4.6.142.8	4.6.130.0	2.74.14.1	Windows Server 2008 (32bit) Windows Server 2008 (64bit) Windows Server 2008 R2 Windows Server 2012	✓	✓	✓
5		10.0.430.1003	4.9.160.0	2.76.002.001	Windows Server 2012 R2	✓	✓	✓
6	10.2.340.10	4.6.142.8	4.6.130.0	2.74.14.1	Windows Server 2008 (32bit) Windows Server 2008 (64bit) Windows Server 2008 R2 Windows Server 2012	✓	✓	✓
7		10.0.430.1003	4.9.160.0	2.76.002.001	Windows Server 2012 R2	✓	✓	✓

**Table 3-8: FC drivers for CB2000 series**

No.	FC Firmware Version	FC Driver Version	Supported OS	Standard server blade A1 8Gb FC expansion card, 8Gb FC board	Standard server blade A2 8Gb FC expansion card, 8Gb FC board	Standard server blade S3, R3 8Gb FC expansion card, 8Gb FC board	Standard server blade R4 8Gb FC expansion card, 8Gb FC board	High performance server blade A2 8Gb FC expansion card, 8Gb FC board	Standard server blade R4 16Gb FC board	High performance server blade A2 16Gb FC board
1	1.10a5	5.2.70.18	Windows Server 2008 (32bit)	✓	✓	✓		✓		
2		7.2.70.18	Windows Server 2008 (64bit) Windows Server 2008 R2	✓	✓	✓		✓		
3		2.74.14.1	Windows Server 2008 (32bit) Windows Server 2008 (64bit) Windows Server 2008 R2				✓			
4		2.72.12.1	Windows Server 2012	✓	✓	✓	✓	✓		
5	2.01a12	2.74.14.1	Windows Server 2008 (32bit) Windows Server 2008 (64bit) Windows Server 2008 R2 Windows Server 2012	✓	✓	✓	✓	✓		
6		2.76.002.001	Windows Server 2012 R2	✓	✓	✓	✓	✓		
7	10.0.803.25	10.0.720.0	Windows Server 2008 R2 Windows Server 2012 Windows Server 2012 R2						✓	✓

Windows Server drivers are contained in the driver media listed below.

**Table 3-9: NIC drivers for Windows Server**

No.	Driver Media	OS	Driver Version	Folder Path
1	CB2000 10Gb CNA Driver CD ver.01-08 (or later) CB500 10Gb CNA Driver CD ver.01-27 (or later) CB2500 10Gb CNA Driver CD ver.01-28 (or later)	Windows Server 2008 (32bit)	4.6.142.8	WinSrv2008\Drivers\NIC\EmulexXG\x86
2		Windows Server 2008 (64bit)	4.6.142.8	WinSrv2008\Drivers\NIC\EmulexXG\x64
3		Windows Server 2008 R2	4.6.142.8	WinSrv2008R2\Drivers\NIC\EmulexXG\x64
4			10.2.298.37	WinSrv2008R2\Drivers\NIC\EmulexXG_02\x64
5			10.6.126.0	WinSrv2008R2\Drivers\NIC\EmulexXG_03\x64
6			11.1.145.30	WinSrv2008R2\Drivers\NIC\EmulexXG_04\x64
7			4.6.142.8	WinSrv2012\Drivers\NIC\EmulexXG\x64
8		Windows Server 2012	10.2.478.1	WinSrv2012\Drivers\NIC\EmulexXG_04\x64
9			10.6.126.0	WinSrv2012\Drivers\NIC\EmulexXG_05\x64
10			11.1.145.30	WinSrv2012\Drivers\NIC\EmulexXG_06\x64
11		Windows Server 2012 R2	10.0.430.1003	WinSrv2012R2\Drivers\NIC\EmulexXG\x64
12			10.2.478.1	WinSrv2012R2\Drivers\NIC\EmulexXG_04\x64
13			10.6.126.0	WinSrv2012R2\Drivers\NIC\EmulexXG_05\x64
14			11.1.145.30	WinSrv2012R2\Drivers\NIC\EmulexXG_06\x64
15		Windows Server 2016	11.1.196.4	WinSrv2016\Drivers\NIC\EmulexXG\x64

**Table 3-10: iSCSI drivers for Windows Server**

No.	Driver Media	OS	Driver Version	Folder Path
1	CB2000 10Gb CNA Driver CD ver.01-08 (or later) CB500 10Gb CNA Driver CD ver.01-24 (or later) CB2500 10Gb CNA Driver CD ver.01-25 (or later)	Windows Server 2008 (32bit)	4.6.130.0	WinSrv2008\Drivers\iSCSI\Emulex\x86
2		Windows Server 2008 (64bit)	4.6.130.0	WinSrv2008\Drivers\iSCSI\Emulex\x64
3		Windows Server 2008 R2	4.6.130.0	WinSrv2008R2\Drivers\iSCSI\Emulex\x64
4			10.2.254.0	WinSrv2008R2\Drivers\iSCSI\Emulex_02\x64
5			10.6.116.0	WinSrv2008R2\Drivers\iSCSI\Emulex_03\x64
6		Windows Server 2012	4.6.130.0	WinSrv2012\Drivers\iSCSI\Emulex\x64
7			10.2.254.0	WinSrv2012\Drivers\iSCSI\Emulex_02\x64
8			10.6.116.0	WinSrv2012\Drivers\iSCSI\Emulex_03\x64
9		Windows Server 2012 R2	4.9.160.0	WinSrv2012R2\Drivers\iSCSI\Emulex\x64
10			10.2.254.0	WinSrv2012R2\Drivers\iSCSI\Emulex_02\x64
11			10.6.116.0	WinSrv2012R2\Drivers\iSCSI\Emulex_03\x64

**Table 3-11: FCoE drivers for Windows Server**

No.	Driver Media	OS	Driver Version	Folder Path
1	CB2000 10Gb CNA Driver CD ver.01-08 (or later) CB500 10Gb CNA Driver CD ver.01-24 (or later) CB2500 10Gb CNA Driver CD ver.01-25 (or later)	Windows Server 2008 (32bit)	2.74.14.1	WinSrv2008\Drivers\FCoE\Emulex\x86
2		Windows Server 2008 (64bit)	2.74.14.1	WinSrv2008\Drivers\FCoE\Emulex\x64
3		Windows Server 2008 R2	2.74.14.1	WinSrv2008R2\Drivers\FCoE\Emulex\x64
4			10.2.261.4	WinSrv2008R2\Drivers\FCoE\Emulex_02\x64
5			10.6.114.0	WinSrv2008R2\Drivers\FCoE\Emulex_03\x64
6		Windows Server 2012	2.74.14.1	WinSrv2012\Drivers\FCoE\Emulex\x64
7			10.2.261.4	WinSrv2012\Drivers\FCoE\Emulex_02\x64
8			10.6.114.0	WinSrv2012\Drivers\FCoE\Emulex_03\x64
9		Windows Server 2012 R2	2.76.002.001	WinSrv2012R2\Drivers\FCoE\Emulex\x64
10			10.2.261.4	WinSrv2012R2\Drivers\FCoE\Emulex_02\x64
11			10.6.114.0	WinSrv2012R2\Drivers\FCoE\Emulex_03\x64

**Table 3-12: FC drivers for Windows Server**

No.	Driver Media	OS	Driver Version	Folder Path
1	Server installation and monitoring tool ver.03-10 (or later)	Windows Server 2008 (32bit)	2.74.14.1	WinSrv2008\Drivers\FibreChannel\Emulex_04\x86
2		Windows Server 2008 (64bit)	10.0.720.0	WinSrv2008\Drivers\FibreChannel\Emulex_05\x86
3			2.74.14.1	WinSrv2008\Drivers\FibreChannel\Emulex_04\x64
4			10.0.720.0	WinSrv2008\Drivers\FibreChannel\Emulex_05\x64
5		Windows Server 2008 R2	2.74.14.1	WinSrv2008R2\Drivers\FibreChannel\Emulex_04\x64
6			10.0.720.0	WinSrv2008R2\Drivers\FibreChannel\Emulex_05\x64
7	Server installation and monitoring tool ver.03-00 (or later)	Windows Server 2012	2.74.14.1	WinSrv2012\Drivers\FibreChannel\Emulex_04\x64
8		Windows Server 2012 R2	10.0.720.0	WinSrv2012\Drivers\FibreChannel\Emulex_05\x64
9			2.76.002.001	WinSrv2012R2\Drivers\FibreChannel\Emulex_04\x64
10			10.0.720.0	WinSrv2012R2\Drivers\FibreChannel\Emulex_05\x64
11		Windows Server 2008 R2	10.2.261.4	WinSrv2008R2\Drivers\FibreChannel\Emulex\x64
12			10.6.114.0	WinSrv2008R2\Drivers\FibreChannel\Emulex_02\x64
13	CB500 10Gb CNA Driver CD ver.01-27 (or later) CB2500 10Gb CNA Driver CD ver.01-28 (or later)	Windows Server 2012	11.1.145.16	WinSrv2008R2\Drivers\FibreChannel\Emulex_03\x64
14			10.2.261.4	WinSrv2012\Drivers\FibreChannel\Emulex\x64
15			10.6.114.0	WinSrv2012\Drivers\FibreChannel\Emulex_02\x64
16		Windows Server 2012 R2	11.1.145.16	WinSrv2012\Drivers\FibreChannel\Emulex_03\x64
17			10.2.261.4	WinSrv2012R2\Drivers\FibreChannel\Emulex\x64
18			10.6.114.0	WinSrv2012R2\Drivers\FibreChannel\Emulex_02\x64
19			11.1.145.16	WinSrv2012R2\Drivers\FibreChannel\Emulex_03\x64
20		Windows Server 2016	11.1.145.16	WinSrv2016\Drivers\FibreChannel\Emulex\x64

### 3.1.2 RHEL

RHEL drivers are listed below.

**Table 3-13: CNA drivers for CB2500 series CNA board**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 CNA board	CB520X B2 CNA board	CB520X B3 CNA board	CB520H B3 CNA board	CB520H B4 CNA board
1	10.2.340.10	10.2.340.7	10.2.340.7	10.2.340.0	RHEL6.5 (64-bit x86_64)	✓			✓	
2		10.2.469.0	10.2.469.0	10.2.469.0	RHEL6.6 (64-bit x86_64)	✓	✓		✓	
3		10.4r	N/A	10.6.0.20	RHEL6.7 (64-bit x86_64)	✓	✓		✓	
4	10.6.144.2702 (*1)	10.6.144.2706	10.6.144.2702	10.6.144.2703	RHEL6.5 (64-bit x86_64)	✓			✓	
5					RHEL6.6 (64-bit x86_64)	✓	✓		✓	
6		10.6.144.2706	N/A	10.6.0.20 10.6.144.2703	RHEL6.7 (64-bit x86_64)	✓	✓		✓	
7		10.6.144.2706	N/A	10.6.144.2703	RHEL7.1 (64-bit x86_64)	✓	✓		✓	
8		10.6.144.2707	N/A	10.6.144.2708	RHEL7.2 (64-bit x86_64)	✓	✓	✓	✓	✓
9		10.4r	N/A	10.6.0.20	RHEL6.7 (64-bit x86_64)					✓
10	11.1.215.0 (*1)(*2)	11.1.207.0	N/A	N/A	RHEL6.6 (64-bit x86_64)	✓	✓		✓	
					RHEL6.7 (64-bit x86_64)					
11					RHEL6.8 (64-bit x86_64)	✓	✓	✓	✓	✓
12					RHEL7.1 (64-bit x86_64)	✓	✓		✓	
13					RHEL7.2 (64-bit x86_64)	✓	✓	✓	✓	✓
14	11.4.1178.0 (*1)(*2)	11.1.215.8	N/A	N/A	RHEL7.3 (64-bit x86_64)	✓	✓	✓	✓	✓
15		11.4.1178.0	N/A	N/A	RHEL6.9 (64-bit x86_64)	✓	✓	✓	✓	✓
16					RHEL7.4 (64-bit x86_64)	✓	✓	✓	✓	✓
17		12.0.1159.0	N/A	N/A	RHEL6.10 (64-bit x86_64)	✓	✓	✓	✓	✓
18		12.0.1207.0	N/A	N/A	RHEL7.5 (64-bit x86_64)		✓	✓	✓	✓
19					RHEL7.6 (64-bit x86_64)	✓	✓	✓	✓	✓

(\*1) When using this firmware, the firmware parameter "Advanced Mode Support" is recommended to set "Enabled".

See "Emulex Adapter User's Guide for Hardware (MK-99COM104-19 or later)".

(\*2) SR-IOV is not supported.

