



Supported Packages and System Requirements

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Hardware Supported

For detailed information about the hardware supported in Cisco IOS XE Release 16.12.x and its maintenance releases, see:

http://www.cisco.com/c/en/us/td/docs/cable/cbr/installation/guide/b_cbr_how_and_what_to_order.html.



Note The Cisco cBR chassis must house line cards with either Downstream DOCSIS 3.0 PHY modules or Downstream DOCSIS 3.1 PHY modules. Mixed configuration is not supported.

Cisco announced September 18, 2020, as the end-of-sale date for the Cisco cBR-8 Leoben1 based DOCSIS line cards (CBR-LC-*-16U30) and SUP60 (CBR-CCAP-SUP-60G).

Cisco IOS XE Gibraltar 16.12.1z1 will support SUP60. Cisco IOS XE Amsterdam 17.3.1w is the first Cisco cBR-8 software release to discontinue support for these end-of-sale products. For more details on the end-of-sale and end-of-life announcements, see:

<https://www.cisco.com/c/en/us/products/collateral/video/cbr-series-converged-broadband-routers/eos-eol-notice-c51-743587.html>.

Memory Requirements

The following table displays the memory recommendations for the Cisco cBR Series Converged Broadband Routers with Cisco IOS XE Gibraltar 16.12.1z2 feature sets.

Table 1: Memory Recommendations for the Cisco cBR Series Converged Broadband Routers with IOS XE 16.12.1z2

Feature Set	Cisco cBR Route Processor	Software Image	Recommended Flash Memory	Recommended DRAM Memory	Runs From
CISCO IOS-XE universalk9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01z2.SPA.bin	8G	48G	Bootflash:
CISCO IOS-XE CLC K9	Cisco cBR8 (CBAICG) (CBAICR) Processor	cbrsup-universalk9.16.12.01z2.SPA.bin	8G	16G	Supervisor
CISCO IOS-XE (CBAICR)	Cisco cBR8 (CBAICR) Processor	cbrsup-universalk9.16.12.01z2.SPA.bin	8G	64G	Supervisor

The following table displays the memory recommendations for the Cisco cBR Series Converged Broadband Routers with Cisco IOS XE Gibraltar 16.12.1z1 feature sets.

Table 2: Memory Recommendations for the Cisco cBR Series Converged Broadband Routers with IOS XE 16.12.1z1

Feature Set	Cisco cBR Route Processor	Software Image	Recommended Flash Memory	Recommended DRAM Memory	Runs From
CISCO IOS-XE universalk9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01z1.SPA.bin	8G	48G	Bootflash:
CISCO IOS-XE CLC K9	Cisco cBR8 (CBAICG) (CBAICR) Processor	cbrsup-universalk9.16.12.01z1.SPA.bin	8G	16G	Supervisor
CISCO IOS-XE (CBAICR)	Cisco cBR8 (CBAICR) Processor	cbrsup-universalk9.16.12.01z1.SPA.bin	8G	64G	Supervisor

The following table displays the memory recommendations for the Cisco cBR Series Converged Broadband Routers with Cisco IOS XE Gibraltar 16.12.1z feature sets.

Table 3: Memory Recommendations for the Cisco cBR Series Converged Broadband Routers with IOS XE 16.12.1z

Feature Set	Cisco cBR Route Processor	Software Image	Recommended Flash Memory	Recommended DRAM Memory	Runs From
CISCO IOS-XE universalk9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01z.SPA.bin	8G	48G	Bootflash:
CISCO IOS-XE CLC K9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01z.SPA.bin	8G	16G	Supervisor
CISCO IOS-XE (CBR) Processor	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01z.SPA.bin	8G	64G	Supervisor

The following table displays the memory recommendations for the Cisco cBR Series Converged Broadband Routers with Cisco IOS XE Gibraltar 16.12.1y feature sets.

