



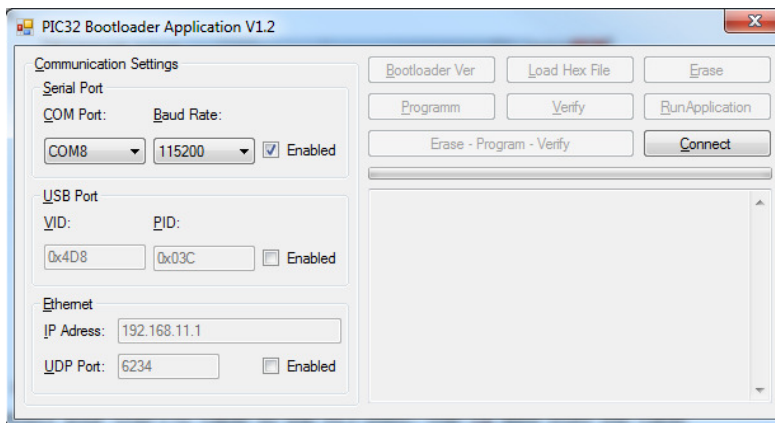
Tutorials: Updating the PLT-2001 firmware

What you need

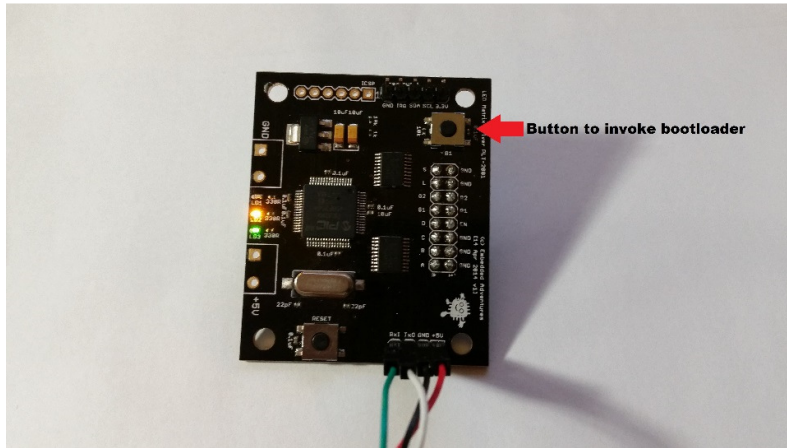
- USB-TTL Serial cable
- PLT-2001 Uber LED Matrix Display Driver
- PIC32 bootloader program
- PLT-2001 hex file

Instructions

1. Open the bootloader application (PIC32 UBL).
2. Select your COM port, select "115200" for speed, and check the "Enabled" box.

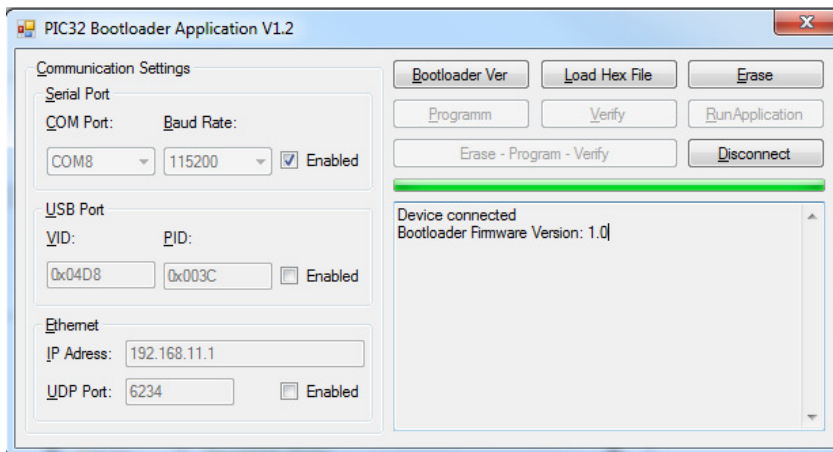


- a.
3. Connect your USB-TTL cable to the PLT-2001. The Tx wire from the cable should be attached to the RX pin on the PLT-2001 and the Rx wire from the cable to the TX pin on the PLT-2001.
 - a. Invoke the bootloader by holding down the B1 button and pressing RESET, then releasing B1. The middle LED should be lit.



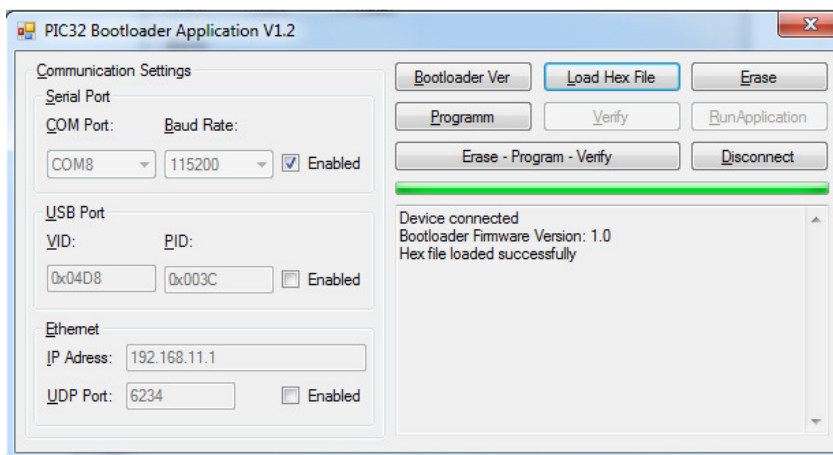
b.

