

Tutorial

USB AVR Programmer

In this tutorial, you will how to use the USB AVR Programmer for programming your xBoard™ MINI AVR development board.

Step I

Connect the USB Programmer to your PCs USB port. Make sure you connect it to that USB port in you installed it during its installation. Wait for a "ding" sound from PC. Now the programmer is installed correctly. The **GREEN LED** will glow to show programmer is ready.

Note

If windows says "USB Device not recognized" make sure the USB cables are not broken.

Note

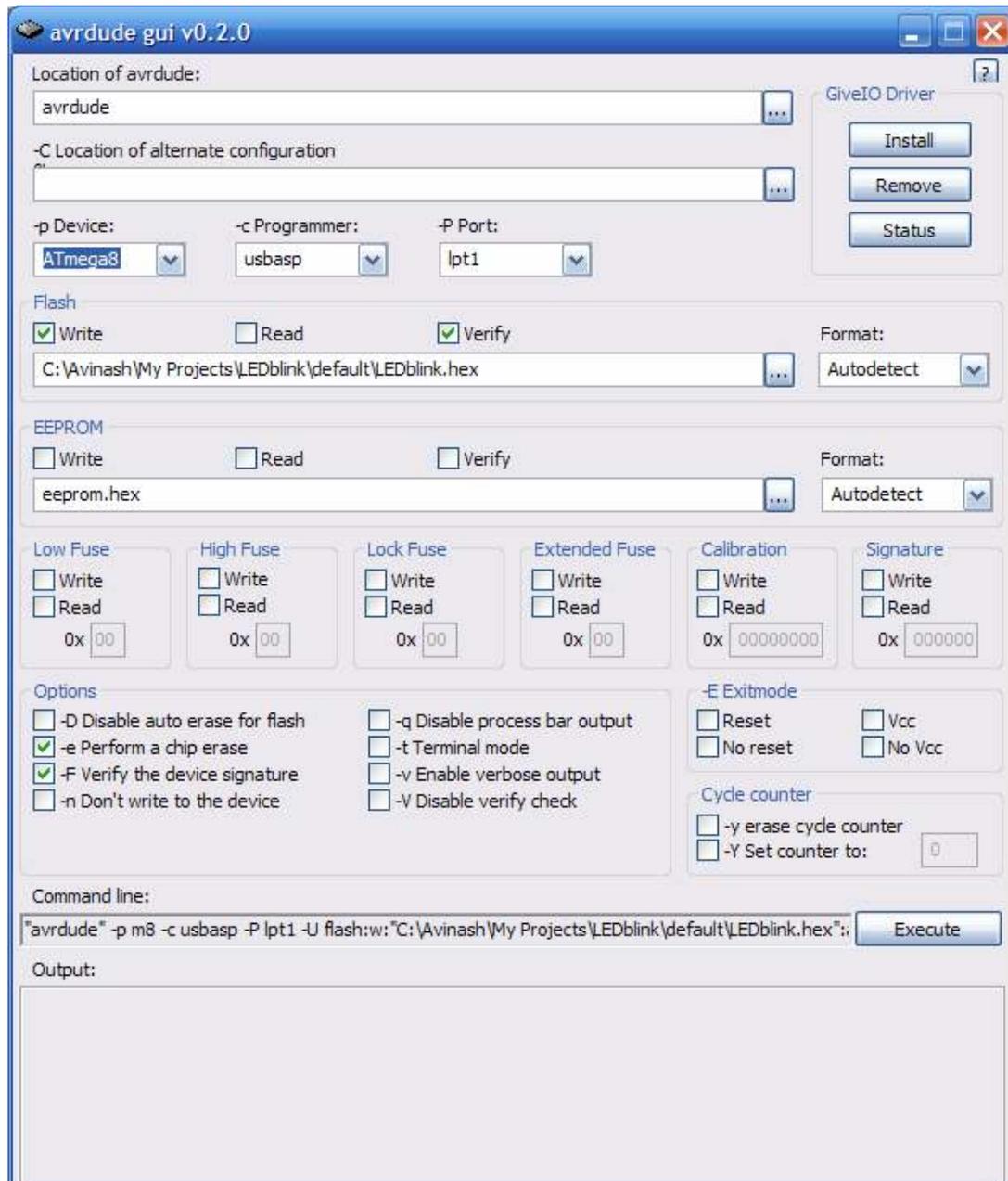
If windows says "New hardware found" you have connected the programmer to a different port than which you have installed. Or you have not yet installed the programmer ! Please see installation instruction in this CD.

