

Release Notes for VDSL CPE PHY Release A2pv6C039m

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Introduction

These release notes describe new enhancements and fixed caveats for the VDSL CPE PHY using firmware release A2pv6C039m.

These release notes are updated as needed.



System Requirements

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Memory and IOS Software Requirements

Table 1 lists the supported Cisco 880 Series Routers and Cisco 890 Series Routers with their respective memory and IOS requirements while using firmware release A2pv6C039m.



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 880 Routers and Cisco 890 Routers with Memory Requirements

Platform	Flash (MB)	DRAM (MB)	IOS version
Cisco 880 VA Series Routers	256	512	15.2(4) M or later
Cisco 890 VA Series Routers	256	512	15.2(4) M or later

The following EHWICs are supported with A2pv6C039m:

- C1900/C2900/C3900/C3900e Series router with EHWIC-VA-DSL-A
- C1900/C2900/C3900/C3900e Series router with EHWIC-VA-DSL-M

Determining the Firmware Version

To determine the version of firmware currently running on your Cisco 880VA Series Router, issue the following IOS command and look for the output entries shown in bold in this example:

```
C887VA# show controller vdsl 0
Controller VDSL 0 is UP
Daemon Status: Up
XTU-R (DS) XTU-C (US)
Chip Vendor ID:
                        'BDCM'
                                                 'BDCM'
Chip Vendor Specific:
                        0x0000
                                                 0xA1F3
Chip Vendor Country:
                        0xB500
                                                 0xB500
Modem Vendor ID:
                        'CSCO'
Modem Vendor Specific: 0x4602
                                                 0x0000
Modem Vendor Country:
                        0xB500
                                                 0x0000
Serial Number Near:
                      FTX1819823V C887VA-K 15.3(3)M3
Serial Number Far:
Modem Version Near:
                    15.3(3)M3
```

```
Modem Version Far:
                    0xa1f3
Modem Status:
                     TC Sync (Showtime!)
DSL Config Mode:
                     AUTO
Trained Mode:
                     G.993.2 (VDSL2) Profile 17a
TC Mode:
                     PTM
Selftest Result:
                     0x00
DELT configuration:
                     disabled
DELT state:
                     not running
Trellis:
                     ON
                                           ON
SRA:
                     disabled
                                            disabled
SRA count:
                     Ω
Bit swap:
                     enabled
                                            enabled
Bit swap count:
                    8
Line Attenuation:
                   0.0 dB
                                          0.0 dB
Signal Attenuation: 0.0 dB
                                          0.0 dB
Noise Margin:
                     23.1 dB
                                          11.4 dB
                     156743 kbits/s
Attainable Rate:
                                        63985 kbits/s
Actual Power:
                     11.3 dBm
                                         6.7 dBm
Per Band Status:
                     D1 D2 D3 D4
Line Attenuation (dB): 1.4 2.9 3.9
                                       1.6
                                            2.8
                                                  2.7
                                                       N/A
Signal Attenuation (dB): 1.2 2.9 3.9
                                      2.3 2.1 0.0
                                                       N/A
Noise Margin (dB):
                    23.2 23.1 23.1 14.1 10.3
                                                      N/A
                                                            N/A
Total FECC:
                      0
Total ES:
                      2363
                             0
Total SES:
                      2361
                             0
Total LOSS:
                      225
                            0
Total UAS:
                      320371 320371
Total LPRS:
                      0
                            0
Total LOFS:
                      1644
                             0
Total LOLS:
                      0
                             0
Full inits:
                      226
Failed full inits:
                      0
Short inits:
                      0
Failed short inits:
                      Ω
Firmware
          Source
                          File Name (version)
-----
                          _____
          user config
VDSL
                          flash: VA_A_39m_B_38h3_24h.bin (10)
```

Modem FW Version: 140729_1209-4.02L.03.A2pv6C039m.d24h

Modem PHY Version: A2pv6C039m.d24h Vendor Version: Ap6v39m.24h 68

	DS Channel1	DS Channel0	US Channel1	US Channel0
Speed (kbps):	0	99999	0	60015
SRA Previous Speed:	0	45249	0	7692
Previous Speed:	0	45249	0	7692
Reed-Solomon EC:	0	687513	0	0
Header Errors:	0	0	0	0
Interleave (ms):	0.00	0.00	0.00	0.00
Actual INP:	0.00	0.00	0.00	0.00

Training Log : Stopped

Training Log Filename : flash:vdsllog.bin

C887VA#

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 880VA Integrated Services Router (or Cisco 890 VA Integrated Services Router) -> Very High Bitrate DSL (VDSL) Firmware > A2pv6C039m

- Copy the A2pv6C039m 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
           Download fw file name
 flash:
          Download fw file name
          Download fw file name
 ftp:
          Download fw file name
 http:
 https: Download fw file name
          Download fw file name
 null:
 nvram:
         Download fw file name
          Download fw file name
 rcp:
           Download fw file name
 scp:
           Download fw file name
  system:
           Download fw file name
  tar:
  tftp:
          Download fw file name
 tmpsys: Download fw file name
 xmodem: Download fw file name
 vmodem: Download fw file name
```



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 A2pv6C039m.

Router(config-controller)# firmware filename flash:

- Improved kl0 measurement in G.993.2 for Bridged Tap loops
- Improve showtime stability of G.993.2 during SRA upshift
- Fixed G.992.5 BER issue in TR-100 CPE margin verification tests
- Removed G.993.2 DS rate cap against non-BRCM COs
- Improved G.HS IOP against NVLT-D card
- Fixed G.INP parameters reporting issue in G.992.[35]

Known Issues and Limitations

- G.INP supports DTU framing type 1 only
- G.993.2 ATM mode testing is limited due to lack of DSLAM support

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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