DETAILED CV-5200 FIRMWARE UPDATE LOADING INSTRUCTIONS

SECTION 1: DOWNLOAD FILES, INSTALL APPLICATION

STEP 1: DOWNLOAD PROGRAMMING FILES AND UPDATE HEXFILE

DOWNLOAD 3 ITEMS:

1. AN1388 Source Code (application program)   FILENAME: FIRMWARE-AN1388-Source-Code-2014_02_14.zip
2. CV-5200 Firmware   FILENAME: CV5200rX_XX_XX.zip*

*The exact file name depends on the latest version of the firmware.

NOTE: If using Windows 7, 8, or 10 with older hardware, you may need to install FTDI VCP Drivers appropriate for the specific Windows version. FTDI chipset is used for communication from CV system to computer via USB-to-USB port connection. Please contact support@okinternational.com for further information if needed.

NOTE: DO NOT download CV-500 firmware; it is not compatible with CV-5200.

NOTE: Windows 10 may automatically download files to the DOWNLOADS FOLDER, but the user may select a path using the 'Save as' option.

STEP 2: UNZIP FIRMWARE-AN1388-SOURCE-CODE APPLICATION FILES to self-designated and known location on your computer
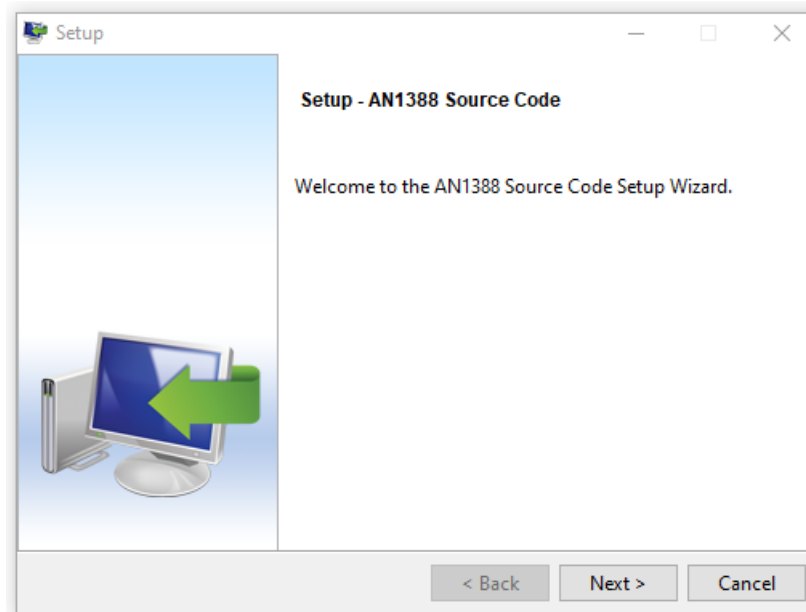
Unzip file: FIRMWARE-AN1388-Source-Code-2014_02_14.zip

Use the Unzip menu to select a destination folder for file extraction.

You can extract the .exe file in the Downloads folder or a folder of your choice using "Unzip to selected folder."

STEP 3: RUN AN1388 Source Code 2014_02_14.exe APPLICATION TO INSTALL PIC BOOTLOADER PROGRAMMING APPLICATION

The application PIC32UBL is needed to install the new firmware on the CV unit. AN1388 Source Code 2014_02_14 installs PIC32UBL on your hard drive.

