

Installing USBasp in Atmel Studio ver.6.2

Version 09.11.2014

(based on <http://dthoughts.com/blog/2014/04/09/interfacing-usbasp-programmer-with-atmel-studio>)

1. Installing USBasp programmer and AVRDUDE

This will be a quick tutorial on how to install USBasp Programmer in Atmel Studio.

First we need the Driver software for USBasp. Here is the link to download the software:

<http://www.fischl.de/usbasp/usbasp-windriver.2011-05-28.zip>

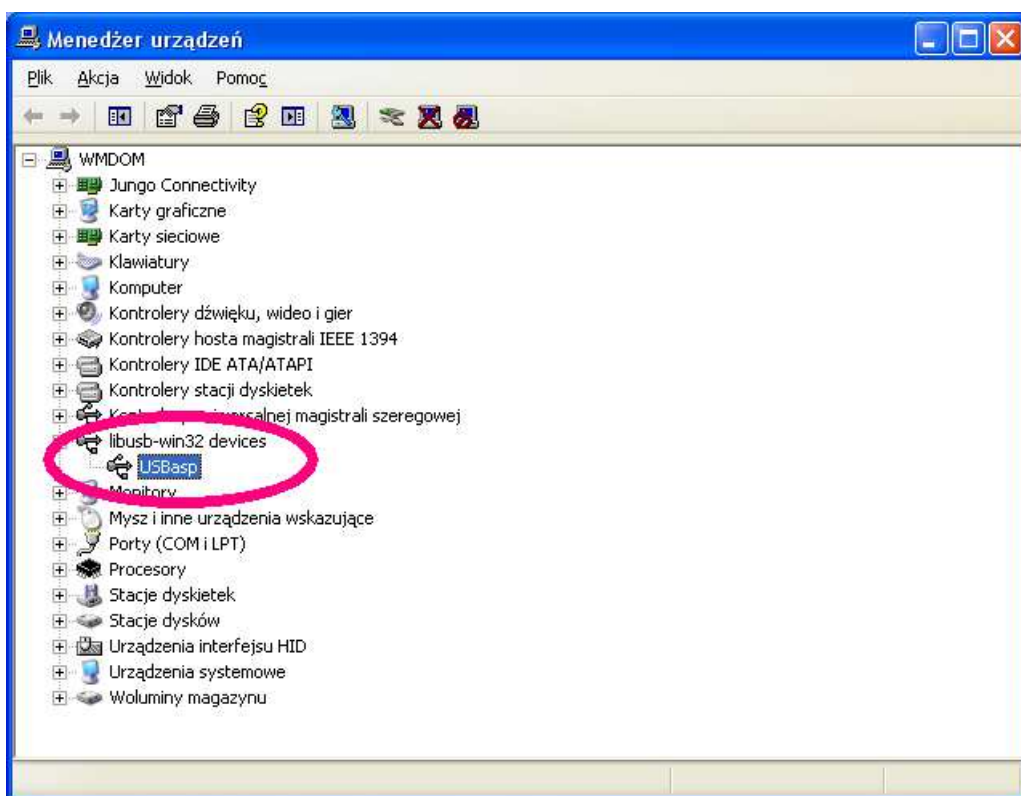
How to use USBasp under Linux or MacOS X <http://www.fischl.de/usbasp>.

How to install driver for WIN8 and WIN8.1

WIN 8 (<http://letsmakerobots.com/node/36841>)

WIN8.1 (<http://openchrysalis.wordpress.com/2014/09/26/installing-usbasp-driver-software-in-windows-8-1/>)

More information about AVR and USBasp with AVRDUDE (AVR Programming with USBasp - <http://dthoughts.com/blog/2014/04/04/avr-programming-with-usbasp>)



Next, you are going to need to install some software - AVRDUDE, for version 6.1 (<http://download.savannah.gnu.org/releases/avrdude/avrdude-6.1-mingw32.zip>). Make sure you put the AVRdude (two files: avrdude.exe i avrdude.conf) somewhere where you aren't going to move it because if you do, it will break the metod.

PDF file about AVRDUDE 6.1 (<http://mirror2.klaus-uwe.me/nongnu//avrdude/avrdude-doc-6.1.pdf>).