Table 4: Memory Recommendations for the Cisco cBR Series Converged Broadband Routers with IOS XE 16.12.1y

Feature Set	Cisco cBR Route Processor	Software Image	Recommended Flash Memory	Recommended DRAM Memory	Runs From
CISCO IOS-XE universalk9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01y.SPA.bin	8G	48G	Bootflash:
CISCO IOS-XE CLC K9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01y.SPA.bin	8G	16G	Supervisor
CISCO IOS-XE (CBR) Processor	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01y.SPA.bin	8G	64G	Supervisor

The following table displays the memory recommendations for the Cisco cBR Series Converged Broadband Routers with Cisco IOS XE Gibraltar 16.12.1x feature sets.

Table 5: Memory Recommendations for the Cisco cBR Series Converged Broadband Routers with IOS XE 16.12.1x

Feature Set	Cisco cBR Route Processor	Software Image	Recommended Flash Memory	Recommended DRAM Memory	Runs From
CISCO IOS-XE universalk9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01x.SPA.bin	8G	48G	Bootflash:
CISCO IOS-XE CLC K9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01x.SPA.bin	8G	16G	Supervisor
CISCO IOS-XE (CBR) Processor	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01x.SPA.bin	8G	64G	Supervisor

The following table displays the memory recommendations for the Cisco cBR Series Converged Broadband Routers with Cisco IOS XE Gibraltar 16.12.1w feature sets.

Table 6: Memory Recommendations for the Cisco cBR Series Converged Broadband Routers with IOS XE 16.12.1w

Feature Set	Cisco cBR Route Processor	Software Image	Recommended Flash Memory	Recommended DRAM Memory	Runs From
CISCO IOS-XE universalk9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01w.SPA.bin	8G	48G	Bootflash:
CISCO IOS-XE CLC K9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01w.SPA.bin	8G	16G	Supervisor
CISCO IOS-XE (CBR) Processor	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01w.SPA.bin	8G	64G	Supervisor

The following table displays the memory recommendations for the Cisco cBR Series Converged Broadband Routers with Cisco IOS XE Gibraltar 16.12.1 feature sets.

Table 7: Memory Recommendations for the Cisco cBR Series Converged Broadband Routers with IOS XE 16.12.1

Feature Set	Cisco cBR Route Processor	Software Image	Recommended Flash Memory	Recommended DRAM Memory	Runs From
CISCO IOS-XE universalk9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01.SPA.bin	8G	48G	Bootflash:
CISCO IOS-XE CLC K9	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01.SPA.bin	8G	16G	Supervisor
CISCO IOS-XE (CBR) Processor	Cisco cBR8 (CBR) Processor	cbrsup-universalk9.16.12.01.SPA.bin	8G	64G	Supervisor

Determining the Software Version for Cisco IOS XE Gibraltar 16.12.1z2

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Router, log in and enter the **show version EXEC** command:

```
Router#show version
Load for five secs: 4%/0%; one minute: 8%; five minutes: 9%
Time source is NTP, 09:04:18.826 EDT Tue Aug 17 2021
Cisco IOS XE Software, Version 16.12.01z2
Cisco IOS Software [Gibraltar], cBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version
16.12.1z2, RELEASE SOFTWARE (fc6)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2021 by Cisco Systems, Inc.
Compiled Mon 16-Aug-21 18:29 by mcpre
```

```
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or the applicable URL provided on the flyer accompanying the IOS-XE
software.
```

```
ROM: IOS-XE ROMMON
```

```
Router uptime is 22 minutes
Uptime for this control processor is 27 minutes
System returned to ROM by reload at 22:57:48 EDT Mon Aug 16 2021
System restarted at 08:42:18 EDT Tue Aug 17 2021
```

```
System image file is "bootflash:cbrsup-universalk9.16.12.01z2.SPA.bin"
Last reload reason: Reload Command
```

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If you require further assistance please contact us by sending email to export@cisco.com.

```
Smart Licensing Status: UNREGISTERED/EVAL MODE
```

```
Cisco cBR-8 (CBR) processor (revision CBR) with 7443497K/6147K bytes of memory.
Processor board ID FXS1924Q2E2
52 Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
50331648K bytes of physical memory.
7743487K bytes of eUSB flash at bootflash:.
117155287K bytes of SATA hard disk at harddisk:.
3911744K bytes of USB flash at usb0:.
0K bytes of WebUI ODM Files at webui:.
```

```
Configuration register is 0x2102
```