**Table 3-14: CNA drivers for CB2500 series Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 Onboard CNA	CB520X B2 Onboard CNA	CB520X B3 Onboard CNA	CB520H B3 Onboard CNA	CB520H B4 Onboard CNA
1	10.2.370.16	10.2.340.7	10.2.340.7	10.2.340.0	RHEL6.5 (64-bit x86_64)	✓			✓	
2		10.2.469.0	10.2.469.0	10.2.469.0	RHEL6.6 (64-bit x86_64)	✓	✓		✓	
3		10.4r	N/A	10.6.0.20	RHEL6.7 (64-bit x86_64)	✓	✓		✓	
4	10.2.370.1601	10.2.340.7	10.2.340.7	10.2.340.0	RHEL6.5 (64-bit x86_64)	✓			✓	
5		10.2.469.0	10.2.469.0	10.2.469.0	RHEL6.6 (64-bit x86_64)	✓	✓		✓	
6		10.4r	N/A	10.6.0.20	RHEL6.7 (64-bit x86_64)	✓	✓		✓	
7	10.6.144.2704	10.6.144.2706	10.6.244.2702	10.6.144.2703	RHEL6.5 (64-bit x86_64)	✓			✓	
8					RHEL6.6 (64-bit x86_64)	✓	✓		✓	
9		10.6.144.2706	N/A	10.6.0.20 10.6.144.2703	RHEL6.7 (64-bit x86_64)	✓	✓		✓	
10		10.6.144.2706	N/A	10.6.144.2703	RHEL7.1 (64-bit x86_64)	✓	✓		✓	
11		10.6.144.2707	N/A	10.6.144.2708	RHEL7.2 (64-bit x86_64)	✓	✓		✓	✓
12		10.6.144.2707	N/A	N/A	RHEL7.2 (64-bit x86_64)			✓		
13		10.4r	N/A	10.6.0.20	RHEL6.7 (64-bit x86_64)					✓
14	11.1.215.0 (*1)	11.1.207.0	N/A	N/A	RHEL6.6 (64-bit x86_64)	✓	✓		✓	
15					RHEL6.7 (64-bit x86_64)					
16					RHEL6.8 (64-bit x86_64)	✓	✓	✓	✓	✓
17					RHEL7.1 (64-bit x86_64)	✓	✓		✓	
18					RHEL7.2 (64-bit x86_64)	✓	✓	✓	✓	✓
19	11.4.1179.0 (*1)	11.4.1178.0	N/A	N/A	RHEL7.3 (64-bit x86_64)	✓	✓	✓	✓	✓
20					RHEL6.9 (64-bit x86_64)	✓	✓	✓	✓	✓
21					RHEL7.4 (64-bit x86_64)	✓	✓	✓	✓	✓
22					RHEL6.10 (64-bit x86_64)	✓	✓	✓	✓	✓
23					RHEL7.5 (64-bit x86_64)		✓	✓	✓	✓
24	12.0.1336.0 (*1)	12.0.1339.0	N/A	N/A	RHEL7.6 (64-bit x86_64)	✓	✓	✓	✓	✓
					RHEL7.9 (64-bit x86_64)		✓	✓	✓	✓

(\*1) SR-IOV is not supported.

Table 3-15: FC drivers for CB2500 series

No.	FC Firmware Version	FC Driver Version	Supported OS	CB520X B1 8Gb FC board	CB520X B2 8Gb FC board	CB520X B3 8Gb FC board	CB520H B3 8Gb FC board	CB520H B4 8Gb FC board	CB520X B1 16Gb FC board	CB520X B2 16Gb FC board	CB520X B3 16Gb FC board	CB520H B3 16Gb FC board	CB520H B4 16Gb FC board
1	2.01a12	10.2.340.0	RHEL6.5 (64-bit x86_64)	✓			✓						
2		10.2.469.0	RHEL6.6 (64-bit x86_64)	✓	✓		✓						
3		10.6.144.2703	RHEL6.5 (64-bit x86_64)	✓			✓						
4			RHEL6.6 (64-bit x86_64)	✓	✓		✓						
			RHEL7.1 (64-bit x86_64)										
5		10.6.144.2708	RHEL7.2 (64-bit x86_64)	✓	✓	✓	✓	✓					
6		10.6.0.20	RHEL6.7 (64-bit x86_64)	✓	✓		✓						
7		11.1.211.0	RHEL6.6 (64-bit x86_64)	✓	✓		✓						
			RHEL6.7 (64-bit x86_64)										
8			RHEL6.8 (64-bit x86_64)	✓	✓	✓	✓	✓					
9			RHEL7.1 (64-bit x86_64)	✓	✓		✓						
10			RHEL7.2 (64-bit x86_64)	✓	✓	✓	✓	✓					
11		11.1.215.9	RHEL7.3 (64-bit x86_64)	✓	✓	✓	✓	✓					
12		11.2.156.38	RHEL6.9 (64-bit x86_64)	✓	✓	✓	✓	✓					
13			RHEL7.4 (64-bit x86_64)	✓	✓	✓	✓	✓					
14		12.0.261.12	RHEL6.10 (64-bit x86_64)	✓	✓	✓	✓	✓					
15			RHEL7.5 (64-bit x86_64)		✓	✓	✓	✓					
16		12.0.261.15	RHEL7.6 (64-bit x86_64)	✓	✓	✓	✓	✓					
17	2.02a5	12.6.240.48	RHEL7.9 (64-bit x86_64)		✓	✓	✓	✓					
18	10.2.340.10	10.2.340.0	RHEL6.5 (64-bit x86_64)						✓				✓
19		10.2.469.0	RHEL6.6 (64-bit x86_64)						✓	✓		✓	
20		10.6.0.20	RHEL6.7 (64-bit x86_64)						✓	✓		✓	
21	10.6.144.21	10.6.144.2703	RHEL6.5 (64-bit x86_64)						✓			✓	
22			RHEL6.6 (64-bit x86_64)						✓	✓		✓	
			RHEL7.1 (64-bit x86_64)										
23		10.6.144.2708	RHEL7.2 (64-bit x86_64)						✓	✓	✓	✓	✓
24		10.6.0.20	RHEL6.7 (64-bit x86_64)						✓	✓		✓	
25	11.1.215.0	11.1.211.0	RHEL6.6 (64-bit x86_64)						✓	✓		✓	
			RHEL6.7 (64-bit x86_64)										
26			RHEL6.8 (64-bit x86_64)						✓	✓	✓	✓	✓
27			RHEL7.1 (64-bit x86_64)						✓	✓		✓	
28			RHEL7.2 (64-bit x86_64)						✓	✓	✓	✓	✓
29		11.1.215.9	RHEL7.3 (64-bit x86_64)						✓	✓	✓	✓	✓
30		11.2.156.38	RHEL6.9 (64-bit x86_64)						✓	✓	✓	✓	✓
31			RHEL7.4 (64-bit x86_64)						✓	✓	✓	✓	✓
32	11.4.204.37	12.0.261.12	RHEL6.10 (64-bit x86_64)						✓	✓	✓	✓	✓
33			RHEL7.5 (64-bit x86_64)							✓	✓	✓	✓
34		12.0.261.15	RHEL7.6 (64-bit x86_64)						✓	✓	✓	✓	✓
35	12.6.240.42 (*1)	12.6.240.48	RHEL7.9 (64-bit x86_64)							✓	✓	✓	✓

(\*1) If using the N+M cold standby function, make sure that the HBA and Boot Parameters (Topology Selection, Force Link Speed) are the same for the active and standby server blades after updating firmware from 11.4.\*.\* or lower to 12.6.\*.\* or higher.  
If the parameters are different, set them to the same for the active and standby server blades.  
Before starting operation, perform an N+M failover test to confirm that the N+M failover works properly.

Table 3-16: CNA drivers for CB500 series CNA/LAN expansion card,CB540A B1/CB520H B1/CB520H B2 Onboard CNA

(1/2)

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520A A1 CNA/LAN expansion card (*5)	CB540A B1 Onboard CNA (*5)	CB540A x1 CNA/LAN expansion card (*5)	CB520H B1 Onboard CNA (*5)	CB520H x1 CNA/LAN expansion card (*5)	CB520H B2 Onboard CNA (*5)	CB520H x2 CNA/LAN expansion card (*5)	CB520X B1 CNA/LAN expansion card (*5)	CB520X B2 CNA/LAN expansion card (*5)	CB520H B3 CNA/LAN expansion card (*5)	CB520H B4 CNA/LAN expansion card (*5)
1	4.1.334.28 4.1.334.2801	4.1.334.18	4.1.334.15 4.2.374.0	8.2.0.126	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64) RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓	✓	✓	✓	✓						
2		4.1.334.18	4.1.334.15 4.2.374.0	8.3.5.65	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64) RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓	✓	✓						
3	4.2.433.604	4.1.334.18 4.2.456.0	4.1.334.15 4.2.374.0	8.2.0.126	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64) RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓	✓	✓	✓	✓						
4		4.1.334.18 4.2.456.0	4.1.334.15 4.2.374.0	8.3.5.65	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)	✓	✓	✓	✓	✓						
5		4.2.456.0	4.2.374.0	8.3.5.65	RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓	✓	✓	✓					
6	4.6.348.0	4.2.456.0 4.6.352.0	4.2.374.0 4.6.188.0	8.2.0.126 8.2.2.18	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64)	✓	✓	✓	✓	✓						
7		4.2.456.0 4.6.352.0	4.2.374.0 4.6.188.0 4.6.345.0 (*1)	8.2.0.126 8.2.2.18 8.2.2.30 (*1)	RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓	✓	✓	✓	✓						
8		4.2.456.0 4.6.352.0	4.2.374.0 4.6.176.0	8.3.5.65 8.3.7.20	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)		✓	✓	✓	✓						
9		4.2.456.0	4.2.374.0	8.3.5.65	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)	✓										
10		4.6.352.0	4.6.176.0	8.3.7.20 10.0.803.24	RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓	✓	✓	✓					
11		4.6.352.0	4.6.345.0	10.0.803.24	RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)	✓	✓	✓	✓	✓	✓					
12					RHEL6.5 (64-bit x86_64)							✓				
13		10.2.469.0	N/A	10.2.469.0	RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)						✓	✓				
14	10.2.340.10	4.2.456.0 4.6.352.0	4.6.188.0	8.2.2.18	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64)		✓	✓	✓	✓						
15		4.2.456.0 4.6.352.0	4.6.188.0 4.6.345.0 (*1)	8.2.2.18 8.2.2.30 (*1)	RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)		✓	✓	✓	✓						
16		4.2.456.0 4.6.352.0	4.6.176.0	8.3.7.20	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)		✓	✓	✓	✓						
17		4.6.352.0	4.6.176.0	10.0.803.24	RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)		✓	✓	✓	✓	✓					
18		10.2.340.7	4.6.345.0	10.0.803.24	RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)		✓	✓	✓	✓	✓					
19		10.2.340.7	10.2.340.7 (*2)	10.2.340.0	RHEL6.5 (64-bit x86_64)								✓		✓	
20		10.2.469.0	10.2.469.0	10.2.469.0	RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)		✓	✓	✓	✓	✓					
21					RHEL6.6 (64-bit x86_64)								✓	✓	✓	
22		10.4r	N/A	10.6.0.20	RHEL6.7 (32-bit x86) RHEL6.7 (64-bit x86_64)						✓	✓				
23					RHEL6.7 (64-bit x86_64)								✓	✓	✓	



(2/2)