2. Configuration Atmel Studio

Open Atmel Studio and go to the **Tools** menu and click on **External tools** and click on **"ADD"** (Menu -> **Tools -> External Tools**). The commands in the capture are listed below the image.

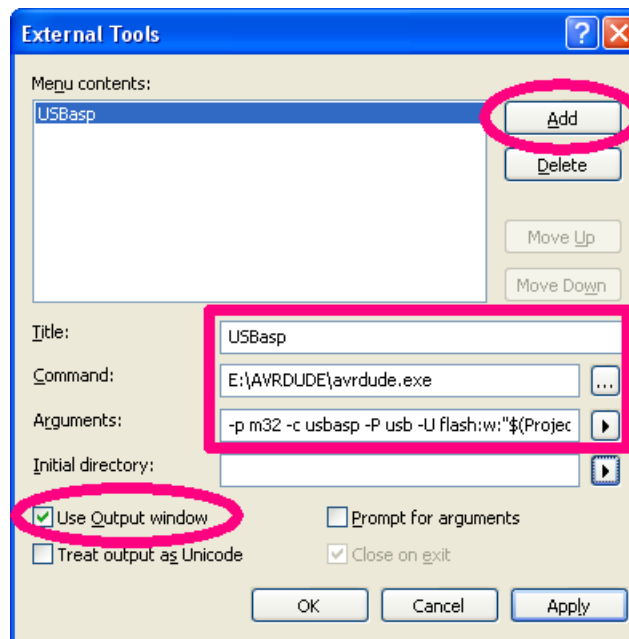
For quick and easy copy pasta, the commands are right here: E:\AVRDUDE\avrdude.exe. The command field is where your avrdude.exe is located.

Title: **USBasp**

Command: **E:\AVRDUDE\avrdude.exe**

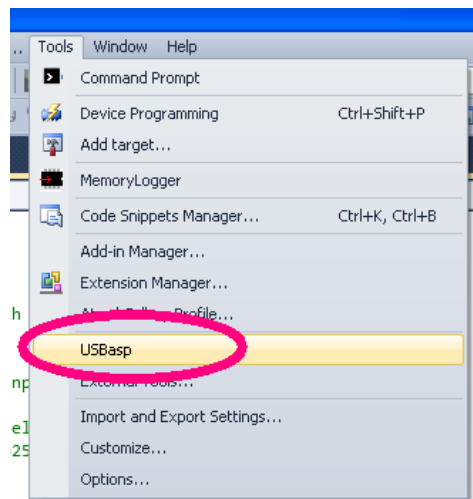
Arguments: **-p m32 -c usbasp -P usb -U flash:w:"\$(ProjectDir)Debug\\$(ItemFileName).hex":i**
(arguments are for ATMEGA32)

Dont forget to check **Use output window** and Prompt for arguments (optional). After adding these entries your external tools window will look like this. Press OK.

