



Release Notes for VDSL CPE PHY Release B2pvC038h3_J

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Introduction

These release notes describe new enhancements and fixed caveats for the VDSL CPE PHY using firmware release B2pvC038h3_J. This firmware is used for Cisco CPEs and certified by Deutsch Telekom with its Digital Subscriber Line Access Multiplexers (DSLAMs). Cisco does not support any CPE interoperability issues if the CPEs are not tested with the DSLAMs by Deutsch Telekom. In this firmware Annex J mode is enabled.

These release notes are updated as needed.



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System Requirements

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Memory and IOS Software Requirements

Table 1 lists the supported Cisco 886VA Series Routers and Cisco 896VA Series Routers with their respective memory and IOS requirements while using firmware release B2pvC038h3_J.



Note

This firmware version is compiled with the SDK version 4.02L.03 and supports IOS release 15.6(2)T and earlier releases up to the supported version mentioned in the firmware release note. This firmware is not supported with Cisco IOS 15.6(3)M and later releases.

Table 1 Supported Cisco 886 Routers and Cisco 896 Routers with Memory Requirements

Platform	Flash	DRAM	IOS version
C886VA-K9	128 MB	256 MB	15.2(4) M or later
C886VAJ-K9			
C886VA-W-E-K9			
C896VA-K9	256 MB	1 GB DRAM	
C896VAG-LTE-GA-K9			

The following EHWIC is supported with B2pvC038h3_J:

- C1900/C2900/C3900/C3900e Series router with Cisco EHWIC-VA-DSL-B

Determining the Firmware Version

To determine the version of firmware currently running on your Cisco 886VA Series Router, issue the following IOS command and look for the output entries shown in bold in this example:

```
C886VA# show controller vds1 0
Controller VDSL 0 is UP

Daemon Status: Up

XTU-R (DS)           XTU-C (US)
Chip Vendor ID:      'BDCM'           'BDCM'
Chip Vendor Specific: 0x0000           0xA31E
Chip Vendor Country: 0xB500           0xB500
Modem Vendor ID:     'CSCO'           ' '
Modem Vendor Specific: 0x4602           0x0000
Modem Vendor Country: 0xB500           0x0000
Serial Number Near:   FHK144672GQ 886VA-K 15.2(4)M
Serial Number Far:
```

```

Modem Version Near: 15.2(4)M
Modem Version Far: 0xa31e

Modem Status: TC Sync (Showtime!)
DSL Config Mode: AUTO
Trained Mode: G.992.5 (ADSL2+) Annex J
TC Mode: ATM
Selftest Result: 0x00
DELT configuration: disabled
DELT state: not running
Trellis: ON ON
SRA: disabled disabled
SRA count: 0 0
Bit swap: enabled enabled
Bit swap count: 0 1
Line Attenuation: 0.0 dB 4.9 dB
Signal Attenuation: 3.3 dB 4.4 dB
Noise Margin: 9.8 dB 6.3 dB
Attainable Rate: 26332 kbits/s 2952 kbits/s
Actual Power: 7.1 dBm 11.9 dBm
Total FECC: 0 0
Total ES: 9721 42
Total SES: 9714 4
Total LOSS: 1086 0
Total UAS: 2670101 2670101
Total LPRS: 0 0
Total LOFS: 8342 0
Total LOLS: 0 0

```

```

Full inits: 2511
Failed full inits: 815
Short inits: 174
Failed short inits: 1353

```

```

Firmware Source File Name (version)
-----
VDSL user config flash:VA_A_39h_B_38h3_24h_j.bin (10)

```

```

Modem FW Version: 140305_1531-4.02L.03.B2pvC038h3_J.d24h
Modem PHY Version: B2pvC038h3_J.d24h
Vendor Version: Bpv38h3.24h 68

```

	DS Channel1	DS Channel0	US Channel1	US Channel0
Speed (kbps):	0	25346	0	2832
SRA Previous Speed:	0	0	0	0
Previous Speed:	0	25866	0	1264
Total Cells:	0	35481077	0	3942410
User Cells:	0	0	0	0
Reed-Solomon EC:	0	0	0	0
CRC Errors:	0	220155	0	0
Header Errors:	0	0	0	0
Interleave (ms):	0.00	0.08	0.00	11.11
Actual INP:	0.00	0.00	0.00	0.69

```

Training Log: Stopped
Training Log Filename: flash:vdslllog.bin