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520A A1 CNA/LAN expansion card (*5)	CB540A B1 Onboard CNA (*5)	CB540A x1 CNA/LAN expansion card (*5)	CB520H B1 Onboard CNA (*5)	CB520H x1 CNA/LAN expansion card (*5)	CB520H B2 Onboard CNA (*5)	CB520H x2 CNA/LAN expansion card (*5)	CB520X B1 CNA/LAN expansion card (*5)	CB520X B2 CNA/LAN expansion card (*5)	CB520H B3 CNA/LAN expansion card (*5)	CB520H B4 CNA/LAN expansion card (*5)
24	10.6.144.2702	10.6.144.2706	10.6.144.2702 (*2)	10.6.144.2703	RHEL6.5 (32-bit x86)	<	<	<	<	<	<	<				
25	(*3)	10.6.144.2706	10.6.144.2702	10.6.144.2703	RHEL6.5 (64-bit x86_64)								✓		✓	
26		10.6.144.2706	10.6.144.2702	10.6.144.2703	RHEL6.6 (32-bit x86_64)		✓	✓	✓	✓	✓	✓				
27					RHEL6.6 (64-bit x86_64)								✓	✓	✓	
28		10.4r	N/A	10.6.0.20	RHEL6.7 (32-bit x86_64)						✓	✓				
29		10.6.144.2706		10.6.144.2703	RHEL6.7 (64-bit x86_64)								✓	✓	✓	
30					RHEL6.7 (64-bit x86_64)											✓
31		10.6.144.2706	N/A	10.6.144.2703	RHEL7.1 (64-bit x86_64)				✓	✓	✓	✓	✓	✓	✓	
32		10.6.144.2707	N/A	10.6.144.2708	RHEL7.2 (64-bit x86_64)				✓	✓	✓	✓	✓	✓	✓	✓
33	11.1.215.0	11.1.207.0	N/A	N/A	RHEL6.6 (32-bit x86_64)		✓	✓	✓	✓	✓	✓				
34	(*3) (*4)				RHEL6.6 (64-bit x86_64)								✓	✓	✓	
35					RHEL6.7 (32-bit x86_64)						✓	✓				
36					RHEL6.7 (64-bit x86_64)								✓	✓	✓	✓
37					RHEL6.8 (32-bit x86_64)						✓	✓				
38					RHEL6.8 (64-bit x86_64)								✓	✓	✓	✓
39					RHEL7.1 (64-bit x86_64)				✓	✓	✓	✓	✓	✓	✓	
40					RHEL7.2 (64-bit x86_64)				✓	✓	✓	✓	✓	✓	✓	✓
41		11.1.215.8	N/A	N/A	RHEL7.3 (64-bit x86_64)						✓	✓	✓	✓	✓	✓
42	11.4.1178.0	11.4.1178.0	N/A	N/A	RHEL6.9 (64-bit x86_64)								✓	✓	✓	✓
43	(*3) (*4)				RHEL7.4 (64-bit x86_64)								✓	✓	✓	✓
44		12.0.1159.0	N/A	N/A	RHEL6.10 (64-bit x86_64)								✓	✓	✓	✓
45		12.0.1207.0	N/A	N/A	RHEL7.5 (64-bit x86_64)									✓	✓	✓
46					RHEL7.6 (64-bit x86_64)								✓	✓	✓	✓

(\*1) This version can be applied only to RHEL5.9 with security updated kernel.

(\*2) The iSCSI driver version 10.2.340.7 or later cannot be updated from the driver version 4.6.345.0.

(\*3) When using this firmware, the firmware parameter "Advanced Mode Support" is recommended to set "Enabled".  
See "Emulex Adapter User's Guide for Hardware (MK-99COM104-19 or later)"

(\*4) SR-IOV is not supported.

(\*5) When using CNA/LAN expansion cards and 520H B1/520H B2/540A B1 blade onboard CNA, Wake on LAN function is always enabled.  
Even if the function is disabled with the driver's setting, the server is awakened by receiving the magic packet.

**Table 3-17: CNA drivers for CB500 series CB520X B1/CB520X B2/CB520H B3/CB520H B4 Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 Onboard CNA	CB520X B2 Onboard CNA	CB520H B3 Onboard CNA	CB520H B4 Onboard CNA
1	10.2.370.16 10.2.370.1601	10.2.340.7	10.2.340.7	10.2.340.0	RHEL6.5 (64-bit x86_64)	✓		✓	
2		10.2.469.0	10.2.469.0	10.2.469.0	RHEL6.6 (64-bit x86_64)	✓	✓	✓	
3		10.4r	N/A	10.6.0.20	RHEL6.7 (64-bit x86_64)	✓	✓	✓	
4	10.6.144.2704	10.6.144.2706	10.6.144.2702	10.6.144.2703	RHEL6.5 (64-bit x86_64)	✓		✓	
5					RHEL6.6 (64-bit x86_64)	✓	✓	✓	
6			N/A	10.6.0.20 10.6.144.2703	RHEL6.7 (64-bit x86_64)	✓	✓	✓	
7			N/A	10.6.144.2703	RHEL6.7 (64-bit x86_64)				✓
8					RHEL7.1 (64-bit x86_64)	✓	✓	✓	
9			N/A	10.6.144.2708	RHEL7.2 (64-bit x86_64)	✓	✓	✓	✓
10					RHEL7.2 (64-bit x86_64)	✓	✓	✓	✓
11	11.1.215.0 (*1)	11.1.207.0	N/A	N/A	RHEL6.6 (64-bit x86_64)	✓	✓	✓	
12					RHEL6.7 (64-bit x86_64)	✓	✓	✓	✓
13					RHEL6.8 (64-bit x86_64)	✓	✓	✓	✓
14					RHEL7.1 (64-bit x86_64)	✓	✓	✓	
15					RHEL7.2 (64-bit x86_64)	✓	✓	✓	✓
16	11.4.1179.0 (*1)	11.4.1178.0	N/A	N/A	RHEL7.3 (64-bit x86_64)	✓	✓	✓	✓
17					RHEL6.9 (64-bit x86_64)	✓	✓	✓	✓
18					RHEL7.4 (64-bit x86_64)	✓	✓	✓	✓
19					RHEL7.5 (64-bit x86_64)		✓	✓	✓
20					RHEL7.6 (64-bit x86_64)	✓	✓	✓	✓
21	12.0.1336.0 (*1)	12.0.1339.0	N/A	N/A	RHEL7.9 (64-bit x86_64)		✓	✓	✓

(\*1) SR-IOV is not supported.

Table 3-18: FC drivers for CB500 series

(1/3)

No.	FC Firmware Version	FC Driver Version	Supported OS	CB520A A1 8Gb FC expansion card	CB540A x1 8Gb FC expansion card	CB520H x1 8Gb FC expansion card	CB520H x2 8Gb FC expansion card	CB520X B1 8Gb FC expansion card	CB520X B2 8Gb FC expansion card	CB520H B3 8Gb FC expansion card	CB520H B4 8Gb FC expansion card	CB520H x2 16Gb FC expansion card	CB520X B1 16Gb FC expansion card	CB520X B2 16Gb FC expansion card	CB520H B3 16Gb FC expansion card	CB520H B4 16Gb FC expansion card
1	2.01a3	8.2.0.126	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64) RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓	✓	✓										
2		8.3.5.65	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)	✓	✓	✓										
3			RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓	✓									
4	2.01a12	8.2.2.18	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64) RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓	✓	✓										
5		8.3.7.20	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)	✓	✓	✓										
6			RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓	✓									
7		8.3.7.33	RHEL6.5 (64-bit x86_64)					✓								
8		10.0.803.24	RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)				✓									
9			RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)	✓	✓	✓	✓									
10		10.2.340.0	RHEL6.5 (64-bit x86_64)					✓		✓						
11		10.2.469.0	RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)		✓	✓	✓									
12			RHEL6.6 (64-bit x86_64)					✓	✓	✓						
13		10.6.0.20	RHEL6.7 (32-bit x86) RHEL6.7 (64-bit x86_64)				✓									
14			RHEL6.7 (64-bit x86_64)					✓	✓	✓						
15		10.6.144.2703	RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)	✓	✓	✓	✓									
16			RHEL6.5 (64-bit x86_64)					✓		✓						
17			RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)		✓	✓	✓									
18			RHEL6.6 (64-bit x86_64)					✓	✓	✓						
19			RHEL6.7 (64-bit x86_64)								✓					
20			RHEL7.1 (64-bit x86_64)				✓	✓	✓	✓						
21		10.6.144.2708	RHEL7.2 (64-bit x86_64)			✓	✓	✓	✓	✓	✓					
22		11.1.211.0	RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)		✓	✓	✓									
23			RHEL6.6 (64-bit x86_64)					✓	✓	✓						
24			RHEL6.7 (32-bit x86) RHEL6.7 (64-bit x86_64)				✓									
25			RHEL6.7 (64-bit x86_64)					✓	✓	✓	✓					
26			RHEL6.8 (32-bit x86) RHEL6.8 (64-bit x86_64)				✓									
27			RHEL6.8 (64-bit x86_64)					✓	✓	✓	✓					
28			RHEL7.1 (64-bit x86_64)				✓	✓	✓	✓	✓					
29			RHEL7.2 (64-bit x86_64)			✓	✓	✓	✓	✓	✓					
30		11.1.215.9	RHEL7.3 (64-bit x86_64)				✓	✓	✓	✓	✓					
31		11.2.156.38	RHEL6.9 (64-bit x86_64) RHEL7.4 (64-bit x86_64)					✓	✓	✓	✓					
32								✓	✓	✓	✓					
33		12.0.261.12	RHEL6.10 (64-bit x86_64)					✓	✓	✓	✓					
34			RHEL7.5 (64-bit x86_64)						✓	✓	✓					
35		12.0.261.15	RHEL7.6 (64-bit x86_64)					✓	✓	✓	✓					

Supported Driver Version

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No.	FC Firmware Version	FC Driver Version	Supported OS	CB520A A1 8Gb FC expansion card	CB540A x1 8Gb FC expansion card	CB520H x1 8Gb FC expansion card	CB520H x2 8Gb FC expansion card	CB520X B1 8Gb FC expansion card	CB520X B2 8Gb FC expansion card	CB520H B3 8Gb FC expansion card	CB520H B4 8Gb FC expansion card	CB520H x2 16Gb FC expansion card	CB520X B1 16Gb FC expansion card	CB520X B2 16Gb FC expansion card	CB520H B3 16Gb FC expansion card	CB520H B4 16Gb FC expansion card
36	2.02a5	12.6.240.48	RHEL7.9 (64-bit x86_64)						✓	✓	✓					
37	10.0.803.25	10.0.803.24	RHEL6.4 (32-bit x86)									✓				
38			RHEL6.4 (64-bit x86_64)									✓				
39			RHEL6.5 (32-bit x86)										✓			
40			RHEL6.5 (64-bit x86_64)										✓			
41	10.2.340.10	10.0.803.24	RHEL6.4 (32-bit x86)									✓				
42			RHEL6.4 (64-bit x86_64)									✓				
43			RHEL6.5 (32-bit x86)										✓			
44			RHEL6.5 (64-bit x86_64)											✓		
45		10.2.340.0	RHEL6.5 (64-bit x86_64)												✓	
46		10.2.469.0	RHEL6.6 (32-bit x86)									✓				
47			RHEL6.6 (64-bit x86_64)										✓	✓	✓	
48		10.6.0.20	RHEL6.6 (64-bit x86_64)										✓	✓	✓	
49			RHEL6.7 (32-bit x86)									✓				
50		10.6.144.2703	RHEL6.7 (64-bit x86_64)										✓	✓	✓	
51			RHEL6.5 (32-bit x86)									✓				
52			RHEL6.5 (64-bit x86_64)										✓		✓	
53			RHEL6.6 (32-bit x86)									✓				
54			RHEL6.6 (64-bit x86_64)										✓	✓	✓	
55			RHEL6.7 (64-bit x86_64)										✓	✓	✓	✓
56	11.1.215.0	10.6.144.2708	RHEL7.1 (64-bit x86_64)									✓	✓	✓	✓	✓
57		11.1.211.0	RHEL7.2 (64-bit x86_64)									✓	✓	✓	✓	✓
58			RHEL6.6 (32-bit x86)										✓			
59			RHEL6.6 (64-bit x86_64)										✓	✓	✓	
60			RHEL6.7 (32-bit x86)									✓				
61			RHEL6.7 (64-bit x86_64)										✓	✓	✓	✓
62			RHEL6.8 (32-bit x86)									✓				
63			RHEL6.8 (64-bit x86_64)										✓	✓	✓	✓
64			RHEL7.1 (64-bit x86_64)									✓	✓	✓	✓	✓
65		11.1.215.9	RHEL7.2 (64-bit x86_64)									✓	✓	✓	✓	✓
66		11.2.156.38	RHEL7.3 (64-bit x86_64)									✓	✓	✓	✓	✓
67			RHEL6.9 (64-bit x86_64)										✓	✓	✓	✓
			RHEL7.4 (64-bit x86_64)									✓	✓	✓	✓	✓

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No.	FC Firmware Version	FC Driver Version	Supported OS	CB520A A1 8Gb FC expansion card	CB540A x1 8Gb FC expansion card	CB520H x1 8Gb FC expansion card	CB520H x2 8Gb FC expansion card	CB520X B1 8Gb FC expansion card	CB520X B2 8Gb FC expansion card	CB520H B3 8Gb FC expansion card	CB520H B4 8Gb FC expansion card	CB520H x2 16Gb FC expansion card	CB520X B1 16Gb FC expansion card	CB520X B2 16Gb FC expansion card	CB520H B3 16Gb FC expansion card	CB520H B4 16Gb FC expansion card
68	11.4.204.37	12.0.261.12	RHEL6.10 (64-bit x86_64)										✓	✓	✓	✓
69			RHEL7.5 (64-bit x86_64)											✓	✓	✓
70		12.0.261.15	RHEL7.6 (64-bit x86_64)										✓	✓	✓	✓
71	12.6.240.42 (*1)	12.6.240.48	RHEL7.9 (64-bit x86_64)											✓	✓	✓

(\*1) If using the N+M cold standby function, make sure that the HBA and Boot Parameters (Topology Selection, Force Link Speed) are the same for the active and standby server blades after updating firmware from 11.4.\*.\* or lower to 12.6.\*.\* or higher. If the parameters are different, set them to the same for the active and standby server blades. Before starting operation, perform an N+M failover test to confirm that the N+M failover works properly.