Note

Please disconnect the Programmer after programming to ensure that your computer is safe.

Step II

Goto the directory/folder in which you have copied "avrdude" and start the avrdude-gui.exe in that folder. You will get a screen similar to the image shown below.



avrdude-gui program screen-shot.

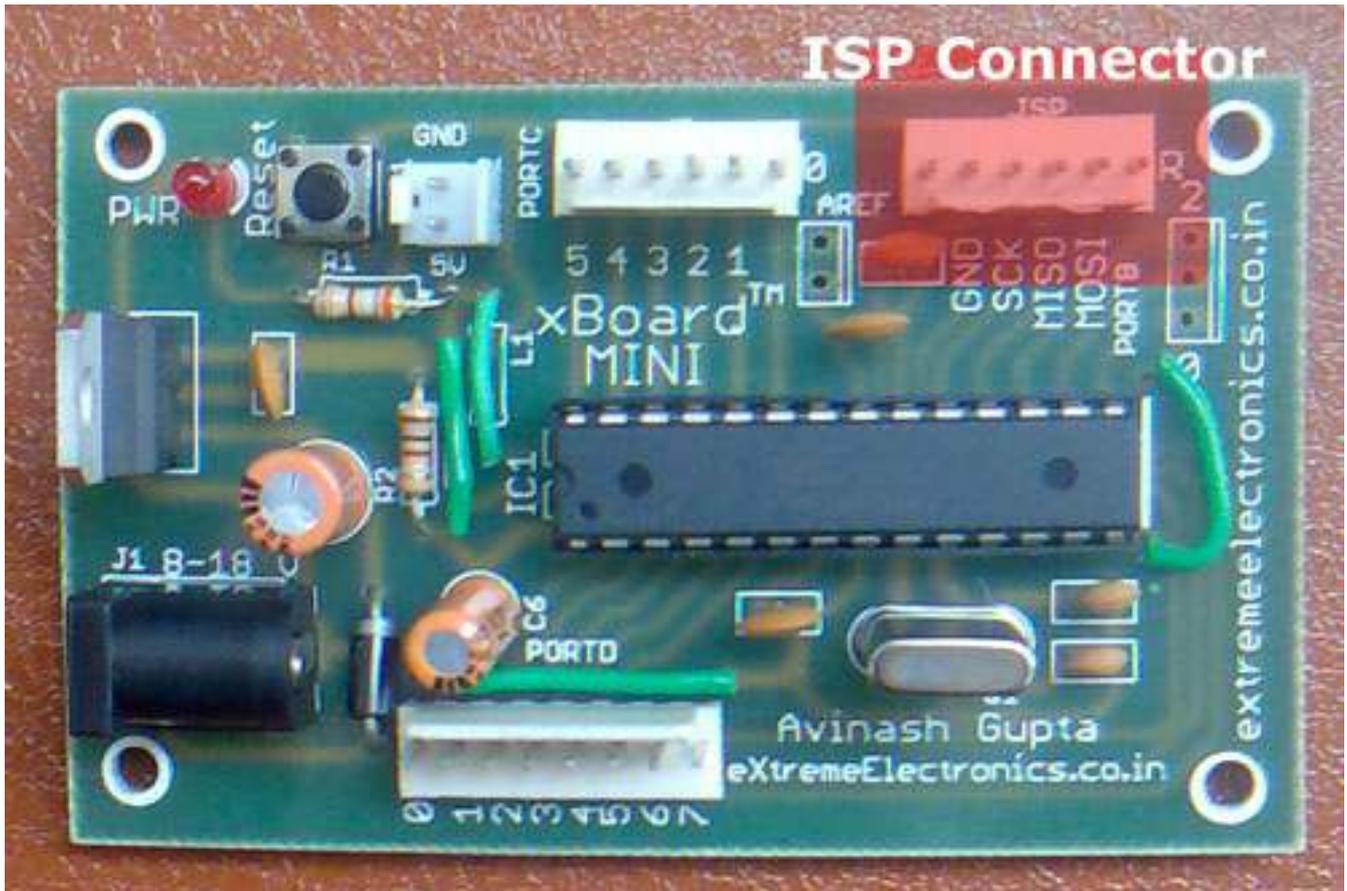
The software is very easy to use. Actually it is a front-end for a popular command line tool called avrdude.