    a. Run executable program file AN1388 Source Code 2014_02_14.exe. This will install the Bootloader application. At the Setup/Welcome screen, click < Next >.
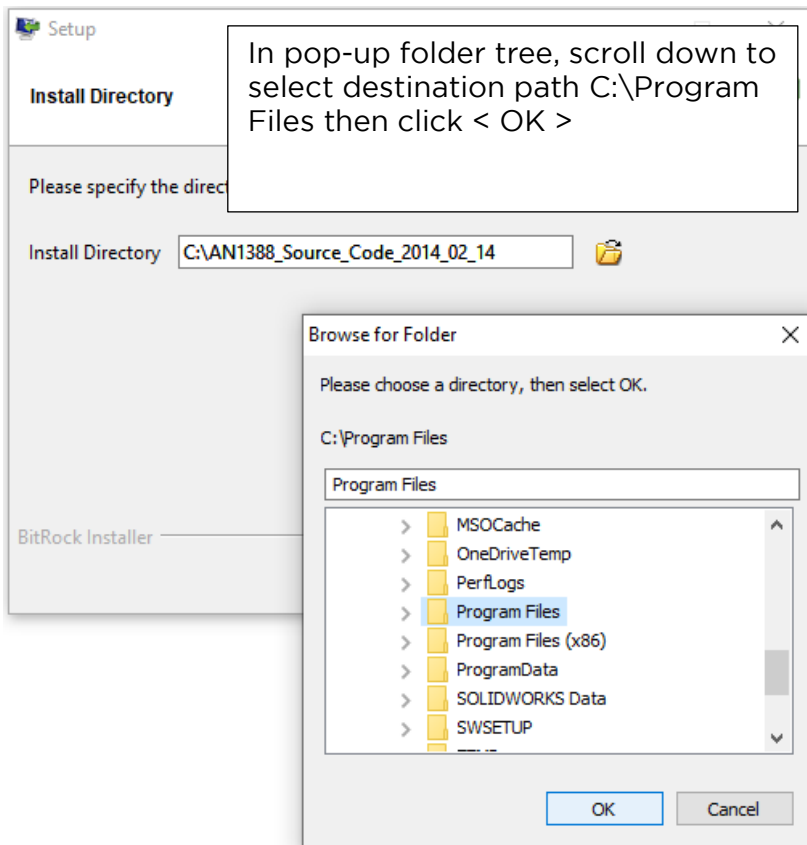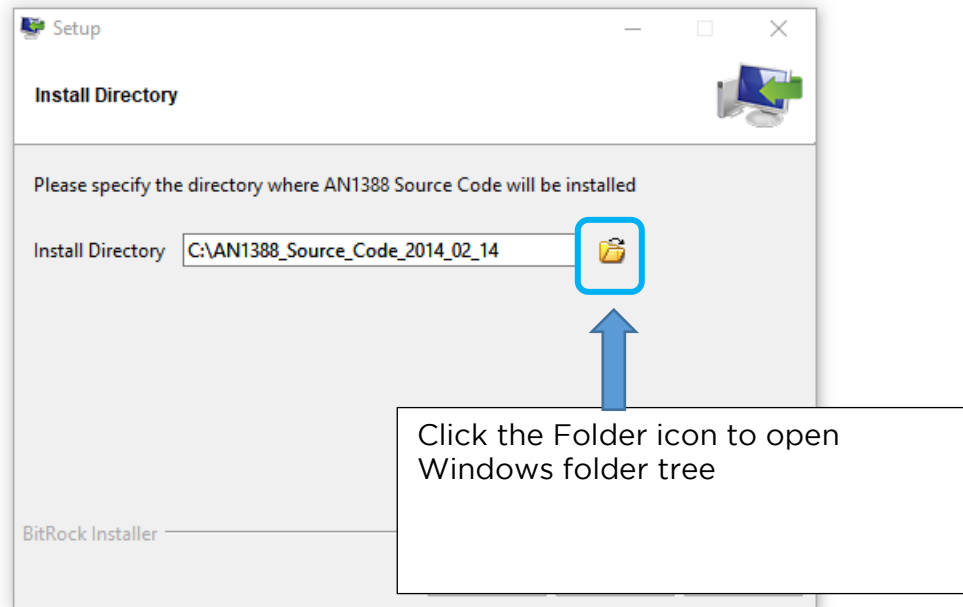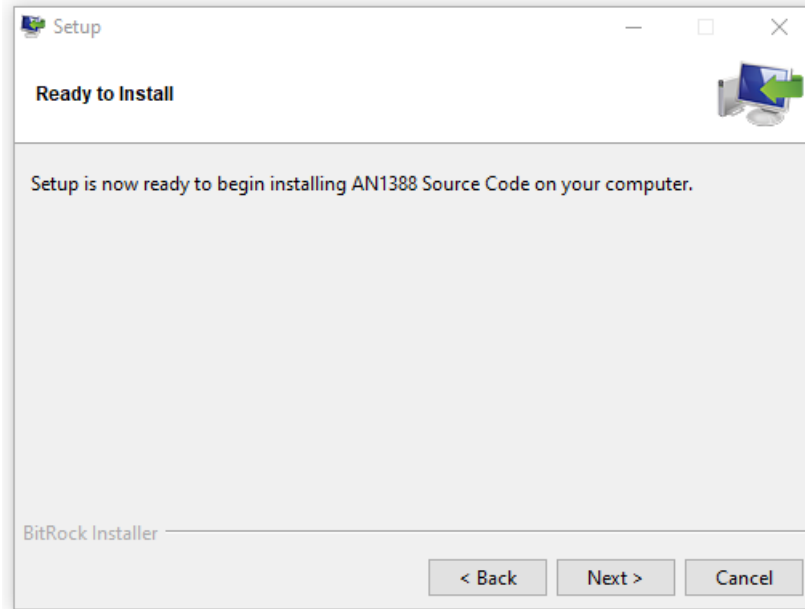

    b. ACCEPT the License agreement. Click < Next >.

c. SELECT PATH FOR DIRECTORY INSTALLATION

Select a destination folder of choice for installation.

Setup — □ ✕

Install Directory

Please specify the directory where AN1388 Source Code will be installed

Install Directory C:\AN1388_Source_Code_2014_02_14 📁

BitRock Installer

Click the Folder icon to open Windows folder tree

Setup

Install Directory

Please specify the direc

Install Directory C:\AN1388_Source_Code_2014_02_14 📁

In pop-up folder tree, scroll down to select destination path C:\Program Files then click < OK >

Browse for Folder ✕

Please choose a directory, then select OK.

C:\Program Files

Program Files

> 📁 MSOCache
> 📁 OneDriveTemp
> 📁 PerfLogs
> 📁 Program Files
> 📁 Program Files (x86)
> 📁 ProgramData
> 📁 SOLIDWORKS Data
> 📁 SWSETUP

OK   Cancel

BitRock Installer

d. Click < Next > to begin the application program installation.
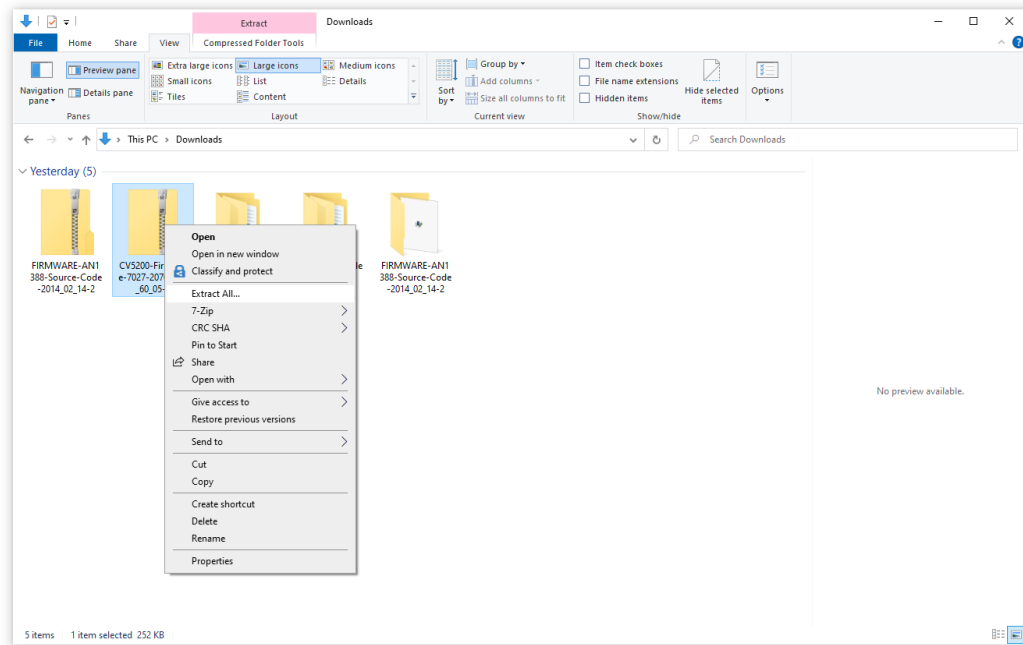