**Table 3-19: CNA drivers for CB2000 series**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	Standard server blade S3, R3 CNA/LAN expansion card, CNA board	Standard server blade R4 CNA/LAN expansion card, CNA board	High performance server blade A2 CNA/LAN expansion card, CNA board
1	4.2.433.604	4.1.334.18 4.2.456.0	4.1.334.15 4.2.374.0	8.2.0.126	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64) RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓		✓
2					RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)	✓		✓
3		4.2.456.0	4.2.374.0	8.3.5.65	RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓
4	4.6.348.0	4.2.456.0	4.2.374.0 4.6.188.0	8.2.0.126 8.2.2.18	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64)	✓		✓
5					RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓		✓
6		4.2.456.0 4.6.352.0 (*1)	4.2.374.0 4.6.188.0 4.6.345.0 (*1)	8.2.0.126 8.2.2.18 8.2.2.30 (*1)	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)	✓		✓
7					RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓
8		4.6.352.0	4.6.176.0	10.0.803.24	RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)	✓	✓	✓
9		4.6.352.0	4.6.345.0	10.0.803.24	RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)	✓	✓	✓
10	10.2.340.10	4.2.456.0	4.6.188.0	8.2.2.18	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64)	✓		✓
11		4.2.456.0	4.6.188.0	8.2.2.18	RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓		✓
12		4.6.352.0 (*1)	4.6.345.0 (*1)	8.2.2.30 (*1)	RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓		✓
13		4.2.456.0	4.6.176.0	8.3.7.20	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)	✓		✓
14		4.6.352.0	4.6.176.0	10.0.803.24	RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓
15		10.2.340.7	4.6.345.0	10.0.803.24	RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)	✓	✓	✓
16		10.2.469.0	10.2.469.0	10.2.469.0	RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)	✓	✓	✓

(\*1) This version can be applied only to RHEL5.9 with security updated kernel.

**Table 3-20: FC drivers for CB2000 series**

No.	FC Firmware Version	FC Driver Version	Supported OS	Standard server blade A1 8Gb FC expansion card, 8Gb FC board	Standard server blade A2 8Gb FC expansion card, 8Gb FC board	Standard server blade S3, R3 8Gb FC expansion card, 8Gb FC board	Standard server blade R4 8Gb FC expansion card, 8Gb FC board	High performance server blade A2 8Gb FC expansion card, 8Gb FC board	Standard server blade R4 16Gb FC board	High performance server blade A2 16Gb FC board
1	1.10a5	8.2.0.126	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64) RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓	✓	✓		✓		
2		8.3.5.65	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)	✓	✓	✓		✓		
3			RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓	✓	✓		
4	2.01a12	8.2.2.18	RHEL5.7 (32-bit x86) RHEL5.7 (64-bit x86_64) RHEL5.9 (32-bit x86) RHEL5.9 (64-bit x86_64)	✓	✓	✓		✓		
5		8.3.7.20	RHEL6.2 (32-bit x86) RHEL6.2 (64-bit x86_64)	✓	✓	✓		✓		
6		8.3.7.20 10.0.803.24	RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓	✓	✓		
7		10.0.803.24	RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)	✓	✓	✓	✓	✓		
8		10.2.469.0	RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)	✓	✓	✓	✓	✓		
9		12.0.261.12	RHEL6.10 (64-bit x86_64)	✓	✓	✓	✓	✓		
10	10.0.803.25	10.0.803.24	RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64) RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)						✓	✓
11		10.2.469.0	RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)						✓	✓
12	11.4.204.37	12.0.261.12	RHEL6.10 (64-bit x86_64)						✓	✓

### 3.1.3 VMware

VMware drivers are listed below.

**Table 3-21: CNA drivers for CB2500 series CNA board**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 CNA board	CB520X B2 CNA board	CB520X B3 CNA board	CB520H B3 CNA board	CB520H B4 CNA board
1	10.2.340.10	10.2.298.5	10.2.250.0	10.2.298.12	VMware5.5	✓	✓		✓	
2		10.2.445.0	10.2.250.1	10.2.298.12	VMware6.0 VMware6.0 U1 VMware6.0 U2	✓	✓		✓	
3	10.6.144.2702 (*2)	10.2.298.5	10.2.250.0	10.2.298.12	VMware5.5	✓	✓		✓	
4		10.2.298.5	10.2.250.0	10.2.298.12	VMware5.5					✓
5		10.2.445.0	10.2.250.1	10.2.298.12	VMware6.0 VMware6.0 U1 VMware6.0 U2	✓	✓	✓	✓	✓
6	11.1.215.0 (*1)(*2)	11.1.145.0	N/A	N/A	VMware5.5	✓	✓		✓	✓
7		11.1.196.3	N/A	N/A	VMware6.0 U3	✓	✓	✓	✓	✓
8					VMware6.5		✓	✓	✓	✓
9					VMware6.5 U1		✓	✓	✓	✓
10					VMware6.5 U2		✓	✓	✓	✓
11					VMware6.5 U3		✓	✓	✓	✓
12	11.4.1178.0 (*1)(*2)	12.0.1115.0	N/A	N/A	VMware6.7 U1 (*3)	✓	✓	✓	✓	✓
13					VMware6.7 U2 (*3)	✓	✓	✓	✓	✓
14					VMware6.7 U3 (*3)	✓	✓	✓	✓	✓

(\*1) SR-IOV is not supported.

(\*2) When using this firmware, the firmware parameter "Advanced Mode Support" is recommended to set "Enabled". See "Emulex Adapter User's Guide for Hardware (MK-99COM104-19 or later)".

(\*3) The following warning message may be logged in the vmkernel in VMware6.7 Update1 or later environment, but this message can be ignored. This message does not affect the driver.

**WARNING:** elxnet: elxnet\_getQCount:xxxx: [xxxx:xx:xx.x] DRSS cannot be supported as sufficient Firmware/Kernel resources are not available.



**Table 3-22: CNA drivers for CB2500 series Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 Onboard CNA	CB520X B2 Onboard CNA	CB520X B3 Onboard CNA	CB520H B3 Onboard CNA	CB520H B4 Onboard CNA
1	10.2.370.16	10.2.298.5 10.2.445.0	10.2.250.0	10.2.298.12	VMware5.5	✓	✓		✓	
2		10.2.445.0	10.2.250.1	10.2.298.12	VMware6.0 VMware6.0 U1 VMware6.0 U2	✓	✓		✓	
3	10.2.370.1601	10.2.298.5 10.2.445.0	10.2.250.0	10.2.298.12	VMware5.5	✓	✓		✓	
4		10.2.445.0	10.2.250.1	10.2.298.12	VMware6.0 VMware6.0 U1 VMware6.0 U2	✓	✓		✓	
5	10.6.144.2704	10.2.298.5 10.2.445.0 10.6.144.2712	10.2.250.0	10.2.298.12	VMware5.5	✓	✓		✓	
6		10.2.298.5 10.6.144.2712	10.2.250.0	10.2.298.12	VMware5.5					✓
7		10.2.445.0 10.6.144.2712	10.2.250.1	10.2.298.12	VMware6.0 VMware6.0 U1 VMware6.0 U2	✓	✓		✓	✓
8		10.2.445.0 10.6.144.2712	10.2.250.1	N/A	VMware6.0 VMware6.0 U1 VMware6.0 U2			✓		
9	11.1.215.0 (*1)	11.1.145.0	N/A	N/A	VMware5.5	✓	✓		✓	✓
10					VMware6.0 U3	✓	✓	✓	✓	✓
11		11.1.196.3	N/A	N/A	VMware6.5		✓	✓	✓	✓
12					VMware6.5 U1		✓	✓	✓	✓
13					VMware6.5 U2		✓	✓	✓	✓
14					VMware6.5 U3		✓	✓	✓	✓
15	11.4.1179.0 (*1)	12.0.1115.0	N/A	N/A	VMware6.7 U1 (*2)	✓	✓	✓	✓	✓
16					VMware6.7 U2 (*2)	✓	✓	✓	✓	✓
17					VMware6.7 U3 (*2)	✓	✓	✓	✓	✓

(\*1) SR-IOV is not supported.

(\*2) The following warning message may be logged in the vmkernel in VMware6.7 Update1 or later environment, but this message can be ignored. This message does not affect the driver.

**WARNING:** elxnet: elxnet\_getQCount:xxxx: [xxxx:xx:xx.x] DRSS cannot be supported as sufficient Firmware/Kernel resources are not available.

**Table 3-23: FC drivers for CB2500 series**

No.	FC Firmware Version	FC Driver Version	Supported OS	CB520X B1 8Gb FC board	CB520X B2 8Gb FC board	CB520X B3 8Gb FC board	CB520H B3 8Gb FC board	CB520H B4 8Gb FC board	CB520X B1 16Gb FC board	CB520X B2 16Gb FC board	CB520X B3 16Gb FC board	CB520H B3 16Gb FC board	CB520H B4 16Gb FC board
1	2.01a12 (*2)	10.2.298.12	VMware5.5	✓	✓		✓	✓					
2			VMware6.0	✓	✓	✓	✓	✓					
			VMware6.0 U1										
			VMware6.0 U2										
3		11.1.145.18	VMware5.5	✓	✓		✓	✓					
4			VMware6.0 U3	✓	✓	✓	✓	✓					
5		11.1.196.3	VMware6.5		✓	✓	✓	✓					
6			VMware6.5 U1		✓	✓	✓	✓					
7			VMware6.5 U2		✓	✓	✓	✓					
8		11.4.341.0	VMware6.7 U1	✓	✓	✓	✓	✓					
9	2.02a4 (*1)	11.1.196.3	VMware6.5 U3		✓	✓	✓	✓					
10		11.4.341.0	VMware6.7 U2	✓	✓	✓	✓	✓					
11			VMware6.7 U3	✓	✓	✓	✓	✓					
12	10.2.340.10	10.2.298.12	VMware5.5						✓	✓		✓	
			VMware6.0										
			VMware6.0 U1										
			VMware6.0 U2										
13	10.6.144.21	10.2.298.12	VMware5.5						✓	✓		✓	✓
14			VMware6.0						✓	✓	✓	✓	✓
			VMware6.0 U1										
			VMware6.0 U2										
15	11.1.215.0	11.1.145.18	VMware5.5						✓	✓		✓	✓
16			VMware6.0 U3						✓	✓	✓	✓	✓
17		11.1.196.3	VMware6.5							✓	✓	✓	✓
18			VMware6.5 U1							✓	✓	✓	✓
19			VMware6.5 U2							✓	✓	✓	✓
20			VMware6.5 U3							✓	✓	✓	✓
21		11.4.341.0	VMware6.7 U1						✓	✓	✓	✓	✓
22			VMware6.7 U2						✓	✓	✓	✓	✓
23			VMware6.7 U3						✓	✓	✓	✓	✓

(\*1) Emulex UEFI Utility menu item "Legacy Only Configuration Settings" and "Request RESET or RECONNECT to Make Changes Active" are displayed when using FW 2.02a4 or higher. These items are not supported.

(\*2) When the firmware is downgraded from 2.02a4 to 2.01a12, the firmware parameter "Set Boot from SAN" is changed from "Enable" to "Disable". Restore the firmware parameter.

