

DETAILED CV-5200 FIRMWARE UPDATE LOADING INSTRUCTIONS

SECTION 1: DOWNLOAD FILES, INSTALL APPLICATION

STEP 1: DOWNLOAD PROGRAMMING FILES AND UPDATE HEXFILE

DOWNLOAD 3 ITEMS:

2. CV-5200 Firmware

1. AN1388 Source Code (application program) FILENAME: FIRMWARE-AN1388-Source-Code-2014_02_14.zip 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 >.

👺 Setup		_		×
License Agreement			d.	Ç
Please read the following Lic agreement before continuin	ense Agreement. You must accept the g with the installation.	terms of	f this	
MICROCHIP IS WILLING T DOCUMENTATION TO YOU O THE FOLLOWING TERMS. "I ACCEPT" AND PROCEEN NOT ACCEPT THESE LICEN NOT DOWNLOAD OR INSTAL INSTALLING THE SOFTWAR OF THIS ACCEPTED	O LICENSE THE ACCOMPANYING SO NLY ON THE CONDITION THAT YOU TO ACCEPT THE TERMS OF THIS I WITH THE DOWNLOAD OR INSTALI (SE TERMS, CLICK "I DO NOT ACC L THIS SOFTWARE. BY DOWNLOAD) E, LICENSEE AGREES TO BE BOUN	DFTWARE J ACCEP JICENSE JICENS	AND I ALL OF , CLICK YOU DO AND DO HE TERMS	Â
OF THIS AGREEMENT.				~
Do you accept this license? BitRock Installer	 I accept the agreement I do not accept the agreement 			
	< Back	Next >	Cano	el:



c. SELECT PATH FOR DIRECTORY INSTALLATION

Select a destination folder of choice for installation.

Setup	- 🗆 🗙
Install Directory	N
Please specify the directory where AN1388	Source Code will be installed
nstall Directory C:\AN1388_Source_Cod	e_2014_02_14
	Click the Folder icon to open Windows folder tree

Setup	In pop-up folder tree, scroll down to select destination path C:\Program Files then click < OK >				
Please specify the direct					
Install Directory C:\AN	11388_Source_Code_2014_02_14 👸				
	Browse for Folder X				
	Please choose a directory, then select OK.				
	C:\Program Files				
	Program Files				
BitRock Installer	MSOCache Mocache OneDriveTemp PerfLogs				
	> Program Files				
	> Program Files (x86)				
	SOLIDWORKS Data				
	> SWSETUP				
	OK Cancel				



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

😻 Setup	_		×
Ready to Install			C
Setup is now ready to begin installing AN1388 Source Code on	your compu	ter.	
BitRock Installer	Next >	Ca	ncel

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."

<pre>Image: Image: Imag</pre>								
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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.

-	℅ explorer	
		-
Best n	natch	
7	File Explorer App	File Explorer

Connection Validation (CV)™

Firmware Update Loading Instructions



-	Windows (C:)		Search Results in W	indows (C:) 👻	
			ٽ ~	PIC32UBL.exe	×
S	PIC32UBL.exe C:\Program Files\PIC32_Bootloaders\PC Application	Туре: А	pplication	Date modified: 8/10/2012 9:11 PM Size: 264 KB	
_	Send to >	8	Bluetooth device		
	Cut		Compressed (zipped) folder		
	Сору		Desktop (create shortcut)		
	Consta ale atout	<u></u>	Documents		
	Create shortcut		Fax recipient		
	Delete	-	Mail recipient		
	Kendme	=	U Drive (U:)		
	Properties	=	Y Drive (Y:)		

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



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.





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

Name	Date modified	Туре	Size
J 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.

-		0	
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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.