e. Wait for the application to complete installation; then click < Finish >.
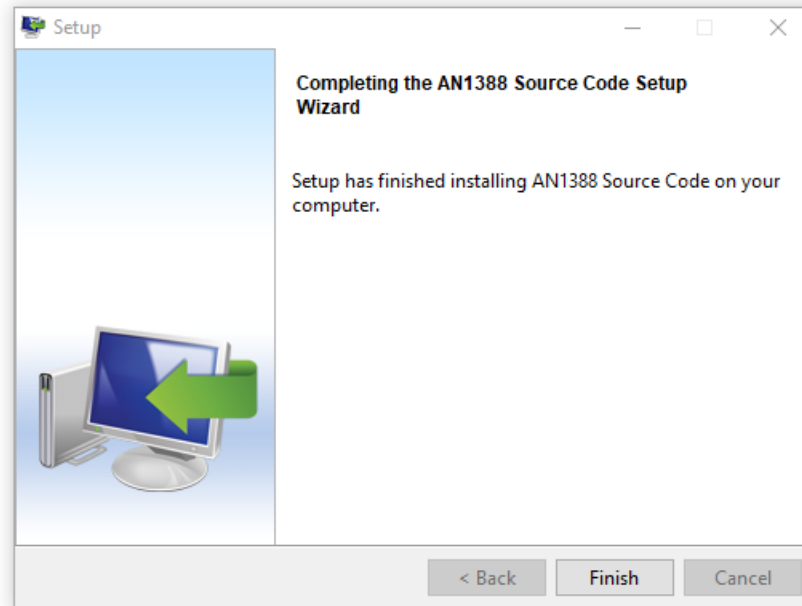
STEP 4: UNZIP CV-PS5200 FIRMWARE UPDATE FILE to self-designated and known location on your computer

Unzip the CV Firmware .zip file.

Use the Unzip menu to select a destination folder for file extract (can extract hex file in the Downloads folder or a folder of your choice using "Unzip to selected folder."
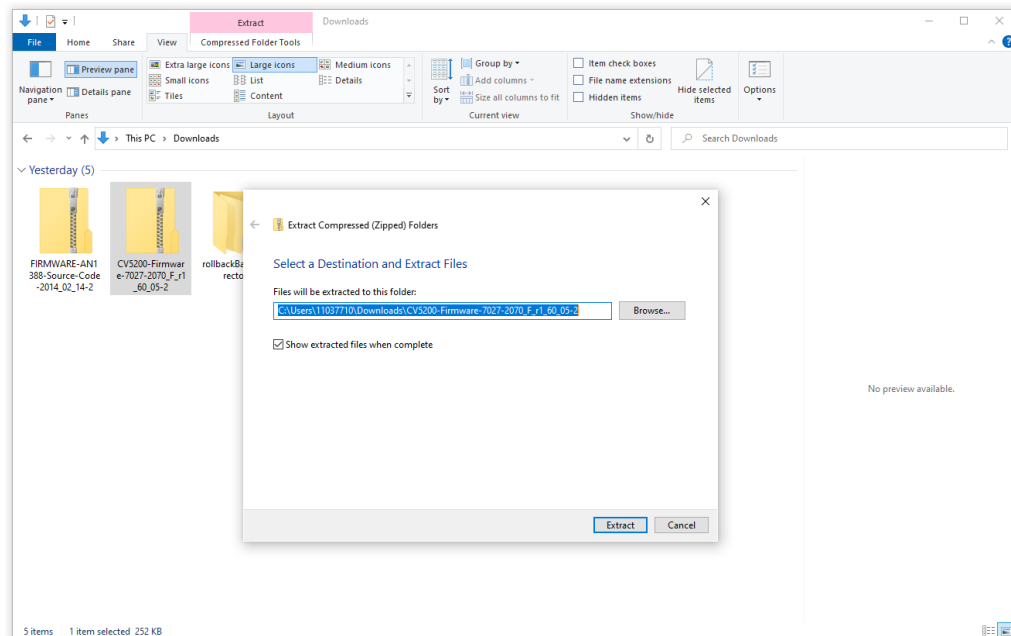
NOTE: It is very IMPORTANT to know the exact FOLDER LOCATION of the CV5200r1_xx.hex file as it will be selected when running the firmware update application.