**Table 3-24: CNA drivers for CB500 series CNA/LAN expansion card,CB540A B1/CB520H B1/CB520H B2 Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520A A1 CNA/LAN expansion card (*3)	CB540A B1 Onboard CNA (*3)	CB540A x1 CNA/LAN expansion card (*3)	CB520H B1 Onboard CNA (*3)	CB520H x1 CNA/LAN expansion card (*3)	CB520H B2 Onboard CNA (*3)	CB520H x2 CNA/LAN expansion card (*3)	CB520X B1 CNA/LAN expansion card (*3)	CB520X B2 CNA/LAN expansion card (*3)	CB520H B3 CNA/LAN expansion card (*3)	CB520H B4 CNA/LAN expansion card (*3)
1	10.2.340.10	10.2.298.5	10.2.250.0	10.2.298.12	VMware5.5		✓	✓	✓	✓	✓	✓	✓	✓	✓	
2		10.2.445.0	10.2.250.1	10.2.298.12	VMware6.0 VMware6.0 U1 VMware6.0 U2				✓	✓	✓	✓	✓	✓	✓	
3	10.6.144.2702 (*2)	10.2.298.5	10.2.250.0	10.2.298.12	VMware5.5		✓	✓	✓	✓	✓	✓	✓	✓	✓	
4		10.2.298.5	10.2.250.0	10.2.298.12	VMware5.5	✓										✓
5		10.2.445.0	10.2.250.1	10.2.298.12	VMware6.0 VMware6.0 U1 VMware6.0 U2				✓	✓	✓	✓	✓	✓	✓	✓
6		10.6.144.2712														
7	11.1.215.0 (*1)(*2)	11.1.145.0	N/A	N/A	VMware5.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8		11.1.196.3	N/A	N/A	VMware6.0 U3				✓	✓	✓	✓	✓	✓	✓	✓
9					VMware6.5									✓	✓	✓
10					VMware6.5 U1									✓	✓	✓
11					VMware6.5 U2									✓	✓	✓
12	11.4.1178.0 (*1)(*2)	12.0.1115.0	N/A	N/A	VMware6.5 U3									✓	✓	✓
13					VMware6.7 U1 (*4)								✓	✓	✓	✓
14					VMware6.7 U2 (*4)								✓	✓	✓	✓
					VMware6.7 U3 (*4)								✓	✓	✓	✓

(\*1) SR-IOV is not supported.

(\*2) When using this firmware, the firmware parameter "Advanced Mode Support" is recommended to set "Enabled". See "Emulex Adapter User's Guide for Hardware (MK-99COM104-19 or later)".

(\*3) When using CNA/LAN expansion cards and 520H B1/520H B2/540A B1 blade onboard CNA, Wake on LAN function is always enabled. Even if the function is disabled with the driver's setting, the server is awakened by receiving the magic packet.

(\*4) The following warning message may be logged in the vmkernel in VMware6.7 Update1 or later environment, but this message can be ignored. This message does not affect the driver.

**WARNING:** elxnet: elxnet\_getQCount:xxxx: [xxxx:xx:xx.x] DRSS cannot be supported as sufficient Firmware/Kernel resources are not available.

**Table 3-25: CNA drivers for CB500 series  
CB520X B1/CB520X B2/CB520H B3/CB520H B4 Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 Onboard CNA	CB520X B2 Onboard CNA	CB520H B3 Onboard CNA	CB520H B4 Onboard CNA
1	10.2.370.16	10.2.298.5	10.2.250.0	10.2.298.12	VMware5.5	✓	✓	✓	
2		10.2.445.0	10.2.250.1	10.2.298.12	VMware6.0 VMware6.0 U1 VMware6.0 U2	✓	✓	✓	
3	10.2.370.1601	10.2.298.5	10.2.250.0	10.2.298.12	VMware5.5	✓	✓	✓	
4		10.2.445.0	10.2.250.1	10.2.298.12	VMware6.0 VMware6.0 U1 VMware6.0 U2	✓	✓	✓	
5	10.6.144.2704	10.2.298.5	10.2.250.0	10.2.298.12	VMware5.5	✓	✓	✓	
6		10.2.445.0 10.6.144.2712	10.2.250.0	10.2.298.12	VMware5.5				✓
7		10.2.298.5 10.6.144.2712	10.2.250.1	10.2.298.12	VMware6.0 VMware6.0 U1 VMware6.0 U2	✓	✓	✓	✓
8		10.2.445.0 10.6.144.2712							
9	11.1.215.0 (*1)	11.1.145.0	N/A	N/A	VMware5.5	✓	✓	✓	✓
10			N/A	N/A	VMware6.0 U3	✓	✓	✓	✓
11		11.1.196.3	N/A	N/A	VMware6.5		✓	✓	✓
12					VMware6.5 U1		✓	✓	✓
13					VMware6.5 U2		✓	✓	✓
14	11.4.1179.0 (*1)	12.0.1115.0	N/A	N/A	VMware6.5 U3		✓	✓	✓
15					VMware6.7 U1 (*2)	✓	✓	✓	✓
16					VMware6.7 U2 (*2)	✓	✓	✓	✓
					VMware6.7 U3 (*2)	✓	✓	✓	✓

(\*1) SR-IOV is not supported.

(\*2) The following warning message may be logged in the vmkernel in VMware6.7 Update1 or later environment, but this message can be ignored. This message does not affect the driver.

**WARNING:** elxnet: elxnet\_getQCount:xxxx: [xxxx:xx:xx.x] DRSS cannot be supported as sufficient Firmware/Kernel resources are not available.

**Table 3-26: FC drivers for CB500 series**

No.	FC Firmware Version	FC Driver Version	Supported OS	CB520A A1 8Gb FC expansion card	CB540A x1 8Gb FC expansion card	CB520H x1 8Gb FC expansion card	CB520H x2 8Gb FC expansion card	CB520X B1 8Gb FC expansion card	CB520X B2 8Gb FC expansion card	CB520H B3 8Gb FC expansion card	CB520H B4 8Gb FC expansion card	CB520H x2 16Gb FC expansion card	CB520X B1 16Gb FC expansion card	CB520X B2 16Gb FC expansion card	CB520H B3 16Gb FC expansion card	CB520H B4 16Gb FC expansion card
1	2.01a12 (*2)	10.2.298.12	VMware5.5	✓	✓	✓	✓	✓	✓	✓	✓					
2			VMware6.0			✓	✓	✓	✓	✓	✓					
			VMware6.0 U1													
			VMware6.0 U2													
3		11.1.145.18	VMware5.5	✓	✓	✓	✓	✓	✓	✓	✓					
4			VMware6.0 U3			✓	✓	✓		✓	✓					
5		11.1.196.3	VMware6.5							✓	✓	✓				
6			VMware6.5 U1							✓	✓	✓				
7			VMware6.5 U2							✓	✓	✓				
8		11.4.341.0	VMware6.7 U1					✓		✓	✓	✓				
9	2.02a4 (*1)	11.1.196.3	VMware6.5 U3							✓	✓	✓				
10		11.4.341.0	VMware6.7 U2					✓		✓	✓	✓				
11			VMware6.7 U3					✓		✓	✓	✓				
12	10.2.340.10	10.2.298.12	VMware5.5									✓	✓	✓	✓	
13			VMware6.0									✓	✓	✓	✓	✓
			VMware6.0 U1													
			VMware6.0 U2													
14	10.6.144.21	10.2.298.12	VMware5.5									✓	✓	✓	✓	✓
			VMware6.0													
			VMware6.0 U1													
			VMware6.0 U2													
15	11.1.215.0	11.1.145.18	VMware5.5									✓	✓	✓	✓	✓
16			VMware6.0 U3									✓	✓	✓	✓	✓
17		11.1.196.3	VMware6.5											✓	✓	✓
18			VMware6.5 U1											✓	✓	✓
19			VMware6.5 U2											✓	✓	✓
20			VMware6.5 U3											✓	✓	✓
21		11.4.341.0	VMware6.7 U1										✓	✓	✓	✓
22			VMware6.7 U2										✓	✓	✓	✓
23			VMware6.7 U3										✓	✓	✓	✓

(\*1) Emulex UEFI Utility menu item "Legacy Only Configuration Settings" and "Request RESET or RECONNECT to Make Changes Active" are displayed when using FW 2.02a4 or higher. These items are not supported.

(\*2) When the firmware is downgraded from 2.02a4 to 2.01a12, the firmware parameter "Set Boot from SAN" is changed from "Enable" to "Disable". Restore the firmware parameter.

## 3.2 LPAR manager environment

This section defines the supported driver version under LPAR manager environment.

### 3.2.1 Windows Server

Windows Server drivers for LPAR manager are listed below.

**Table 3-27: CNA drivers for CB2500 series CNA board**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 CNA board	CB520X B2 CNA board	CB520X B3 CNA board	CB520H B3 CNA board	CB520H B4 CNA board
1	10.2.340.10	10.2.298.37	N/A	N/A	Windows Server 2008 R2 (*1) (*3)	✓				
2					Windows Server 2012 (*1) (*3) Windows Server 2012 R2 (*3)	✓	✓		✓	
3	10.6.144.2702 (*2)	10.2.298.37	N/A	N/A	Windows Server 2008 R2 (*1) (*3)	✓				
4		10.2.298.37 (*4)	N/A	N/A	Windows Server 2012 (*1) Windows Server 2012 R2	✓	✓	✓	✓	✓
5		10.6.126.0 (*5)	N/A	N/A						

(\*1) Before installing the NIC driver, the following hotfix is required to apply. Otherwise, the installation will fail.

<https://support.microsoft.com/en-us/kb/2846340>

(\*2) When using this firmware, the firmware parameter "Advanced Mode Support" is required to set "Enabled".  
See "Emulex Adapter User's Guide for Hardware (MK-99COM104-19 or later)"

(\*3) SR-IOV is not supported.

(\*4) Apply this version for dedicated NIC.

(\*5) Apply this version for VF NIC.

**Table 3-28: CNA drivers for CB2500 series Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 Onboard CNA	CB520X B2 Onboard CNA	CB520X B3 Onboard CNA	CB520H B3 Onboard CNA	CB520H B4 Onboard CNA
1	10.2.370.1601	10.2.298.37	N/A	N/A	Windows Server 2008 R2 (*1) (*2)	✓				
2					Windows Server 2012 (*1) (*2)	✓	✓		✓	
					Windows Server 2012 R2 (*2)					
3	10.6.144.2704	10.2.298.37	N/A	10.6.114.0	Windows Server 2008 R2 (*1) (*2)	✓				
4					Windows Server 2012 (*1) (*2)	✓	✓		✓	
					Windows Server 2012 R2 (*2)					
5		10.2.298.37	N/A	N/A	Windows Server 2012 (*1) (*2)			✓		✓
					Windows Server 2012 R2 (*2)					

(\*1) Before installing the NIC driver, the following hotfix is required to apply. Otherwise, the installation will fail.

<https://support.microsoft.com/en-us/kb/2846340>

(\*2) SR-IOV is not supported.

Table 3-29: CNA drivers for CB500 series CNA/LAN expansion card,CB540A B1/CB520H B1/CB520H B2 Onboard CNA

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520A A1 CNA/LAN expansion card	CB540A B1 Onboard CNA	CB540A x1 CNA/LAN expansion card	CB520H B1 Onboard CNA	CB520H x1 CNA/LAN expansion card	CB520H B2 Onboard CNA	CB520H x2 CNA/LAN expansion card	CB520X B1 CNA/LAN expansion card	CB520X B2 CNA/LAN expansion card	CB520H B3 CNA/LAN expansion card	CB520H B4 CNA/LAN expansion card
1	4.1.334.28 4.1.334.2801	4.1.334.25	N/A	N/A	Windows Server 2008 (32bit) (*1) Windows Server 2008 (64bit) (*1) Windows Server 2008 R2 (*1) Windows Server 2012 (*1)	✓	✓	✓	✓	✓						
2	4.2.433.604	4.1.334.25 4.2.390.6	N/A	N/A	Windows Server 2008 (32bit) (*1) Windows Server 2008 (64bit) (*1) Windows Server 2008 R2 (*1) Windows Server 2012 (*1)	✓	✓	✓	✓	✓						
3		4.2.390.6	N/A	N/A	Windows Server 2008 R2 (*1) Windows Server 2012 (*1)						✓	✓				
4					Windows Server 2012 R2 (*1)				✓	✓	✓	✓				
5	4.6.348.0	4.6.142.8	N/A	N/A	Windows Server 2008 (32bit) (*1) Windows Server 2008 (64bit) (*1)	✓	✓	✓	✓	✓						
6					Windows Server 2008 R2 (*1) Windows Server 2012 (*1)	✓	✓	✓	✓	✓	✓	✓				
7		10.0.430.1003	N/A	N/A	Windows Server 2012 R2 (*1)				✓	✓	✓	✓	✓			
8	10.2.340.10	4.6.142.8	N/A	N/A	Windows Server 2008 (32bit) (*1) Windows Server 2008 (64bit) (*1)		✓	✓	✓	✓						
9					Windows Server 2008 R2 (*1)		✓	✓	✓	✓	✓	✓				
10		10.0.835.0	N/A	NA	Windows Server 2012 (*1)		✓	✓	✓	✓	✓	✓				
11					Windows Server 2012 R2 (*1)				✓	✓	✓	✓				
12		10.2.298.37	N/A	N/A	Windows Server 2008 R2 (*1) (*2)								✓		✓	
13					Windows Server 2012 (*1) (*2) Windows Server 2012 R2 (*1)								✓	✓	✓	
14	10.6.144.2702 (*3)	10.2.298.37	N/A	10.6.114.0	Windows Server 2008 R2 (*1) (*2)						✓	✓				
15		10.2.298.37 (*4)	N/A	10.6.114.0	Windows Server 2012 (*2) Windows Server 2012 R2						✓	✓				
16		10.6.126.0 (*5)	N/A	10.6.114.0												
17		10.2.298.37	N/A	N/A	Windows Server 2008 R2 (*1) (*2)								✓		✓	
18		10.2.298.37 (*4)	N/A	N/A	Windows Server 2012 (*2) Windows Server 2012 R2								✓	✓	✓	✓
19		10.6.126.0 (*5)	N/A	N/A												

(\*1) SR-IOV is not supported.