Determining the Software Version for Cisco IOS XE Gibraltar 16.12.1z1

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Router, log in and enter the **show version EXEC** command:

```
Router#show version
Load for five secs: 100%/1%; one minute: 88%; five minutes: 36%
Time source is NTP, 11:15:33.937 EST Thu Jan 28 2021
Cisco IOS XE Software, Version 16.12.01z1
Cisco IOS Software [Gibraltar], CBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version
16.12.1z1, RELEASE SOFTWARE (fc7)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2021 by Cisco Systems, Inc.
Compiled Wed 27-Jan-21 23:34 by mcpre
```

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```
ROM: IOS-XE ROMMON
```

```
BXB-TB7 uptime is 6 minutes
Uptime for this control processor is 13 minutes
System returned to ROM by reload at 22:24:54 EST Wed Jan 27 2021
System restarted at 11:09:03 EST Thu Jan 28 2021
System image file is "harddisk:cbrsup-universalk9.16.12.01z1.SPA.bin"
Last reload reason: Reload Command
```

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```
Smart Licensing Status: UNREGISTERED/EVAL MODE
```

```
Cisco cBR-8 (CBR) processor (revision CBRVE) with 10373192K/6147K bytes of memory.
Processor board ID FXS2038Q3HF
72 Gigabit Ethernet interfaces
16 Ten Gigabit Ethernet interfaces
4 Hundred Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
50331648K bytes of physical memory.
7649279K bytes of eUSB flash at bootflash:.
234365527K bytes of SATA hard disk at harddisk:.
0K bytes of WebUI ODM Files at webui:.
```

```
Configuration register is 0x0
```

Determining the Software Version for Cisco IOS XE Gibraltar 16.12.1z

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Router, log in and enter the **show version EXEC** command:

```
Router#show version
Load for five secs: 35%/6%; one minute: 44%; five minutes: 47%
Time source is NTP, 13:30:51.839 CST Fri Jun 12 2020
Cisco IOS XE Software, Version 16.12.01z
Cisco IOS Software [Gibraltar], cBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version
16.12.1z, RELEASE SOFTWARE (fc4)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2020 by Cisco Systems, Inc.
Compiled Thu 11-Jun-20 12:32 by mcpre
```

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ROM: IOS-XE ROMMON

```
Router uptime is 3 hours, 23 minutes
Uptime for this control processor is 3 hours, 29 minutes
System returned to ROM by reload at 17:26:41 CST Thu Jun 11 2020
System restarted at 10:07:22 CST Fri Jun 12 2020
System image file is "harddisk:cbrsup-universalk9.16.12.01z.SPA.bin"
Last reload reason: Reload Command
```

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```
Cisco cBR-8 (CBR) processor (revision CBR) with 11349752K/6147K bytes of memory.
Processor board ID FXS2023Q4TA
80 Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
50331648K bytes of physical memory.
7739391K bytes of eUSB flash at bootflash:.
117155287K bytes of SATA hard disk at harddisk:.
0K bytes of WebUI ODM Files at webui:.
```

Configuration register is 0x1820

Determining the Software Version for Cisco IOS XE Gibraltar 16.12.1y

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Router, log in and enter the **show version EXEC** command:


```
Router#show version
Load for five secs: 13%/0%; one minute: 7%; five minutes: 7%
Time source is NTP, 13:09:15.248 EST Fri Feb 28 2020
Cisco IOS XE Software, Version 16.12.01y
Cisco IOS Software [Gibraltar], cBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version
16.12.1y, RELEASE SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
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Compiled Wed 26-Feb-20 17:26 by mcpre
```

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ROM: IOS-XE ROMMON

```
Router uptime is 21 hours, 59 minutes
Uptime for this control processor is 22 hours, 4 minutes
System returned to ROM by reload at 15:00:22 EST Thu Feb 27 2020
System restarted at 15:09:56 EST Thu Feb 27 2020
System image file is "harddisk:cbrsup-universalk9.16.12.01y.SPA.bin"
Last reload reason: Reload Command
```

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Smart Licensing Status: UNREGISTERED/EVAL MODE