STEP 5: LOCATE PIC BOOTLOADER PROGRAM executable and create desktop shortcut (Optional)

If in step 3 PIC Bootloader program installed to C:\ main root directory, go to
C:\ PIC32_Bootloaders\PC_Application

If in step 3 program installed C:\Program Files directory, go to
C:\Program Files\PIC32_Bootloaders\PC_Application

Locate PIC BOOTLOADER PROGRAM executable file: PIC32UBL.exe

Select PIC32UBL.exe file; right-click mouse and select SEND TO > DESKTOP (Create shortcut)

To find PIC32UBL.exe using Windows Search:

Type 'explorer' in bottom Windows 10 search bar field.
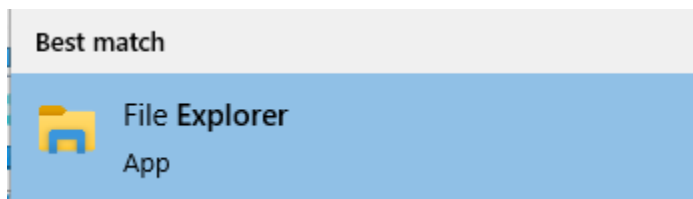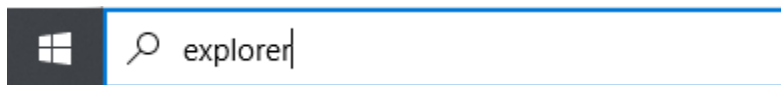From pop-up results, select and open File Explorer app.
At top left menu, check "Navigation pane."
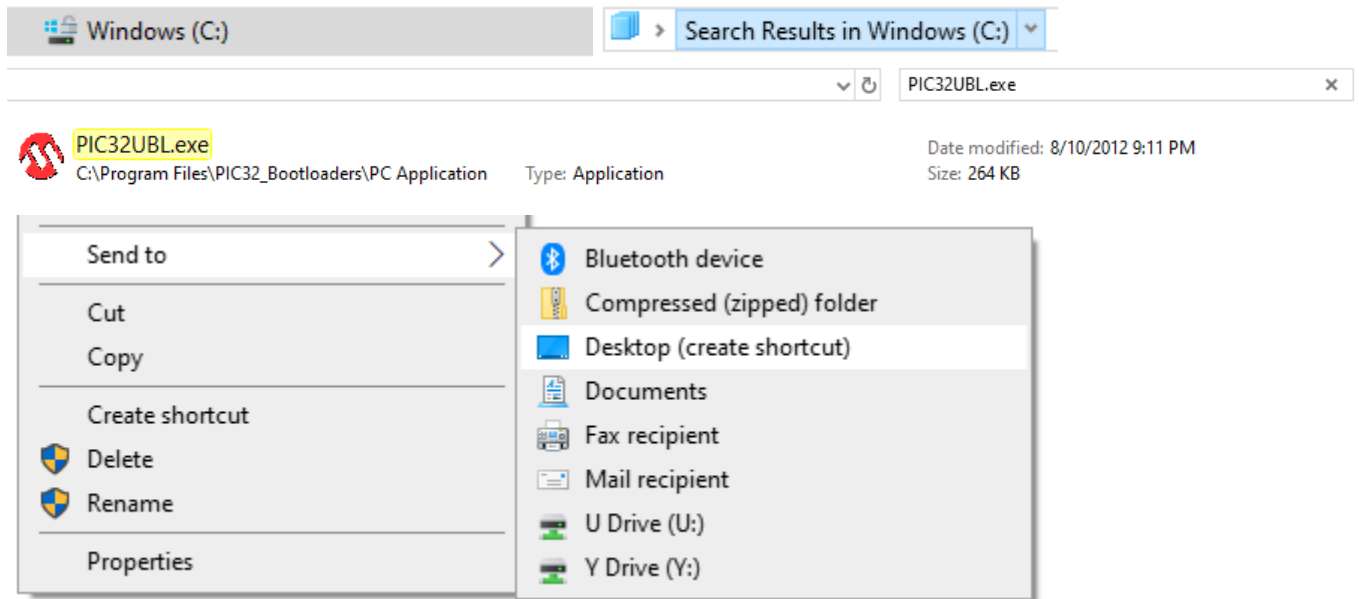In left 'Navigation pane' column, find and select Windows (C:) folder location.
At upper right search bar in 'Search Window (C:) field type "PIC32UBL.exe."
Windows10: type PIC32UBL.exe in bottom left SEARCH BAR.
Once program file found, create desktop shortcut as above.

After extraction of CV5200r1_xx.hex file (firmware update file) SECTION 1 for download, unzip files and application is completed. The application will now be available on the computer for future CV firmware updates (it is not necessary to re-install AN1388 Source Code 2014_02_14.exe application for future CV firmware updates).

SECTION 2: UPDATE CV-PS5200 FIRMWARE

STEP 1: Connect a USB-to-USB cable from the CV-5200 USB port (upper right side) to a USB port on the computer

CV-PS5200 USB connection is located upper right side of the unit

Connect
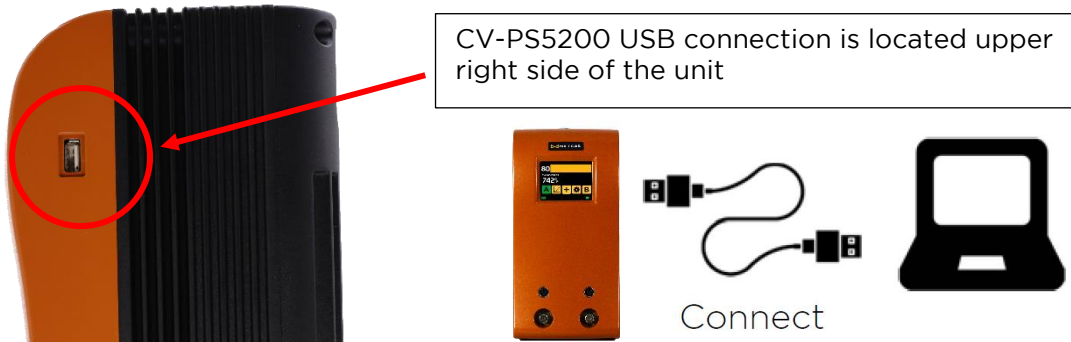
### STEP 2: ENABLE FIRMWARE UPDATE PROGRAMMING MODE for CV-5200

With the CV unit OFF, press and hold your finger lightly but firmly on the touchscreen, then turn the unit power ON.