Make the following settings.

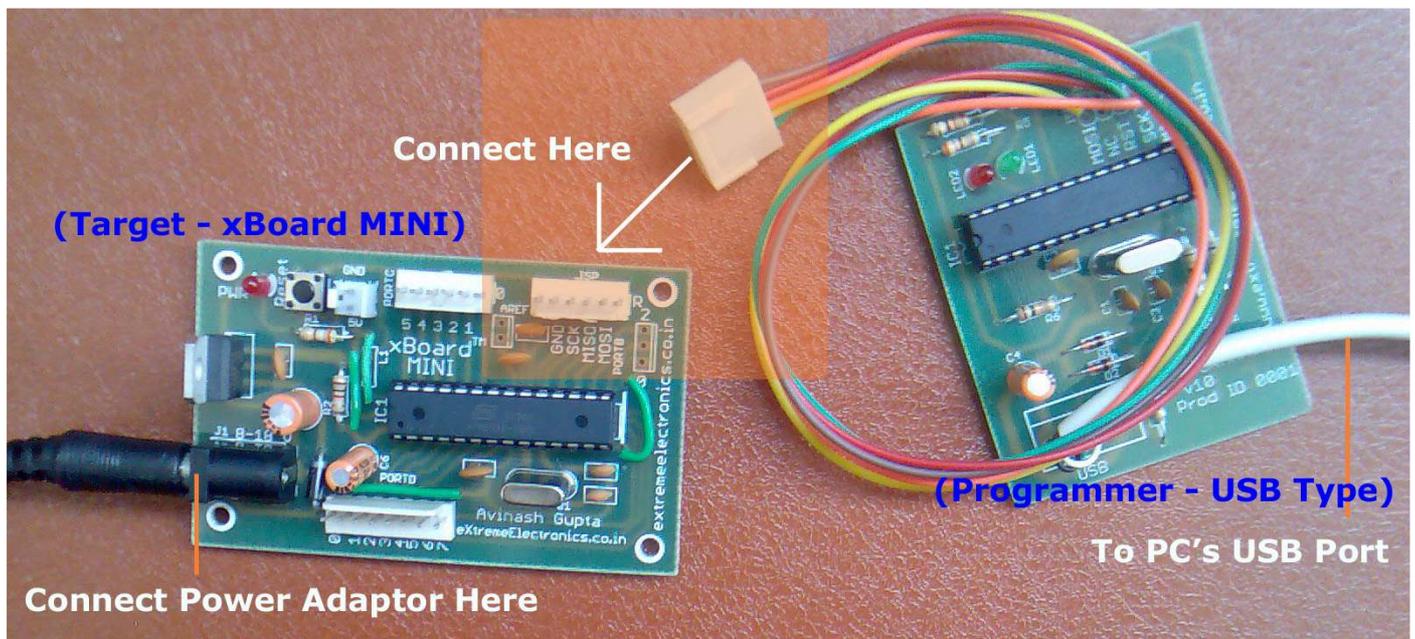
- Device: Select the appropriate AVR microcontroller you are using. In this case use Atmega8
- Programmer: "usbasp"
- Port: This option is not important for USB programming leave it anything.
- Flash: Select the hex file you want to program by clicking browse button. make sure "write" and "verify" options are selected. Leave the format as "Autodetect"
- EEPROM: If you want to program the on-chip EEPROM select a file here.
- Options:
 - Perform a chip erase.

- Verify the device signature.

Now connect the programmer to xBoard MINI via the ISP connector.