(\*2) Before installing the NIC driver, the following hotfix is required to apply. Otherwise, the installation will fail.

<https://support.microsoft.com/en-us/kb/2846340>

(\*3) When using this firmware, the firmware parameter "Advanced Mode Support" is required to set "Enabled".

See "Emulex Adapter User's Guide for Hardware (MK-99COM104-19 or later)"

(\*4) Apply this version for dedicated NIC.

(\*5) Apply this version for VF NIC.



**Table 3-30: CNA drivers for CB500 series CB520X B1/CB520X B2/CB520H B3/CB520H B4 Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 Onboard CNA	CB520X B2 Onboard CNA	CB520H B3 Onboard CNA	CB520H B4 Onboard CNA
1	10.2.370.16	10.2.298.37 (*2)	N/A	N/A	Windows Server 2008 R2 (*1)	✓			
2					Windows Server 2012 (*1) Windows Server 2012 R2 (*1)	✓	✓	✓	
3	10.2.370.1601	10.2.298.37 (*2)	N/A	N/A	Windows Server 2008 R2 (*1)	✓			
4					Windows Server 2012 (*1) Windows Server 2012 R2 (*1)	✓	✓	✓	
5	10.6.144.2704	10.2.298.37 (*2)	N/A	10.6.114.0	Windows Server 2008 R2 (*1)	✓			
6					Windows Server 2012 (*1) Windows Server 2012 R2 (*1)	✓	✓	✓	✓

(\*1) SR-IOV is not supported.

(\*2) Before installing the NIC driver, the following hotfix is required to apply. Otherwise, the installation will fail.

<https://support.microsoft.com/en-us/kb/2846340>

**Table 3-31: CNA drivers for CB2000 series**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	Standard server blade S3, R3 CNA board, CNA/LAN expansion card	Standard server blade R4 CNA board, CNA/LAN expansion card	High performance server blade A2 CNA board, CNA/LAN expansion card
1	4.2.433.604	4.2.390.6	N/A	N/A	Windows Server 2008 (32bit) (*1)	✓		✓
2					Windows Server 2008 (64bit) (*1) Windows Server 2008 R2 (*1) Windows Server 2012 (*1)	✓	✓	✓
3	4.6.348.0	4.6.142.8	N/A	N/A	Windows Server 2008 (32bit) (*1)	✓		✓
4					Windows Server 2008 (64bit) (*1) Windows Server 2008 R2 (*1) Windows Server 2012 (*1)	✓	✓	✓
5					Windows Server 2012 R2 (*1)		✓	✓
6	10.2.340.10	4.6.142.8	N/A	N/A	Windows Server 2008 (32bit) (*1)	✓		✓
7					Windows Server 2008 (64bit) (*1) Windows Server 2008 R2 (*1) Windows Server 2012 (*1)	✓	✓	✓
8					Windows Server 2012 R2 (*1)		✓	✓

(\*1) SR-IOV is not supported.

### 3.2.2 RHEL

RHEL drivers for LPAR manager are listed below.

**Table 3-32: CNA drivers for CB2500 series CNA board**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 CNA board	CB520X B2 CNA board	CB520X B3 CNA board	CB520H B3 CNA board	CB520H B4 CNA board
1	10.2.340.10	10.2.340.7	N/A	N/A	RHEL6.5 (64-bit x86_64)	✓			✓	
2		10.2.469.0	N/A	N/A	RHEL6.6 (64-bit x86_64)	✓	✓		✓	
3		10.2.340.7	N/A	N/A	RHEL6.5 (64-bit x86_64)	✓			✓	
4		10.2.469.0	N/A	N/A	RHEL6.6 (64-bit x86_64)	✓	✓		✓	
5		10.4r	N/A	N/A	RHEL6.7 (64-bit x86_64) RHEL7.1 (64-bit x86_64)	✓	✓		✓	
6		10.6.0.3r	N/A	N/A	RHEL7.2 (64-bit x86_64)	✓	✓	✓	✓	✓

(\*1) When using this firmware, the firmware parameter "Advanced Mode Support" is required to set "Enabled". See "Emulex Adapter User's Guide for Hardware (MK-99COM104-19 or later)"

**Table 3-33: CNA drivers for CB2500 series Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 Onboard CNA	CB520X B2 Onboard CNA	CB520X B3 Onboard CNA	CB520H B3 Onboard CNA	CB520H B4 Onboard CNA
1	10.2.370.1601	10.2.340.7	N/A	N/A	RHEL6.5 (64-bit x86_64) (*1)	✓			✓	
2		10.2.469.0	N/A	N/A	RHEL6.6 (64-bit x86_64) (*1)	✓	✓		✓	
3		10.2.340.7	N/A	N/A	RHEL6.5 (64-bit x86_64) (*1)	✓			✓	
4		10.2.469.0	N/A	N/A	RHEL6.6 (64-bit x86_64) (*1)	✓	✓		✓	
5		10.4r	N/A	N/A	RHEL6.7 (64-bit x86_64) (*1) RHEL7.1 (64-bit x86_64) (*1)	✓	✓		✓	
6		10.6.0.3r	N/A	N/A	RHEL7.2 (64-bit x86_64) (*1)	✓	✓	✓	✓	✓

(\*1) SR-IOV is supported. Up to 4LPARs using SR-IOV NICs are supported.

Table 3-34: CNA drivers for CB500 series CNA/LAN expansion card,CB540A B1/CB520H B1/CB520H B2 Onboard CNA

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520A A1 CNA/LAN expansion card	CB540A B1 Onboard CNA	CB540A x1 CNA/LAN expansion card	CB520H B1 Onboard CNA	CB520H x1 CNA/LAN expansion card	CB520H B2 Onboard CNA	CB520H x2 CNA/LAN expansion card	CB520X B1 CNA/LAN expansion card	CB520X B2 CNA/LAN expansion card	CB520H B3 CNA/LAN expansion card	CB520H B4 CNA/LAN expansion card
1	4.1.334.28 4.1.334.2801	4.1.334.18	N/A	N/A	RHEL5.7 (32-bit x86) (*1) RHEL5.7 (64-bit x86_64) (*1) RHEL5.9 (32-bit x86) (*1) RHEL5.9 (64-bit x86_64) (*1) RHEL6.2 (32-bit x86) (*1) RHEL6.2 (64-bit x86_64) (*1)	✓	✓	✓	✓	✓						
2	4.2.433.604	4.1.334.18 4.2.456.0	N/A	N/A	RHEL5.7 (32-bit x86) (*1) RHEL5.7 (64-bit x86_64) (*1) RHEL5.9 (32-bit x86) (*1) RHEL5.9 (64-bit x86_64) (*1) RHEL6.2 (32-bit x86) (*1) RHEL6.2 (64-bit x86_64) (*1)	✓	✓	✓	✓	✓						
3		4.2.456.0	N/A	N/A	RHEL6.4 (32-bit x86) (*1) RHEL6.4 (64-bit x86_64) (*1) RHEL6.5 (32-bit x86) (*1) RHEL6.5 (64-bit x86_64) (*1)	✓	✓	✓	✓	✓	✓	✓				
4	4.6.348.0	4.2.456.0	N/A	N/A	RHEL5.7 (32-bit x86) (*1) RHEL5.7 (64-bit x86_64) (*1) RHEL5.9 (32-bit x86) (*1) RHEL5.9 (64-bit x86_64) (*1) RHEL6.2 (32-bit x86) (*1) RHEL6.2 (64-bit x86_64) (*1)	✓	✓	✓	✓	✓						
5		4.6.352.0	N/A	N/A	RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓	✓	✓	✓	✓				
6					RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)	✓	✓	✓	✓	✓	✓	✓				
7					RHEL6.5 (64-bit x86_64)								✓			
8	10.2.340.10	4.2.456.0	N/A	N/A	RHEL5.7 (32-bit x86) (*1) RHEL5.7 (64-bit x86_64) (*1) RHEL5.9 (32-bit x86) (*1) RHEL5.9 (64-bit x86_64) (*1) RHEL6.2 (32-bit x86) (*1) RHEL6.2 (64-bit x86_64) (*1)		✓	✓	✓	✓						
9		4.6.352.0	N/A	N/A	RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)		✓	✓	✓	✓	✓	✓				
10		10.2.340.7	N/A	N/A	RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)		✓	✓	✓	✓	✓	✓				
11					RHEL6.5 (64-bit x86_64)								✓		✓	
12		10.2.469.0	N/A	N/A	RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)		✓	✓	✓	✓	✓	✓				
13					RHEL6.6 (64-bit x86_64)								✓	✓	✓	
14	10.6.144.2702	10.2.340.7	N/A	N/A	RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)						✓	✓				
15	(*2)				RHEL6.5 (64-bit x86_64)								✓		✓	
16		10.2.469.0	N/A	N/A	RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)						✓	✓				
17					RHEL6.6 (64-bit x86_64)								✓	✓	✓	
18		10.4r	N/A	N/A	RHEL6.7 (32-bit x86) RHEL6.7 (64-bit x86_64) RHEL7.1 (64-bit x86_64)						✓	✓				
19					RHEL6.7 (64-bit x86_64) RHEL7.1 (64-bit x86_64)								✓	✓	✓	
20		10.6.0.3r	N/A	N/A	RHEL7.2 (64-bit x86_64)								✓	✓	✓	✓

(\*1) SR-IOV is not supported.

(\*2) When using this firmware, the firmware parameter "Advanced Mode Support" is required to set "Enabled".

See "Emulex Adapter User's Guide for Hardware (MK-99COM104-19 or later)"

**Table 3-35: CNA drivers for CB500 series CB520X B1/CB520X B2/CB520H B3/CB520H B4 Onboard CNA**

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	CB520X B1 Onboard CNA	CB520X B2 Onboard CNA	CB520H B3 Onboard CNA	CB520H B4 Onboard CNA
1	10.2.370.16	10.2.340.7	N/A	N/A	RHEL6.5 (64-bit x86_64) (*1)	✓		✓	
2		10.2.469.0	N/A	N/A	RHEL6.6 (64-bit x86_64) (*1)	✓	✓	✓	
3	10.2.370.1601	10.2.340.7	N/A	N/A	RHEL6.5 (64-bit x86_64) (*1)	✓		✓	
4		10.2.469.0	N/A	N/A	RHEL6.6 (64-bit x86_64) (*1)	✓	✓	✓	
5	10.6.144.2704	10.2.340.7	N/A	N/A	RHEL6.5 (64-bit x86_64) (*1)	✓		✓	
6		10.2.469.0	N/A	N/A	RHEL6.6 (64-bit x86_64) (*1)	✓	✓	✓	
7		10.4r	N/A	N/A	RHEL6.7 (64-bit x86_64) (*1)	✓	✓	✓	
8		10.6.0.3r	N/A	N/A	RHEL7.1 (64-bit x86_64) (*1)				
					RHEL7.2 (64-bit x86_64) (*1)	✓	✓	✓	✓

(\*1) SR-IOV is supported. Up to 4LPARs using SR-IOV NICs are supported.

Table 3-36: CNA drivers for CB2000 series

No.	CNA Firmware Version	NIC Driver Version	iSCSI Driver Version	FCoE Driver Version	Supported OS	Standard server blade S3, R3 CNA/LAN expansion card, CNA board	Standard server blade R4 CNA/LAN expansion card, CNA board	High performance server blade A2 CNA/LAN expansion card, CNA board
1	4.2.433.604	4.1.334.18 4.2.456.0	N/A	N/A	RHEL5.7 (32-bit x86) (*1) RHEL5.7 (64-bit x86_64) (*1) RHEL5.9 (32-bit x86) (*1) RHEL5.9 (64-bit x86_64) (*1)	✓		✓
2					RHEL6.2 (32-bit x86) (*1) RHEL6.2 (64-bit x86_64) (*1)	✓		✓
3					RHEL6.4 (32-bit x86) (*1) RHEL6.4 (64-bit x86_64) (*1)	✓	✓	✓
4	4.6.348.0	4.2.456.0	N/A	N/A	RHEL5.7 (32-bit x86) (*1) RHEL5.7 (64-bit x86_64) (*1)	✓		✓
5		4.2.456.0 4.6.352.0 (*2)			RHEL5.9 (32-bit x86) (*1) RHEL5.9 (64-bit x86_64) (*1)	✓		✓
6		4.6.352.0			RHEL6.2 (32-bit x86) (*1) RHEL6.2 (64-bit x86_64) (*1)	✓		✓
7					RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64) RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)	✓	✓	✓
8	10.2.340.10	4.2.456.0	N/A	N/A	RHEL5.7 (32-bit x86) (*1) RHEL5.7 (64-bit x86_64) (*1)	✓		✓
9		4.2.456.0 4.6.352.0 (*2)			RHEL5.9 (32-bit x86) (*1) RHEL5.9 (64-bit x86_64) (*1)	✓		✓
10		4.6.352.0			RHEL6.4 (32-bit x86) RHEL6.4 (64-bit x86_64)	✓	✓	✓
11		10.2.340.7			RHEL6.5 (32-bit x86) RHEL6.5 (64-bit x86_64)	✓	✓	✓
12		10.2.469.0			RHEL6.6 (32-bit x86) RHEL6.6 (64-bit x86_64)	✓	✓	✓

(\*1) SR-IOV is not supported.