```
Cisco cBR-8 (CBR) processor (revision CBR) with 8421767K/6147K bytes of memory.
Processor board ID FXS1927Q4VZ
24 Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
50331648K bytes of physical memory.
7739391K bytes of eUSB flash at bootflash:.
97620247K bytes of SATA hard disk at harddisk:.
15330288K bytes of USB flash at usb0:.
0K bytes of WebUI ODM Files at webui:.
```

Configuration register is 0x2102

Determining the Software Version for Cisco IOS XE Gibraltar 16.12.1x

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Router, log in and enter the **show version EXEC** command:

```
Router#show version
Load for five secs: 49%/0%; one minute: 20%; five minutes: 17%
Time source is NTP, 13:33:47.763 PST Fri Dec 13 2019
Cisco IOS XE Software, Version 16.12.01x
Cisco IOS Software [Gibraltar], cBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version
16.12.1x, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
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Compiled Wed 11-Dec-19 21:18 by mcpre
```

```
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software.
```

```
ROM: IOS-XE ROMMON
```

```
Router uptime is 13 hours, 40 minutes
Uptime for this control processor is 12 hours, 22 minutes
System returned to ROM by SSO Switchover at 01:07:22 PST Fri Dec 13 2019
System restarted at 01:15:26 PST Fri Dec 13 2019
System image file is "harddisk:cbrsup-universalk9.16.12.01x.SPA.bin"
Last reload reason: 4
```

```
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```

```
A summary of U.S. laws governing Cisco cryptographic products may be found at:
http://www.cisco.com/wwl/export/crypto/tool/stqrg.html
```

```
If you require further assistance please contact us by sending email to
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```

```
Smart Licensing Status: UNREGISTERED/EVAL MODE
```

```
Cisco cBR-8 (CBR) processor (revision CBRVE) with 12328557K/6147K bytes of memory.
Processor board ID FXS1849Q1FE
16 Ten Gigabit Ethernet interfaces
4 Hundred Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
50331648K bytes of physical memory.
7649279K bytes of eUSB flash at bootflash:.
234365527K bytes of SATA hard disk at harddisk:.
60718080K bytes of USB flash at usb1:.
0K bytes of WebUI ODM Files at webui:.

Configuration register is 0x2102
```

Determining the Software Version for Cisco IOS XE Gibraltar 16.12.1w

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Router, log in and enter the **show version EXEC** command:

```
Router#show version
Cisco IOS XE Software, Version 16.12.01w
Cisco IOS Software [Gibraltar], cBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version
16.12.1w, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
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Compiled Thu 17-Oct-19 16:55 by mcpre
```

```
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software.
```

```
ROM: IOS-XE ROMMON
```

```
Router uptime is 10 minutes
Uptime for this control processor is 16 minutes
System returned to ROM by reload at 22:16:01 PDT Thu Oct 17 2019
System restarted at 10:26:04 PDT Fri Oct 18 2019
System image file is "harddisk:cbrsup-universalk9.16.12.01w.SPA.bin"
Last reload reason: Reload Command
```

```
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```

to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at:
<http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>

If you require further assistance please contact us by sending email to
export@cisco.com.

Smart Licensing Status: UNREGISTERED/EVAL MODE

Cisco cBR-8 (CBR) processor (revision CBRVE) with 9398985K/6147K bytes of memory.
 Processor board ID FXS1849Q1FE
 16 Ten Gigabit Ethernet interfaces
 4 Hundred Gigabit Ethernet interfaces
 32768K bytes of non-volatile configuration memory.
 50331648K bytes of physical memory.
 7649279K bytes of eUSB flash at bootflash:.
 234365527K bytes of SATA hard disk at harddisk:.
 60718080K bytes of USB flash at usb1:.
 0K bytes of WebUI ODM Files at webui:.