When the unit goes to firmware program/update mode, the screen should be black/blank and you should hear an audible ticking sound; "tick, tick, tick" or "click,click,click," like an old clock ticking.

CLICK!
CLICK!
CLICK!

STEP 3: Open the PIC32UBL.exe program (PIC BOOTLOADER application)

Name	Date modified	Type	Size
PIC32UBL	9/11/2017 4:57 PM	File folder	
PIC32UBL.exe	8/10/2012 9:11 PM	Application	264 KB
Readme.txt	8/10/2012 9:11 PM	Text Document	1 KB
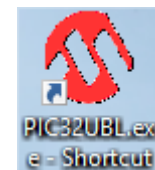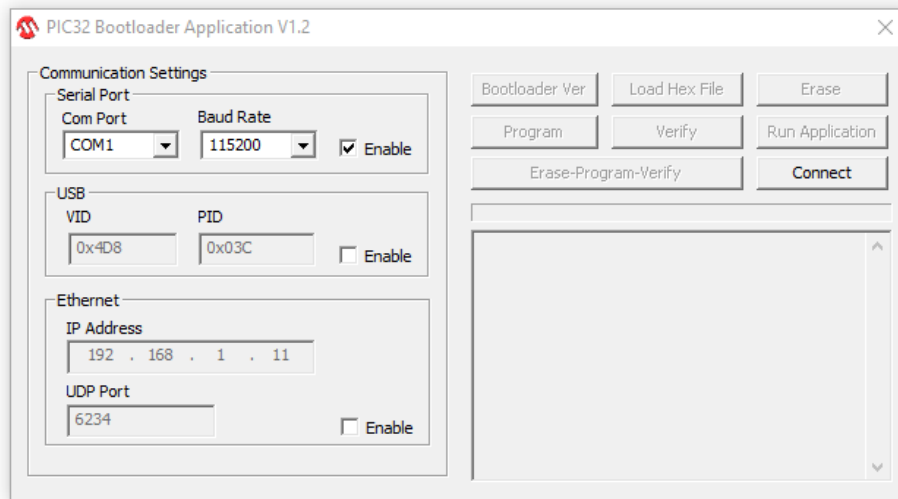
## STEP 4: Determine the active USB SERIAL COM PORT for computer

a. In the Windows 10 bottom search bar field, type "device manager"

b. In pop-up result, select and open Device Manager (Control panel)

c. Locate Ports (COM & LPT) and expand the tree by clicking the left arrow

d. Locate USB Serial Port (COM #); this number will be the active computer USB Serial Com Port #

IMPORTANT NOTE: PIC 32 Bootloader software will only connect to CV-PS5200 using com ports 1 – 9.
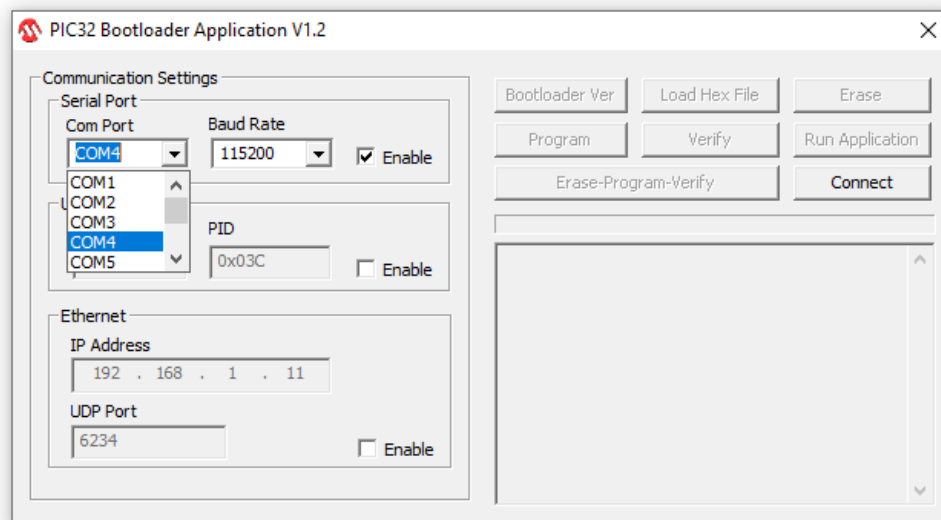
Device Manager