(\*2) This version can be applied only to RHEL5.9 with security updated kernel.

# The OneCommand Manager application GUI (in Windows)

This chapter describes the OneCommand Manager application GUI (OCM hereafter) for Emulex adapters.



Supported OCM versions for Compute Blade 500 and Compute Blade 2000 are as follows.

**Table 4-1:**

No.	OCM version	Supported OS	CB500								CB2000		Remarks
			CB520A A1	CB540A x1	CB520H x1	CB520H x2	CB520X B1	CB520X B2	CB520H B3	CB520H B4	Standard server blade Sx, Rx	High performance server blade	
1	6.0.15.1	Windows Server 2008 (32bit) Windows Server 2008 (64bit) Windows Server 2008 R2									✓	✓	Use with NIC/iSCSI driver version 4.1.334.*. (* is a number)
2	6.1.34.1	Windows Server 2008 (32bit) Windows Server 2008 (64bit) Windows Server 2008 R2 Windows Server 2012	✓	✓	✓	✓					✓	✓	Use with NIC/iSCSI driver version 4.1.*.* or 4.2.*.* and FC/FCoE driver version 5.2.*.*. (* is a number)
3	6.3.16.1	Windows Server 2008 (32bit) Windows Server 2008 (64bit) Windows Server 2008 R2 Windows Server 2012 Windows Server 2012 R2	✓	✓	✓	✓					✓	✓	Use with NIC/iSCSI driver version 4.6.*.*, 10.0.*.* or 10.2.*.* and FC/FCoE driver version 2.74.*.* or 2.76.*.*. (* is a number)
4	10.2.340.5	Windows Server 2008 R2 Windows Server 2012 Windows Server 2012 R2					✓						Use with NIC/iSCSI/FC/FCoE driver version 10.2.*.*. (* is a number)
5	10.6.144.19	Windows Server 2008 R2 Windows Server 2012 Windows Server 2012 R2	✓	✓	✓	✓	✓	✓	✓	✓			Use with NIC/iSCSI/FC/FCoE driver version 10.6.*.*. (* is a number)
6	11.1.200.0	Windows Server 2008 R2 Windows Server 2012 Windows Server 2012 R2 Windows Server 2016	✓	✓	✓	✓	✓		✓				Use with NIC/FC driver version 11.1.*.*. (* is a number)

Supported OCM versions for Compute Blade 2500 are as follows.

**Table 4-2:**

No.	OCM version	Supported OS	CB2500					Remarks
			CB520X B1	CB520X B2	CB520X B3	CB520H B3	CB520H B4	
1	10.2.340.5	Windows Server 2008 R2	✓					Use with NIC/iSCSI/FC/FCoE driver version 10.2.*.* (* is a number)
		Windows Server 2012	✓	✓		✓		
		Windows Server 2012 R2						
2	10.6.144.19	Windows Server 2008 R2	✓					Use with NIC/iSCSI/FC/FCoE driver version 10.6.*.* (* is a number)
		Windows Server 2012	✓	✓	✓	✓	✓	
		Windows Server 2012 R2						
3	11.1.200.0	Windows Server 2012	✓	✓	✓	✓	✓	Use with NIC/FC driver version 11.1.*.* (* is a number)
		Windows Server 2012 R2		✓	✓	✓	✓	
		Windows Server 2016						

For Compute Blade 500, each OCM version is contained in the following driver media.

**Table 4-3:**

No.	OCM version	Driver media	Location of the installation file
1	6.1.34.1	CB500 10Gb CNA Driver CD ver.01-00	\\Win2008\\Utility\\EmulexOCM
2	6.3.16.1	CB500 10Gb CNA Driver CD ver.01-19 (or later)	\\WinSrv2008\\Utility\\OCM
3	10.2.340.5	CB500 10Gb CNA Driver CD ver.01-19 (or later)	\\WinSrv2008\\Utility\\OCM_2
4	10.6.144.19	CB500 10Gb CNA Driver CD ver.01-19 (or later)	\\WinSrv2008\\Utility\\OCM_3
5	11.1.200.0	CB500 10Gb CNA Driver CD ver.01-27 (or later)	\\WinSrv2008\\Utility\\OCM_4

For Compute Blade 2500, each OCM version is contained in the following driver media.

**Table 4-4:**

No.	OCM version	Driver media	Location of the installation file
1	10.2.340.5	CB2500 10Gb CNA Driver CD ver.01-19 (or later)	\\WinSrv2008\\Utility\\OCM_2
2	10.6.144.19	CB2500 10Gb CNA Driver CD ver.01-19 (or later)	\\WinSrv2008\\Utility\\OCM_3
3	11.1.200.0	CB2500 10Gb CNA Driver CD ver.01-28 (or later)	\\WinSrv2008\\Utility\\OCM_4

For Compute Blade 2000, each OCM version is contained in the following driver media.

**Table 4-5:**

No.	OCM version	Driver media	Location of the installation file
1	6.0.15.1	CB2000 10Gb CNA Driver CD from ver.01-00 to ver.01-03	\\Win2008\\Utility\\EmulexOCM
2	6.1.34.1	CB2000 10Gb CNA Driver CD ver.01-04	\\Win2008\\Utility\\EmulexOCM
3	6.3.16.1	CB2000 10Gb CNA Driver CD ver.01-08 (or later)	\\Win2008\\Utility\\OCM

Execute the following script file.

**Table 4-6:**

Script file	OS
OneCommandManager_Install_x86.bat	Windows Server 2008 (32bit)
OneCommandManager_Install_x64.bat	Windows Server 2008 (64bit)
	Windows Server 2008 R2
	Windows Server 2012
	Windows Server 2012 R2
	Windows Server 2016

# The OneCommand Manager application CLI (in Linux)

This chapter describes the OneCommand Manager application CLI (OCM\_CLI hereafter) for Emulex adapters.

Supported OCM\_CLI versions for Compute Blade 500 and Compute Blade 2000 are as follows.

**Table 5-1:**

No.	OCM version	Supported OS	CB500								CB2000		Remarks
			CB520A A1	CB540A x1	CB520H x1	CB520H x2	CB520X B1	CB520X B2	CB520H B3	CB520H B4	Standard server blade Sx, Rx	High performance server blade	
1	6.1.34.2	RHEL5.7 RHEL5.9 RHEL6.2 RHEL6.4	✓	✓	✓						✓	✓	Use with NIC/iSCSI driver version 4.1.* or 4.2.* and FC/FCoE driver 8.2.* or 8.3.*. (* is a number)
2	6.3.16.2	RHEL5.7 RHEL5.9 RHEL6.2 RHEL6.4	✓	✓	✓						✓	✓	Use with NIC/iSCSI driver version 4.2.* or 4.6.* and FC/FCoE driver 8.2.* or 8.3.*. (* is a number)
3	6.3.22.1	RHEL6.4	✓	✓	✓	✓					✓	✓	Use with NIC/iSCSI driver version 4.6.* and FC/FCoE driver 10.0.*. (* is a number)
		RHEL6.5	✓	✓	✓	✓	✓				✓	✓	
4	10.2.340.5	RHEL6.5		✓	✓	✓	✓		✓				Use with NIC/iSCSI/FC/FCoE driver version 10.2.340.* iSCSI driver 4.6.* and FCoE driver 10.0.*. (* is a number)
5	10.2.470.0	RHEL6.6		✓	✓	✓	✓	✓	✓		✓	✓	Use with NIC/iSCSI/FC/FCoE driver version 10.2.469.0.
6	10.6.144.21	RHEL6.5	✓	✓	✓	✓	✓		✓				Use with NIC/iSCSI/FC/FCoE driver version 10.6.144.*. (* is a number)
		RHEL6.6		✓	✓	✓	✓	✓	✓				
		RHEL6.7								✓			
		RHEL7.1			✓	✓	✓	✓	✓				
7	10.6.144.2708	RHEL7.2			✓	✓	✓	✓	✓	✓			Use with NIC/FC/FCoE driver version 10.6.144.*. (* is a number)
8	11.1.215.2	RHEL6.6		✓	✓	✓	✓	✓	✓				Use with NIC driver version 11.1.207.0 and FC driver version 11.1.211.0.
		RHEL6.7				✓	✓	✓	✓	✓			
		RHEL6.8				✓	✓	✓	✓	✓			
		RHEL7.1			✓	✓	✓	✓	✓				
		RHEL7.2			✓	✓	✓	✓	✓	✓			
9	11.1.215.8	RHEL7.3				✓	✓	✓	✓	✓			Use with NIC driver version 11.1.215.8 and FC driver version 11.1.215.9.
10	11.2.156.24	RHEL6.9					✓	✓	✓	✓			Use with FC driver version 11.2.156.38.
11		RHEL7.4					✓	✓	✓	✓			Use with FC driver version 11.2.156.38.
12	11.4.1181.5	RHEL6.9					✓	✓	✓	✓			Use with NIC driver version 11.4.1178.0.
13		RHEL7.4					✓	✓	✓	✓			Use with NIC driver version 11.4.1178.0.
14	12.0.261.9	RHEL6.10					✓	✓	✓	✓	✓	✓	Use with FC driver version 12.0.261.12.
15		RHEL7.5						✓	✓	✓			
16	12.0.261.13	RHEL7.6					✓	✓	✓	✓			Use with FC driver version 12.0.261.15.
17	12.0.1159.0	RHEL6.10					✓	✓	✓	✓			Use with NIC driver version 12.0.1159.0.
18	12.0.1207.0	RHEL7.5 (*1)						✓	✓	✓			Use with NIC driver version 12.0.1207.0.
19		RHEL7.6 (*1)					✓	✓	✓	✓			
20	12.0.1340.0	RHEL7.9 (*1)						✓	✓	✓			Use with NIC driver version 12.0.1339.0.
21	12.6.240.48	RHEL7.9						✓	✓	✓			Use with FC driver version 12.6.240.48.

(\*1) The following message may be logged in the syslog at the time of shutdown in the RHEL7.5 or later environment that is installed OneCommand Manager. But this message can be ignored. This message does not affect the functionality.  
xxx xx xx:xx:xx localhost brcmnmpd: Stopping OneCommand iSCSI SNMP Daemon: [FAILED]

Supported OCM\_CLI versions for Compute Blade 2500 are as follows.

**Table 5-2:**

No.	OCM version	Supported OS	CB2500					Remarks
			CB520X B1	CB520X B2	CB520X B3	CB520H B3	CB520H B4	
1	10.2.340.5	RHEL6.5	✓			✓		Use with NIC/iSCSI/FC/FCoE driver version 10.2.340.*. (* is a number)
2	10.2.470.0	RHEL6.6	✓	✓		✓		Use with NIC/iSCSI/FC/FCoE driver version 10.2.469.0.
3	10.6.144.21	RHEL6.5	✓			✓		Use with NIC/iSCSI/FC/FCoE driver version 10.6.144.*. (* is a number)
		RHEL6.6	✓	✓		✓		
		RHEL7.1	✓	✓		✓		
4	10.6.144.2708	RHEL7.2	✓	✓	✓	✓	✓	Use with NIC/FC/FCoE driver version 10.6.144.*. (* is a number)
5	11.1.215.2	RHEL6.6	✓	✓		✓		Use with NIC driver version 11.1.207.0 and FC driver 11.1.211.0.
		RHEL6.7	✓	✓		✓		
		RHEL6.8	✓	✓	✓	✓	✓	
		RHEL7.1	✓	✓		✓		
		RHEL7.2	✓	✓	✓	✓	✓	
6	11.1.215.8	RHEL7.3	✓	✓	✓	✓	✓	Use with NIC driver version 11.1.215.8 and FC driver version 11.1.215.9.
7	11.2.156.24	RHEL6.9	✓	✓	✓	✓	✓	Use with FC driver version 11.2.156.38.
8		RHEL7.4	✓	✓	✓	✓	✓	Use with FC driver version 11.2.156.38.
9	11.4.1181.5	RHEL6.9	✓	✓	✓	✓	✓	Use with NIC driver version 11.4.1178.0.
10		RHEL7.4	✓	✓	✓	✓	✓	Use with NIC driver version 11.4.1178.0.
11	12.0.261.9	RHEL6.10	✓	✓	✓	✓	✓	Use with FC driver version 12.0.261.12.
12		RHEL7.5		✓	✓	✓	✓	
13	12.0.261.13	RHEL7.6	✓	✓	✓	✓	✓	Use with FC driver version 12.0.261.15.
14	12.0.1159.0	RHEL6.10	✓	✓	✓	✓	✓	Use with NIC driver version 12.0.1159.0.
15	12.0.1207.0	RHEL7.5 (*1)		✓	✓	✓	✓	Use with NIC driver version 12.0.1207.0.
16		RHEL7.6 (*1)	✓	✓	✓	✓	✓	
17	12.0.1340.0	RHEL7.9 (*1)		✓	✓	✓	✓	Use with NIC driver version 12.0.1339.0.
18	12.6.240.48	RHEL7.9		✓	✓	✓	✓	Use with FC driver version 12.6.240.48.