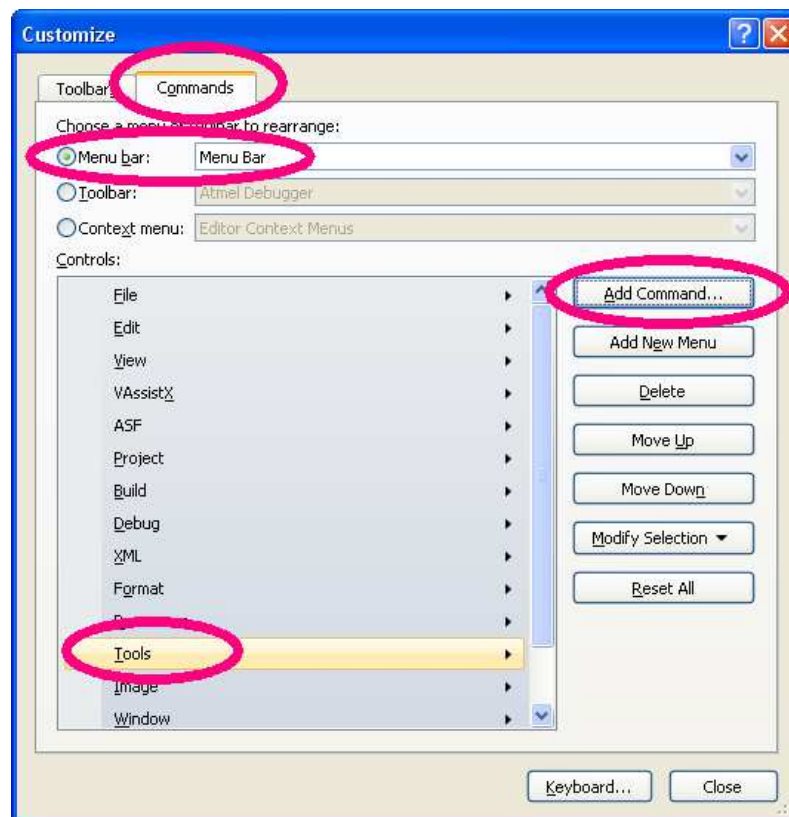


Note that you do have to "Build" (or press F7) your project before you can program with these programmers (that may be with anything too though) so don't forget to do that!

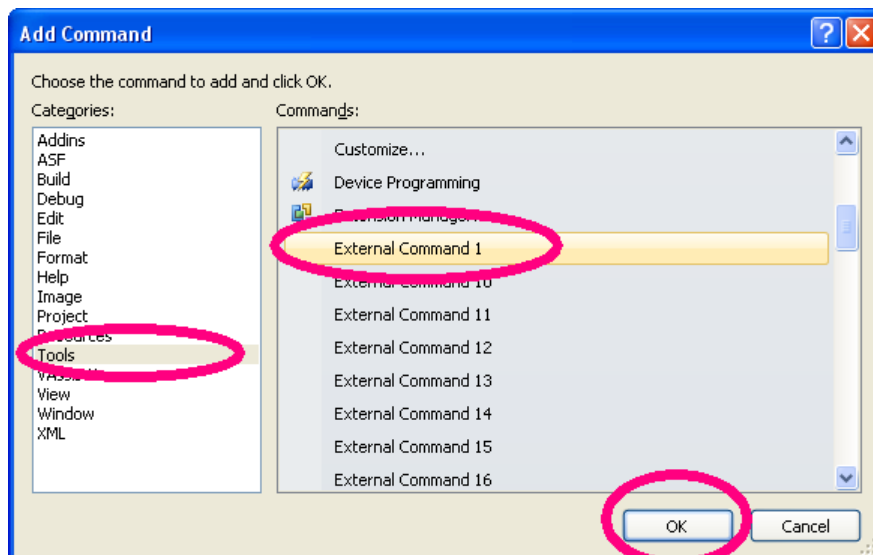
Now if you press **Tools** and **USBasp** you can see the USBasp will burn the hex to flash. You can see the messages in Atmel Studio's output window.



You can also put USBasp in the main menu. Select **Tools -> Customize** and select the **Commands** tab and select the options menu bar, **Tools** and **Add Command**.



In the **Add Command** window, select **Categories -> Tools** and in **Commands** window -> **External Command 1**, then press **OK**.



In the main menu there is USBasp function.



Note that you do have to “Build” your project before you can program with these programmers (that may be with anything too though) so don’t forget to do that!

Output Window during programming.

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Output
Show output from: USBasp

avrdude.exe: AVR device initialized and ready to accept instructions

Reading | ##### | 100% 0.02s

avrdude.exe: Device signature = 0x1e9502
avrdude.exe: NOTE: "flash" memory has been specified, an erase cycle will be performed
To disable this feature, specify the -D option.
avrdude.exe: erasing chip
avrdude.exe: reading input file "D:\Erasmus\test2014\test2014\Debug\test2014.hex"
avrdude.exe: writing flash (150 bytes):
|
Writing | ##### | 100% 0.09s

avrdude.exe: 150 bytes of flash written
avrdude.exe: verifying flash memory against D:\Erasmus\test2014\test2014\Debug\test2014.hex:
avrdude.exe: load data flash data from input file D:\Erasmus\test2014\test2014\Debug\test2014.hex:
avrdude.exe: input file D:\Erasmus\test2014\test2014\Debug\test2014.hex contains 150 bytes
avrdude.exe: reading on-chip flash data:

Reading | ##### | 100% 0.08s

avrdude.exe: verifying ...
avrdude.exe: 150 bytes of flash verified

avrdude.exe: safemode: Fuses OK (E:FF, H:C9, L:EF)

avrdude.exe done. Thank you.

```