Device Manager
Control panel

If the computer active com port is > 9 (e.g. COM 11), you will need to manually reset the active com port. Please contact OK International Tech Support if assistance is needed.
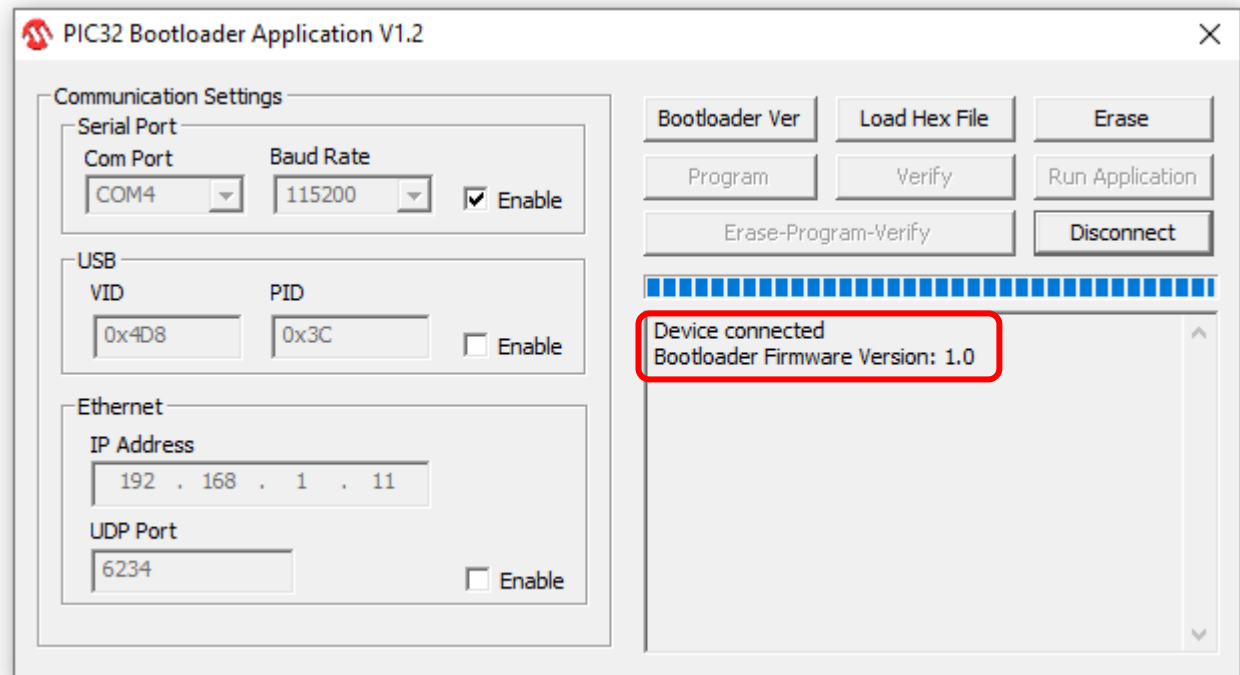

EXAMPLE ONLY – ACTUAL PORT# MAY DIFFER
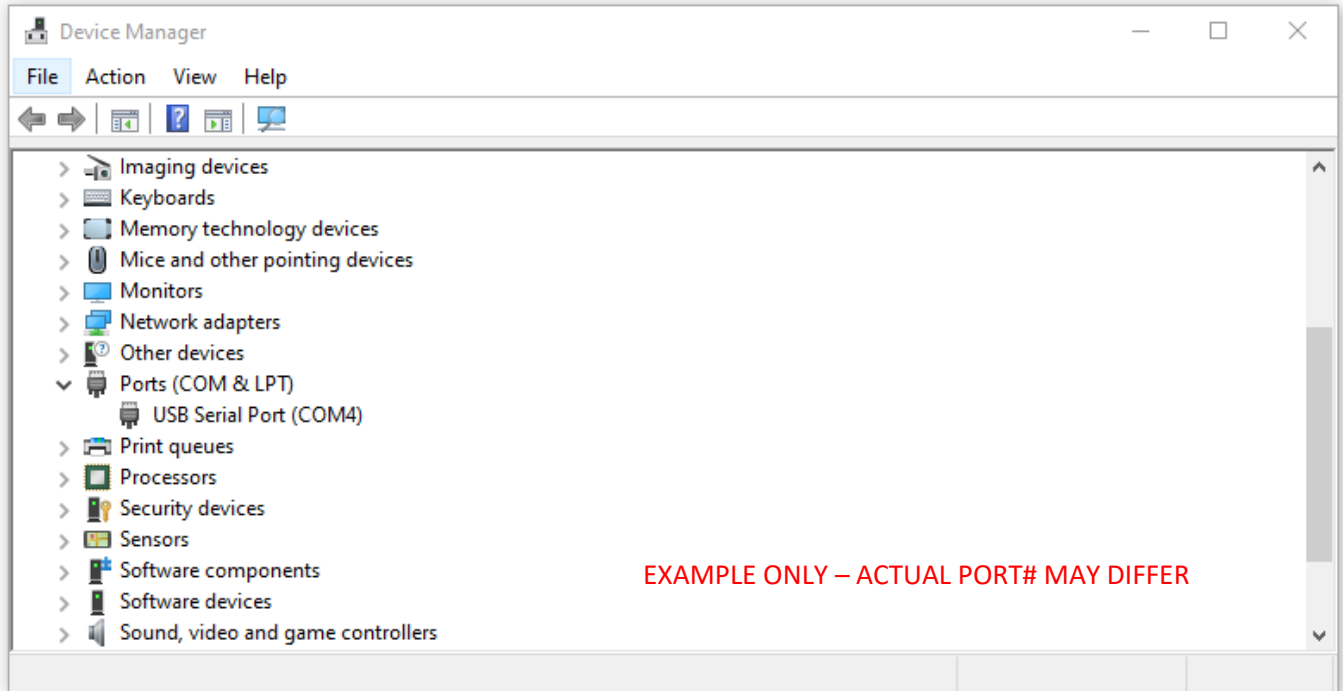
STEP 5: SELECT ACTIVE COM PORT# AND CONNECT TO CV-PS5200 USING PIC 32 Bootloader Application
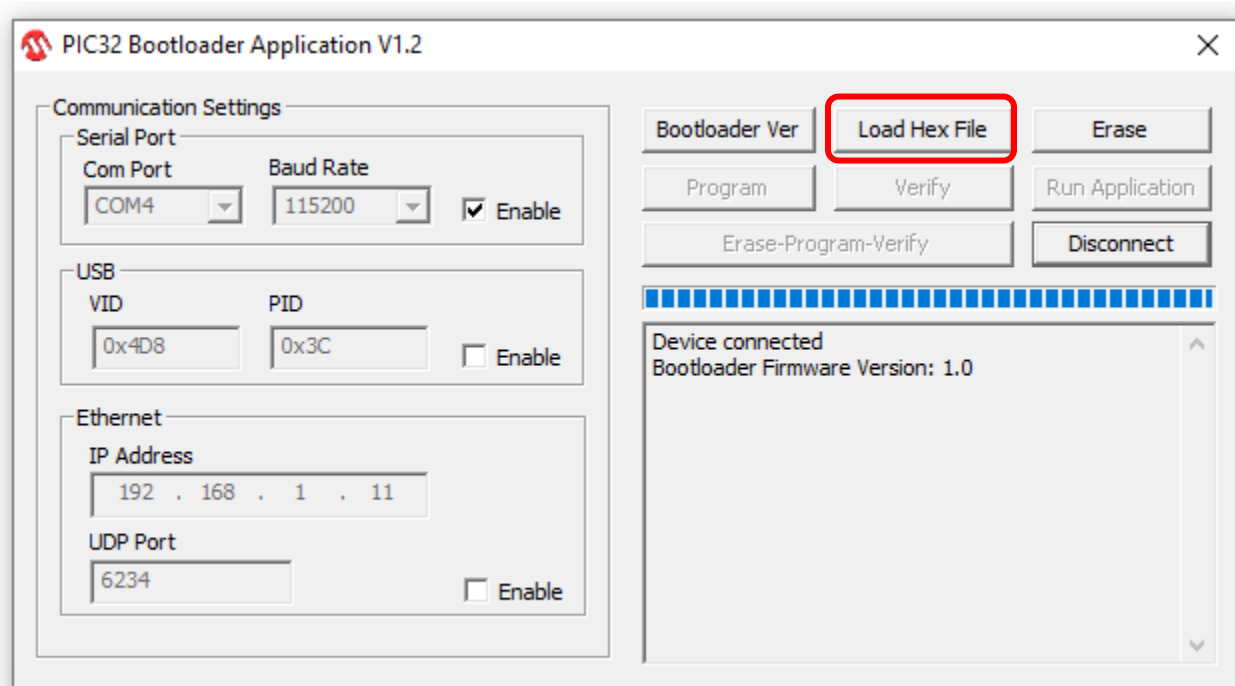
STEP 6: CONNECT TO CV-PS5200