(\*1) The following message may be logged in the syslog at the time of shutdown in the RHEL7.5 or later environment that is installed OneCommand Manager. But this message can be ignored. This message does not affect the functionality.

xxx xx xx:xx:xx localhost brcmsnmpd: Stopping OneCommand iSCSI SNMP Daemon: [FAILED]

For Compute Blade 500, each OCM\_CLI versions are contained in the following driver media.

**Table 5-3:**

No.	OCM version	Driver media	Location of the installation file
1	6.1.34.2	CB500 10Gb CNA Driver CD ver.01-00	/RHEL6/Utility/elxocmcore-rhel5-rhel6-<version>.tgz
2	6.3.16.2	CB500 10Gb CNA Driver CD ver.01-24 (or later)	/RHEL6/Utility/elxocm-<version>.tgz
3	6.3.22.1	CB500 10Gb CNA Driver CD ver.01-24 (or later)	/RHEL6/Utility/elxocm06*-<version>.tgz ("*" is a number)
4	10.2.340.5	CB500 10Gb CNA Driver CD ver.01-24 (or later)	/RHEL6/Utility/elxocm06*-<version>.tgz ("*" is a number.)
5	10.2.470.0	CB500 10Gb CNA Driver CD ver.01-24 (or later)	/RHEL6/Utility/elxocm06*-<version>.tgz ("*" is a number.)
6	10.6.144.21	CB500 10Gb CNA Driver CD ver.01-24 (or later)	/RHEL6u5/Utility/elxocm06*-<version>.tgz /RHEL6u6/Utility/elxocm06*-<version>.tgz /RHEL6u7/Utility/elxocm06*-<version>.tgz /RHEL7u1/Utility/elxocm06*-<version>.tgz ("*" is a number.)
7	10.6.144.2708	CB500 10Gb CNA Driver CD ver.01-24 (or later)	/RHEL7u2/Utility/elxocm06*-<version>.tgz ("*" is a number)
8	11.1.215.2	CB500 10Gb CNA Driver CD ver.01-26 (or later)	/RHEL6u6/Utility/elxocm06*-<version>.tgz /RHEL6u7/Utility/elxocm06*-<version>.tgz /RHEL6u8/Utility/elxocm06*-<version>.tgz /RHEL7u1/Utility/elxocm06*-<version>.tgz /RHEL7u2/Utility/elxocm06*-<version>.tgz ("*" is a number.)
9	11.1.215.8	CB500 10Gb CNA Driver CD ver.01-28 (or later)	/RHEL7u3/Utility/elxocm06*-<version>.tgz ("*" is a number.)
10	11.2.156.24	CB500 10Gb CNA Driver CD ver.01-30 (or later)	/RHEL6u9/Utility/elxocm06*-<version>.tgz /RHEL7u4/Utility/elxocm06*-<version>.tgz ("*" is a number.)
11	11.4.1181.5	CB500 10Gb CNA Driver CD ver.01-30 (or later)	/RHEL6u9/Utility/brcmocm06*-<version>.tgz /RHEL7u4/Utility/brcmocm06*-<version>.tgz ("*" is a number.)
12	12.0.261.9	CB500 10Gb CNA Driver CD ver.01-33 (or later)	/RHEL6u10/Utility/elxocm06*-<version>.tgz ("*" is a number.)
13		CB500 10Gb CNA Driver CD ver.01-32 (or later)	/RHEL7u5/Utility/elxocm06*-<version>.tgz ("*" is a number.)
14	12.0.261.13	CB500 10Gb CNA Driver CD ver.01-34 (or later)	/RHEL7u6/Utility/elxocm06*-<version>.tgz ("*" is a number.)
15	12.0.1159.0	CB500 10Gb CNA Driver CD ver.01-33 (or later)	/RHEL6u10/Utility/brcmocm06*-<version>.tgz ("*" is a number.)
16	12.0.1207.0	CB500 10Gb CNA Driver CD ver.01-32 (or later)	/RHEL7u5/Utility/brcmocm06*-<version>.tgz ("*" is a number.)
17		CB500 10Gb CNA Driver CD ver.01-34 (or later)	/RHEL7u6/Utility/brcmocm06*-<version>.tgz ("*" is a number.)
18	12.0.1340.0	CB500 10Gb CNA Driver CD ver.01-38 (or later)	/RHEL7u9/Utility/brcmocm06*-<version>.tgz ("*" is a number.)
19	12.6.240.48	CB500 10Gb CNA Driver CD ver.01-38 (or later)	/RHEL7u9/Utility/elxocm06*-<version>.tgz ("*" is a number.)

For Compute Blade 2500, each OCM\_CLI versions are contained in the following driver media.

**Table 5-4:**

No.	OCM version	Driver media	Location of the installation file
1	10.2.340.5	CB2500 10Gb CNA Driver CD ver.01-19 (or later)	/RHEL6/Utility/elxocm06*-<version>.tgz (** is a number.)
2	10.2.470.0	CB2500 10Gb CNA Driver CD ver.01-19 (or later)	/RHEL6/Utility/elxocm06*-<version>.tgz (** is a number.)
3	10.6.144.21	CB2500 10Gb CNA Driver CD ver.01-19 (or later)	/RHEL6u5/Utility/elxocm06*-<version>.tgz /RHEL6u6/Utility/elxocm06*-<version>.tgz /RHEL7u1/Utility/elxocm06*-<version>.tgz (** is a number.)
4	10.6.144.2708	CB2500 10Gb CNA Driver CD ver.01-22 (or later)	/RHEL7u2/Utility/elxocm06*-<version>.tgz (** is a number)
5	11.1.215.2	CB2500 10Gb CNA Driver CD ver.01-28 (or later)	/RHEL6u6/Utility/elxocm06*-<version>.tgz /RHEL6u7/Utility/elxocm06*-<version>.tgz /RHEL6u8/Utility/elxocm06*-<version>.tgz /RHEL7u1/Utility/elxocm06*-<version>.tgz /RHEL7u2/Utility/elxocm06*-<version>.tgz (** is a number.)
6	11.1.215.8	CB2500 10Gb CNA Driver CD ver.01-29 (or later)	/RHEL7u3/Utility/elxocm06*-<version>.tgz (** is a number.)
7	11.2.156.24	CB2500 10Gb CNA Driver CD ver.01-31 (or later)	/RHEL6u9/Utility/elxocm06*-<version>.tgz /RHEL7u4/Utility/elxocm06*-<version>.tgz (** is a number.)
8	11.4.1181.5	CB2500 10Gb CNA Driver CD ver.01-31 (or later)	/RHEL6u9/Utility/brcmocm06*-<version>.tgz /RHEL7u4/Utility/brcmocm06*-<version>.tgz (** is a number.)
9	12.0.261.9	CB2500 10Gb CNA Driver CD ver.01-34 (or later)	/RHEL6u10/Utility/elxocm06*-<version>.tgz (** is a number.)
10		CB2500 10Gb CNA Driver CD ver.01-33 (or later)	/RHEL7u5/Utility/elxocm06*-<version>.tgz (** is a number.)
11	12.0.261.13	CB2500 10Gb CNA Driver CD ver.01-35 (or later)	/RHEL7u6/Utility/elxocm06*-<version>.tgz (** is a number.)
12	12.0.1159.0	CB2500 10Gb CNA Driver CD ver.01-34 (or later)	/RHEL6u10/Utility/brcmocm06*-<version>.tgz (** is a number.)
13	12.0.1207.0	CB2500 10Gb CNA Driver CD ver.01-33 (or later)	/RHEL7u5/Utility/brcmocm06*-<version>.tgz (** is a number.)
14		CB2500 10Gb CNA Driver CD ver.01-35 (or later)	/RHEL7u6/Utility/brcmocm06*-<version>.tgz (** is a number.)
15	12.0.1340.0	CB2500 10Gb CNA Driver CD ver.01-39 (or later)	/RHEL7u9/Utility/brcmocm06*-<version>.tgz (** is a number.)
16	12.6.240.48	CB2500 10Gb CNA Driver CD ver.01-39 (or later)	/RHEL7u9/Utility/elxocm06*-<version>.tgz (** is a number.)



For Compute Blade 2000, each OCM\_CLI versions are contained in the following driver media.

**Table 5-5:**

No.	OCM version	Driver media	Location of the installation file
1	6.1.34.2	CB2000 10Gb CNA Driver CD ver.01-00	/RHEL6/Utility/elxocmcore-rhel5-rhel6-<version>.tgz
2	6.3.16.2	CB2000 10Gb CNA Driver CD ver.01-05 (or later)	/RHEL6/Utility/elxocm-<version>.tgz
3	6.3.22.1	CB2000 10Gb CNA Driver CD ver.01-07 (or later)	/RHEL6/Utility/elxocm06*-<version>.tgz ("*" is a number)
4	10.2.340.5	CB2000 10Gb CNA Driver CD ver.01-12 (or later)	/RHEL6/Utility/elxocm06*-<version>.tgz ("*" is a number.)
5	10.2.470.0	CB2000 10Gb CNA Driver CD ver.01-12 (or later)	/RHEL6/Utility/elxocm06*-<version>.tgz ("*" is a number.)
6	12.0.261.9	CB2000 10Gb CNA Driver CD ver.01-13 (or later)	/RHEL6/Utility/elxocm06*-<version>.tgz ("*" is a number.)

# OneCapture

This chapter describes the OneCapture for Emulex adapter.

# OneCapture version List

Supported OneCapture versions are as following tables.

**Table 6-1:** OneCapture versions for Microsoft(R) Windows Server(R)

No.	Supported OneCapture version	Remarks
1	10.6.144.19	Use with NIC/FC driver version 10.6.*.* (* is a number)
2	11.1.215.3	Use with NIC/FC driver version 11.1.*.* or later (* is a number)

**Table 6-2:** OneCapture versions for Red Hat(R) Enterprise Linux(R)

No.	Supported OneCapture version	Remarks
1	10.6.144.2708	Use with NIC/FC driver version 10.6.*.* (* is a number)
2	11.1.210.3	Use with NIC/FC driver version 11.1.207.0 or 11.1.211.0
3	11.1.215.2	
4	11.1.215.8	
5	11.2.156.24	Use with FC driver version 11.2.156.38
6	12.0.261.12	Use with FC driver version 12.0.261.12
7	12.0.261.13	Use with FC driver version 12.0.261.15
8	12.6.240.48	Use with FC driver version 12.6.240.48

**Table 6-3:** Broadcom OneCapture versions for Red Hat(R) Enterprise Linux(R)

No.	Supported Broadcom OneCapture version	Remarks
1	11.4.1181.3	Use with NIC driver version 11.4.1178.0
2	12.0.1159.0	Use with NIC driver version 12.0.1159.0
3	12.0.1207.0	Use with NIC driver version 12.0.1207.0
4	12.0.1340.0	Use with NIC driver version 12.0.1339.0

**Table 6-4:** OneCapture versions for VMware vSphere(R) ESXi

No.	Supported OneCapture version	Remarks
1	10.6.144.15	Use with NIC/FC driver version 10.2.*.* (* is a number)
2	11.1.215.2	Use with NIC/FC driver version 11.1.*.* or later (* is a number)
3	11.4.329.0	Use with FC driver version 11.4.*.* or later (* is a number)

**Table 6-5:** Broadcom OneCapture versions for VMware vSphere(R) ESXi

No.	Supported Broadcom OneCapture version	Remarks
1	12.0.1159.0	Use with NIC driver version 12.0.*.* or later (* is a number)



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