4. Click on "Connect" to begin the connection between the bootloader and your PLT-2001. On the output window, it should say that the device connected and the bootloader firmware version.



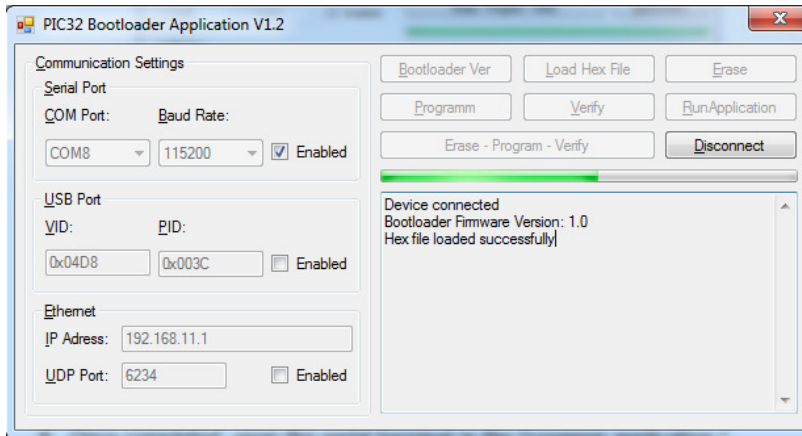
a.

5. Click "Load Hex File" and select the PLT-2001 firmware hex file. The output should print "Hex file loaded successfully".

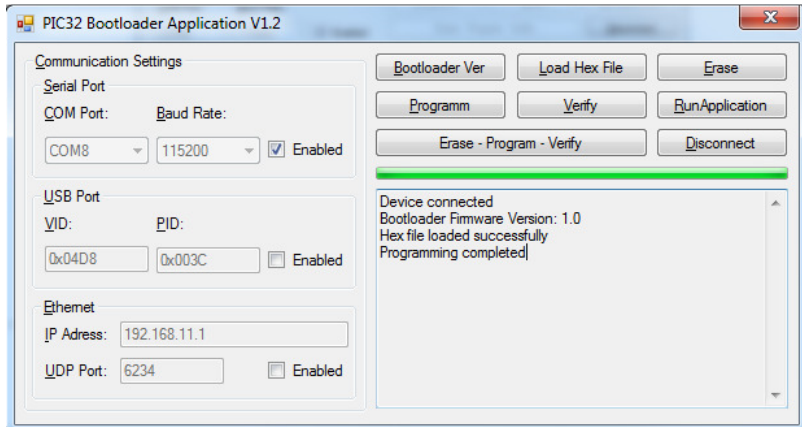


a.

- Press the "Programm" button. The progress bar should begin turning green. If it doesn't, follow step 3a invoke the bootloader again. The second photo shows the window after the hex file has been successfully downloaded.

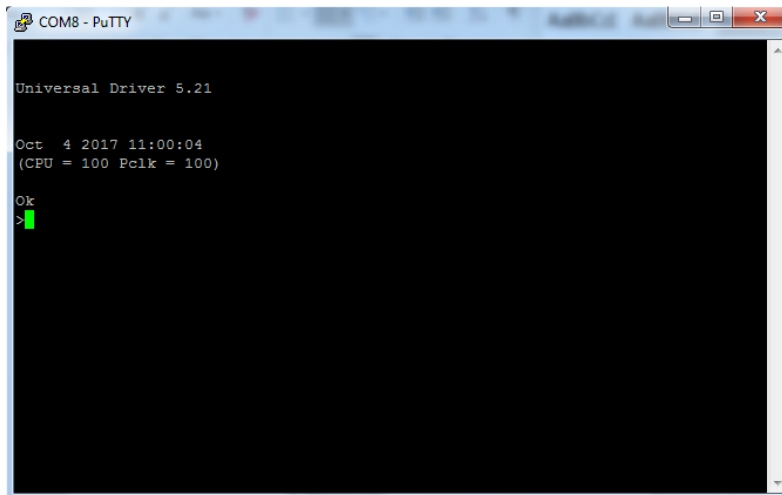


a.



b.

- Once completed, close the bootloader application and open your serial terminal program of choice. Remember that baud rate is 115200.
- Verify that the update was successful by pressing the Reset button on the PLT-2001. The firmware should be printed as in the image.



```
COM8 - PuTTY
Universal Driver 5.21

Oct 4 2017 11:00:04
(CPU = 100 Pclk = 100)

Ok
>
```

a.

If you have any problems, drop us a note at support@embeddedadventures.com.

Version

Doc Version	Date	Comments
1	16 Oct 2017	Initial Version PLT-2001 v1 and firmware version 5.21