Configuration register is 0x2

Determining the Software Version for Cisco IOS XE Gibraltar 16.12.1

To determine the version of the Cisco IOS XE software running on your Cisco cBR Series Converged Broadband Routers, log in and enter the **show version EXEC** command:

```
Router#show version
Cisco IOS XE Software, Version 16.12.01
Cisco IOS Software [Gibraltar], CBR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version
16.12.1, RELEASE SOFTWARE (fc4)
Technical Support: http://www.cisco.com/techsupport
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Compiled Tue 30-Jul-19 18:39 by mcpre
```

```
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or the applicable URL provided on the flyer accompanying the IOS-XE
software.
```

```
ROM: IOS-XE ROMMON
```

```
Router uptime is 9 hours, 12 minutes
Uptime for this control processor is 9 hours, 18 minutes
System returned to ROM by reload at 01:15:51 PDT Wed Jul 31 2019
System restarted at 01:25:25 PDT Wed Jul 31 2019
System image file is "harddisk:cbrsup-universalk9.16.12.01.SPA.bin"
Last reload reason: Reload Command
```

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: <http://www.cisco.com/wvl/export/crypto/tool/stqrg.html>

If you require further assistance please contact us by sending email to export@cisco.com.

Smart Licensing Status: UNREGISTERED - REGISTRATION FAILED/EVAL EXPIRED

Cisco cBR-8 (CBR) processor (revision CBR) with 10375797K/6147K bytes of memory.
 Processor board ID FXS1845Q0UC
 32 Gigabit Ethernet interfaces
 32768K bytes of non-volatile configuration memory.
 50331648K bytes of physical memory.
 7739391K bytes of eUSB flash at bootflash:.
 97620247K bytes of SATA hard disk at harddisk:.
 0K bytes of WebUI ODM Files at webui:.

Configuration register is 0x2

Microcode Software

This section describes microcode software that is supported for the Cisco cBR Series Converged Broadband Routers.

For more information, see the Upgrade Guide in the [Install and Upgrade Guides](#) page.

Table 8: Firmware Packages and Versions Supported in Cisco IOS XE Gibraltar 16.12.1z2

Internal Name	Component Name	Required Minimum Version	Command
Supervisor CPLD	CBR-CCAP-SUP-160G CPLD	16052011 19071712 (Optional)	show platform
Supervisor CPLD	CBR-CCAP-SUP-250G CPLD	170724E0 190717E1 (Optional)	show platform
Supervisor ROMMON	CBR-CCAP-SUP-160G Rommon and CBR-CCAP-SUP-250G Rommon	16.7(6r)S	show platform
DOCSIS 3.1 downstream module Micro	CBR-CCAP-LC-40G	3.1A	show platform diag

Internal Name	Component Name	Required Minimum Version	Command
DOCSIS 3.1 downstream module FPGA	CBR-CCAP-LC-40G	4.484F	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-8X10G	00010001	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-2X100G	00020005	show platform diag
Daggits CPLD	CBR-CCAP-LC-40G	V26	show platform diag

Table 9: Firmware Packages and Versions Supported in Cisco IOS XE Gibraltar 16.12.1z1

Internal Name	Component Name	Required Minimum Version	Command
Supervisor CPLD	CBR-CCAP-SUP-160G CPLD	16052011 19071712 (Optional)	show platform
Supervisor CPLD	CBR-CCAP-SUP-250G CPLD	170724E0 190717E1 (Optional)	show platform
Supervisor ROMMON	CBR-CCAP-SUP-160G Rommon and CBR-CCAP-SUP-250G Rommon	16.7(6r)S	show platform
DOCSIS 3.1 downstream module Micro	CBR-CCAP-LC-40G	3.1A	show platform diag
DOCSIS 3.1 downstream module FPGA	CBR-CCAP-LC-40G	4.484F	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-8X10G	00010001	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-2X100G	00020005	show platform diag
Daggits CPLD	CBR-CCAP-LC-40G	V26	show platform diag

Table 10: Firmware Packages and Versions Supported in Cisco IOS XE Gibraltar 16.12.1z

Internal Name	Component Name	Required Minimum Version	Command
Supervisor CPLD	CBR-CCAP-SUP-160G CPLD	16052011 19071712 (Optional)	show platform
Supervisor CPLD	CBR-CCAP-SUP-250G CPLD	170724E0 190717E1 (Optional)	show platform