```

C886VA#

Upgrading to a New Firmware Release

Perform the following steps to upgrade to a new firmware release:

1. Download the new firmware from Cisco.com Software Center at:
<http://www.cisco.com/cisco/software/navigator.html>

Choose **Products** -> **Routers** -> **Branch Routers** -> **Cisco 800 Series Routers** -> **Cisco 886VA Integrated Services Router (or Cisco 896 VA Integrated Services Router)** -> **Very High Bitrate DSL (VDSL) Firmware** > **B2pvC038h3_J**

2. Copy the B2pvC038h3_J firmware to a designated location; for example, router flash or a TFTP server.
3. Configure the router to load the new firmware from a designated location.

```
Router# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
```

```
Router(config)# controller vdsl 0
Router(config-controller)# firmware filename ?
archive: Download fw file name
cns:      Download fw file name
flash:    Download fw file name
ftp:      Download fw file name
http:     Download fw file name
https:    Download fw file name
null:     Download fw file name
nvram:    Download fw file name
rcp:      Download fw file name
scp:      Download fw file name
system:   Download fw file name
tar:      Download fw file name
tftp:     Download fw file name
tmpsys:   Download fw file name
xmodem:   Download fw file name
ymodem:   Download fw file name
```

```
Router(config-controller)# firmware filename flash:
```



Note Controller VDSL 0 should *not* be turned off.

4. Enter the **copy running-config startup-config** command to save your configuration.
5. Enter the **reload** command to restart the router.

New and Changed Information

This section contains changes introduced with firmware release B2pvC038h3_J.

- Improved response time of EOC messages in G.992.1
- Fixed sub-optimal ds rate under some INP/delay configuration in G.993.2
- Fixed G.993.2 training issues for certain US overhead rate configurations
- Fixed invalid DS SoS requests when last tone in tone groups is loaded with 1 bit in G.993.2
- Fixed overhead channel corruption under certain framing parameter change in G.993.2 SRA
- Fixed K10 electrical Length computation when RFI band is configured from 58 to 512 in G.993.2

- Improved G.992.[35] US rates in Annex J EU-48 and EU-60 for 63268 B/J CPE
- Improved G.993.2 DS rates when large RFI band is configured in DS1 band
- Improved G.993.2 SRA stability when G.INP is enabled
- Fixed G.HS failures in G.992
- Support G.Vector Friendly mode - Annex Y
- Support G.998.4 Amendment 2
- Improved DS rates in G.INP and PhyR
- Implement CPE work around to fix G.993.2 training issue when CO response to R-MSG1 is early
- Fixed Rx Filter configuration in the AFE for B/J 7.2.1 design

Known Issues and Limitations

- G.INP supports DTU framing type 1 only

Related Documentation

- [Release-Specific Documents, page 5](#)
- [Platform-Specific Documents, page 5](#)
- [Other Firmware Code, page 5](#)

Release-Specific Documents

For detailed information about the release-specific platforms, see the following documentations:

- [Cisco Multimode VDSL2 and ADSL2/ADSL2+ High-Speed WAN Interface Card](#)
- [Cisco 800 Series Integrated Services Router Hardware Installation Guide](#)
- [Cisco 800 Series Integrated Services Routers Software Configuration Guide](#)

Platform-Specific Documents

For more information about the supported platforms, see the following documentations:

- [Cisco 800 Series Integrated Services Router Hardware Installation Guide](#)
- [Cisco 800 Series Integrated Services Routers Software Configuration Guide](#)

Other Firmware Code

For information on the firmware used prior to this release, see [Release Notes for Cisco 860VA Series Multimode VDSL2/ADSL2/2+ DSL Router with Firmware Release A2pv6F039d](#).

Obtain Documentation and Submit a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see [What's New in Cisco Product Documentation](#).

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This document is to be used in conjunction with the documents listed in the “[Related Documentation](#)” section.

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