Press the CONNECT command button on PIC BOOTLOADER command screen, "device connected" should appear to indicate a successful connection.
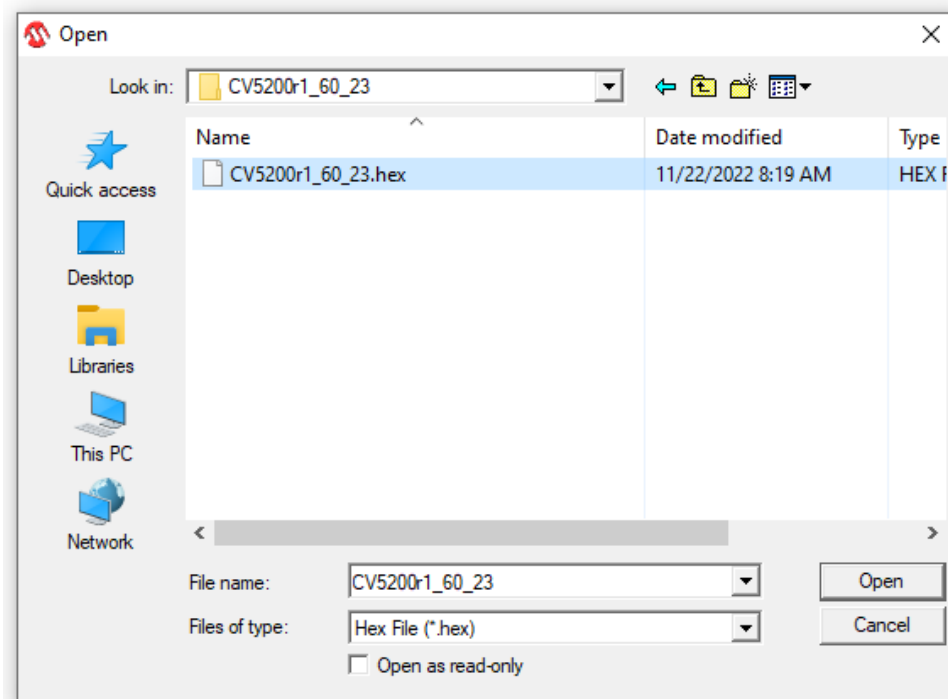