Internal Name	Component Name	Required Minimum Version	Command
Supervisor ROMMON	CBR-CCAP-SUP-160G Rommon and CBR-CCAP-SUP-250G Rommon	16.7(6r)S	show platform
DOCSIS 3.1 downstream module Micro	CBR-CCAP-LC-40G	3.1A	show platform diag
DOCSIS 3.1 downstream module FPGA	CBR-CCAP-LC-40G	4.484F	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-8X10G	00010001	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-2X100G	00020005	show platform diag
Daggits CPLD	CBR-CCAP-LC-40G	V26	show platform diag

Table 11: Firmware Packages and Versions Supported in Cisco IOS XE Gibraltar 16.12.1y

Internal Name	Component Name	Required Minimum Version	Command
Supervisor CPLD	CBR-CCAP-SUP-160G CPLD	16052011 19071712 (Optional)	show platform
Supervisor CPLD	CBR-CCAP-SUP-250G CPLD	170724E0 190717E1 (Optional)	show platform
Supervisor ROMMON	CBR-CCAP-SUP-160G Rommon and CBR-CCAP-SUP-250G Rommon	16.7(6r)S	show platform
DOCSIS 3.1 downstream module Micro	CBR-CCAP-LC-40G	3.1A	show platform diag
DOCSIS 3.1 downstream module FPGA	CBR-CCAP-LC-40G	4.484F	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-8X10G	00010001	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-2X100G	00020005	show platform diag
Daggits CPLD	CBR-CCAP-LC-40G	V26	show platform diag

Table 12: Firmware Packages and Versions Supported in Cisco IOS XE Gibraltar 16.12.1x

Internal Name	Component Name	Required Minimum Version	Command
Supervisor CPLD	CBR-CCAP-SUP-160G CPLD	16052011 19071712 (Optional)	show platform
Supervisor CPLD	CBR-CCAP-SUP-250G CPLD	170724E0 190717E1 (Optional)	show platform
Supervisor ROMMON	CBR-CCAP-SUP-160G Rommon and CBR-CCAP-SUP-250G Rommon	16.7(4r)S	show platform
DOCSIS 3.1 downstream module Micro	CBR-CCAP-LC-40G	3.1A	show platform diag
DOCSIS 3.1 downstream module FPGA	CBR-CCAP-LC-40G	4.484F	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-8X10G	00010001	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-2X100G	00020005	show platform diag
Daggits CPLD	CBR-CCAP-LC-40G	V26	show platform diag

Table 13: Firmware Packages and Versions Supported in Cisco IOS XE Gibraltar 16.12.1w

Internal Name	Component Name	Required Minimum Version	Command
Supervisor CPLD	CBR-CCAP-SUP-160G CPLD	19071712	show platform
Supervisor CPLD	CBR-CCAP-SUP-250G CPLD	190717E1	show platform
Supervisor ROMMON	CBR-CCAP-SUP-160G Rommon and CBR-CCAP-SUP-250G Rommon	16.7(6r)S	show platform
DOCSIS 3.1 downstream module Micro	CBR-CCAP-LC-40G	3.1A	show platform diag
DOCSIS 3.1 downstream module FPGA	CBR-CCAP-LC-40G	4.484F	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-8X10G	00010001	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-2X100G	00020005	show platform diag

Internal Name	Component Name	Required Minimum Version	Command
Daggits CPLD	CBR-CCAP-LC-40G	V26	show platform diag

Table 14: Firmware Packages and Versions Supported in Cisco IOS XE Gibraltar 16.12.1

Internal Name	Component Name	Required Minimum Version	Command
Supervisor CPLD	CBR-CCAP-SUP-160G CPLD	16052011	show platform
Supervisor CPLD	CBR-CCAP-SUP-250G CPLD	170724E0	show platform
Supervisor ROMMON	CBR-CCAP-SUP-160G Rommon and CBR-CCAP-SUP-250G Rommon	16.7(4r)S	show platform
DOCSIS 3.1 downstream module Micro	CBR-CCAP-LC-40G	3.1A	show platform diag
DOCSIS 3.1 downstream module FPGA	CBR-CCAP-LC-40G	4.484F	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-8X10G	00010001	show platform diag
DPIC Uboot and FPGA	CBR-DPIC-2X100G	00020005	show platform diag
Daggits CPLD	CBR-CCAP-LC-40G	V26	show platform diag