🛃 D	evice Manager	_	
File	Action View Help		
	📧 🔽 🗊 💻		
\rightarrow	🚡 Imaging devices		^
I →	🔤 Keyboards		
→	Memory technology devices		
>	Mice and other pointing devices		
>	Monitors		
>	🖵 Network adapters		
>	Other devices		
- v	Ports (COM & LPT)		
	USB Serial Port (COM4)		
	📇 Print queues		
	Processors		
	Security devices		
	E Sensors		
	Software components	EXAMPLE ONLY – ACTUAL PORT# MAY DIFFER	
	Software devices		
\rightarrow	Sound, video and game controllers		v .
	• •		

STEP 5: SELECT ACTIVE COM PORT# AND CONNECT TO CV-PS5200 USING PIC 32 Bootloader Application

Serial Port		Bootloader Ver	Load Hex File	Erase
Com Port Baud Ra	0 V Enable	Program	Verify	Run Applicatio
		Erase-Prog	gram-Verify	Connect
COM3 COM4 COM5 V 0x03C	Enable			
Ethernet				
IP Address 192 . 168 . 1	. 11			
UDP Port				



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.

-Serial Port		Bootloader Ver	Load Hex File	Erase
Com Port Baud Rate	Enable	Program	Verify	Run Applicatio
, <u> </u>		Erase-Pro	gram-Verify	Disconnect
VID PID				
0x4D8 0x3C	🗌 Enable	Device connected Bootloader Firmwa	are Version: 1.0	
Ethernet				
IP Address				
192 . 168 . 1 . 11				
UDP Port				

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

Connection Validation (CV)[™]

Firmware Update Loading Instructions



Country Data		Bootloader Ver	Load Hex File	Erase
COM4 V 115200 V	Fnable	Program	Verify	Run Applicatio
, _, _)• Endbic	Erase-Prog	ram-Verify	Disconnect
VID PID				
0x4D8 0x3C	Enable	Device connected Bootloader Firmwa	re Version: 1.0	
Ethernet				
IP Address				
192 . 168 . 1 . 11				
UDP Port				

c. Highlight the updated hex file and click Open

🚳 Open				×
Look in:	CV5200r1_	60_23 💌	🗢 🗈 📸 🎫	
Quick access Desktop Libraries This PC	Name	60_23.hex	Date modified 11/22/2022 8:19 AM	Type HEX F
Network	< File name: Files of type:	CV5200r1_60_23 Hex File (*.hex) Open as read-only	• C	> Dpen ancel

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

Connection Validation (CV)™

Firmware Update Loading Instructions

Com Port Baud Rate	l e . u	Bootloader Ver Load Hex File Program Verify	Erase
	I I Enable	Erase-Program-Verify	Disconnect
-USB			
VID PID			
VID PID 0x4D8 0x3C	🗍 Enable	Device connected Bootloader Firmware Version: 1.0	,
VID PID 0x4D8 0x3C Ethernet	Enable	Device connected Bootloader Firmware Version: 1.0 Hex file loaded successfully	
VID PID 0x4D8 0x3C Ethernet IP Address	T Enable	Device connected Bootloader Firmware Version: 1.0 Hex file loaded successfully	
VID PID 0x4D8 0x3C Ethernet IP Address 192 . 168 . 1 . 11	T Enable	Device connected Bootloader Firmware Version: 1.0 Hex file loaded successfully	
VID PID 0x4D8 0x3C Ethernet IP Address 192 . 168 . 1 . 11 UDP Port	Enable	Device connected Bootloader Firmware Version: 1.0 Hex file loaded successfully	

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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

Connection Validation (CV)™

Firmware Update Loading Instructions



Serial Port		Bootloader Ver Load Hex File	e Erase
Com Port Baud Rate		Program Verify	Run Application
		Erase-Program-Verify	Disconnect
VID PID			
0x4D8 0x3C	Enable	Device connected Bootloader Firmware Version: 1.0	P
Ethernet		Flash Erased	
		Programming completed	
IP Address		Verification successful	
IP Address		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

Connection Validation (CV)[™]

Firmware Update Loading Instructions





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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