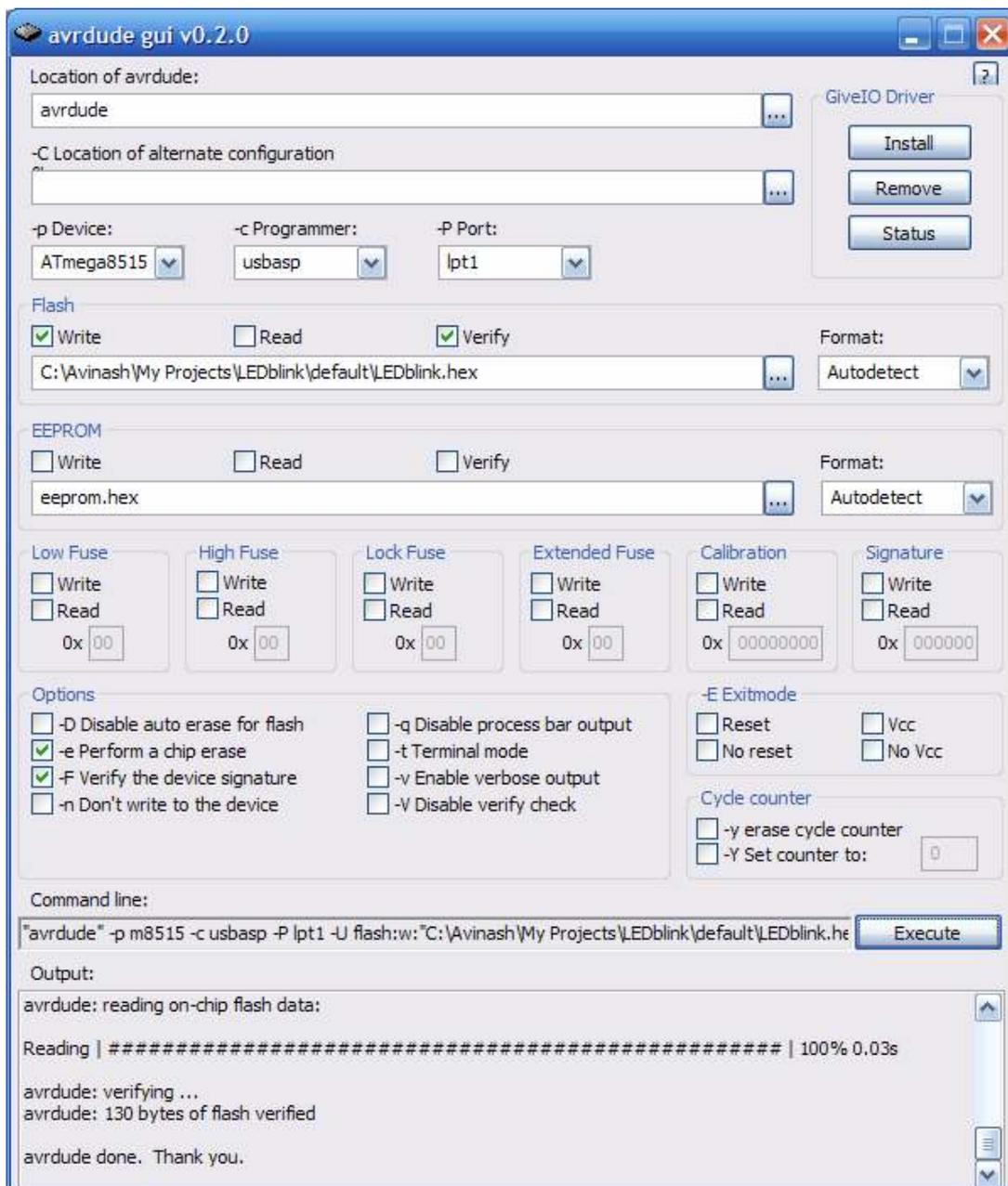


ISP Connector on xBoard™ MINI



Connecting the programmer and the xBoard™ MINI

Next connect the power supply to xBoard and switch it on. Now everything is set, click "Execute" to burn the device. While burning the **RED LED** will glow indicating BUSY state. If everything is setup properly, you will get the following message.



Success !!!

Now your chip is programmed successfully. Please disconnect the programmer from the target and your PC.

Note

For troubleshooting please see *troubleshooting.pdf* in the help folder in the CD.