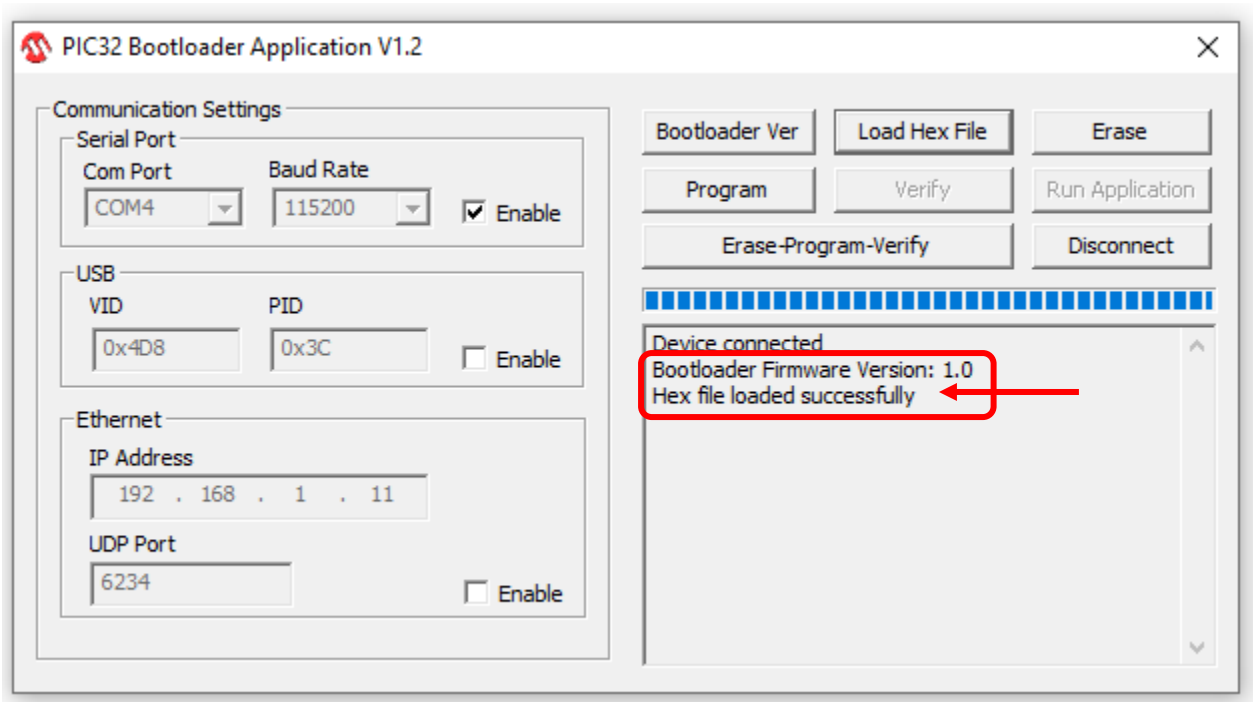### STEP 7 – LOAD HEX FILE (current version CV-P52000 firmware

a. This is CV5200r1_xx.hex file unzipped to 'known location' in Step 4
b. Press LOAD HEX FILE command button on PIC BOOTLOADER command screen

c. Highlight the updated hex file and click Open

d. You should see the onscreen message "Hex file loaded successfully."

STEP 8: UPDATE CV-PS5200 FIRMWARE

a. Press the <u>Erase-Program-Verify</u> command button on the PIC BOOTLOADER command screen

b. The update will take a few seconds (usually less than 1 minute)

c. Upon completion of the update, you should see the following onscreen messages:

   Flash Erased
   Programming completed
   Verification successful
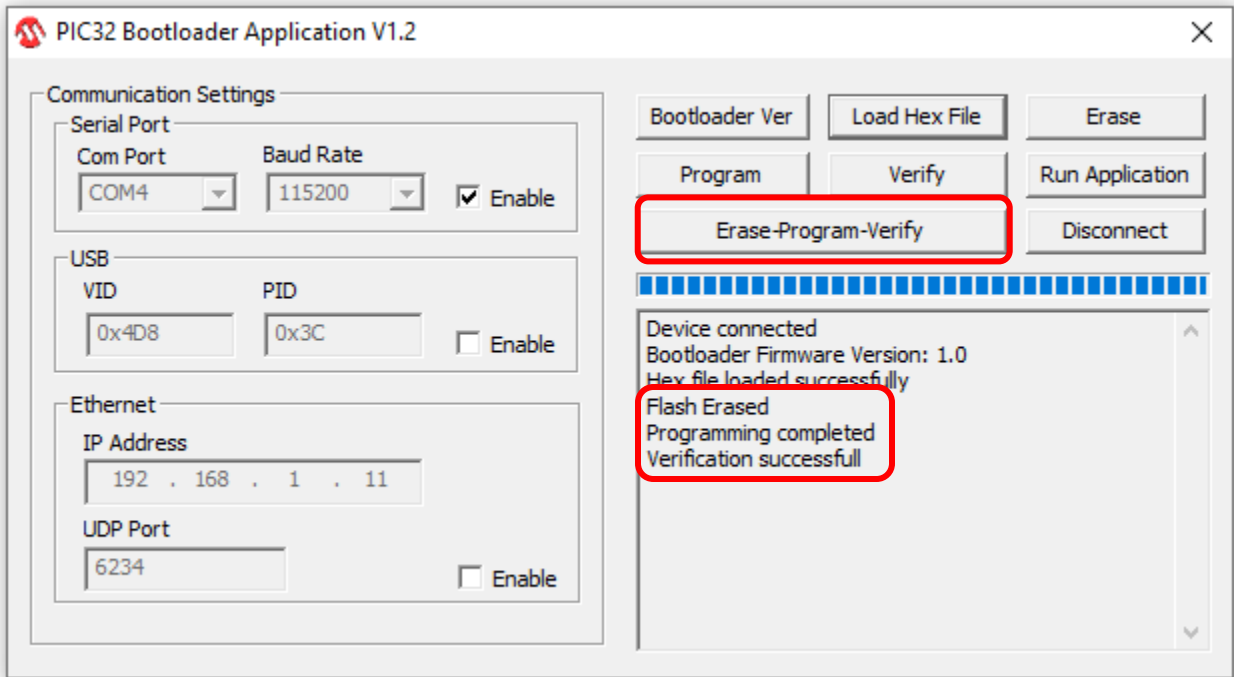
STEP 9: Press the DISCONNECT command button on PIC BOOTLOADER command screen

'Device disconnected' should appear

CLOSE PIC BOOTLOADER application)

STEP 10: CHECK FIRMWARE VERSION AND UPDATE FOR CV-P25200

POWER OFF CV-5200 power supply, wait 5 sec
POWER ON CV-5200 power supply, check firmware version on startup screen

Example only – actual versions may differ

NOTE: Some firmware version updates may require a MASTER RESET.

The indication of MASTER RESET required after firmware update will be 'lock out' from entry to Setup Mode using 4-digit password. Contact support@okinternational.com for assistance.

CONTACT:

OK INTERNATIONAL TECHNICAL SERVICE, USA

1 (714) 799-9910, ask for Tech Support

support@okinternational.com

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