Installing USBasp in Atmel Studio ver.7
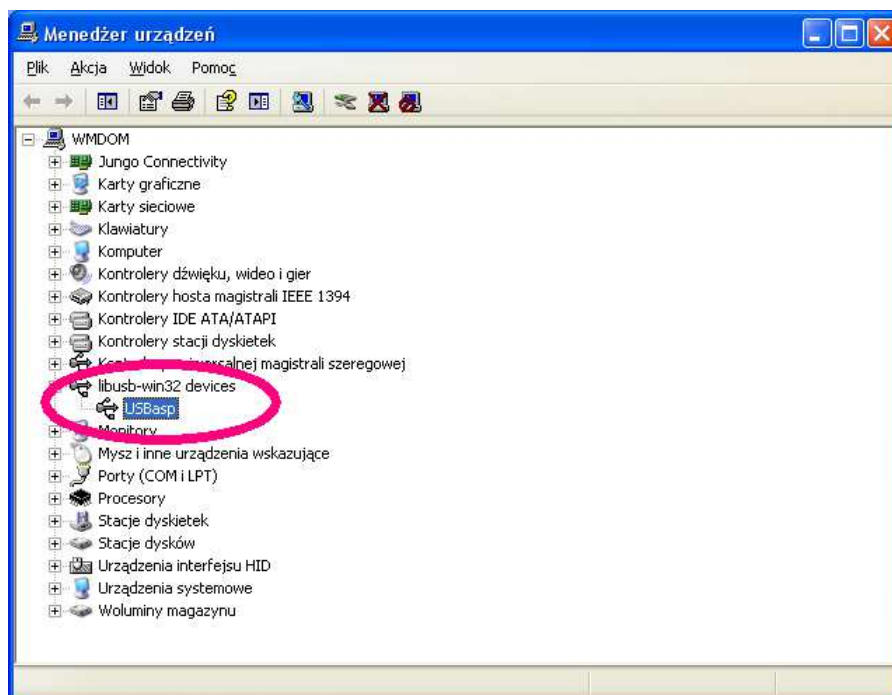
Version 28.11.2015

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

1. Installing USBasp driver and AVRDUDE

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

a) Download USBasp drivers here- http://www.fischl.de/usbasp/usbasp-windriver.2011-05-28.zip and extract it somewhere on your PC/Laptop.

b) Now connect your USBasp programmer to the USB port of your PC/laptop. Ignore the message that 'Device driver software was not successfully installed'.

c) Go to Device Manager in control Panel and you will find 'LibUSB-Win32 Devices'. Click on it and select 'Update Driver Software...'

d) Select 'Browse my computer for driver software'. After this browse to the location where you have extracted the USBasp drivers. (select usbasp-windriver.2011-05-28\usbasp-windriver.2011-05-28\libusb_1.2.4.0). Don't forget to check the "include subfolders" box.

e) Click next and ignore the security warning 'Windows can't verify the publisher of this driver software' and select 'Install this driver software anyway'.

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

Device Manager Control Panel

How to use USBasp under Linuxa 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   (https://openchrysalis.wordpress.com/2014/09/26/installing-usbasp-driver-software-in-windows-8-1/)

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 and avrdude.conf) somewhere where you aren't going to move it because if you do, it will break the method.

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**
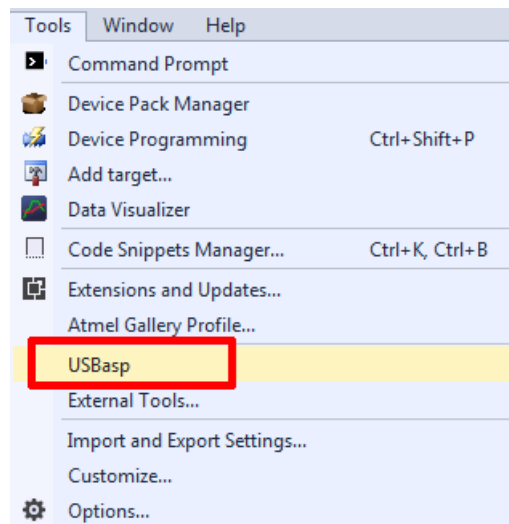Command: **E:\AVRDUDE\avrdude.exe**
Arguments: **-p m32 -c usbasp -P usb -U flash:w:"$(ProjectDir)Debug\$(TargetName).hex":i**
(arguments are for ATMEGA32)

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.
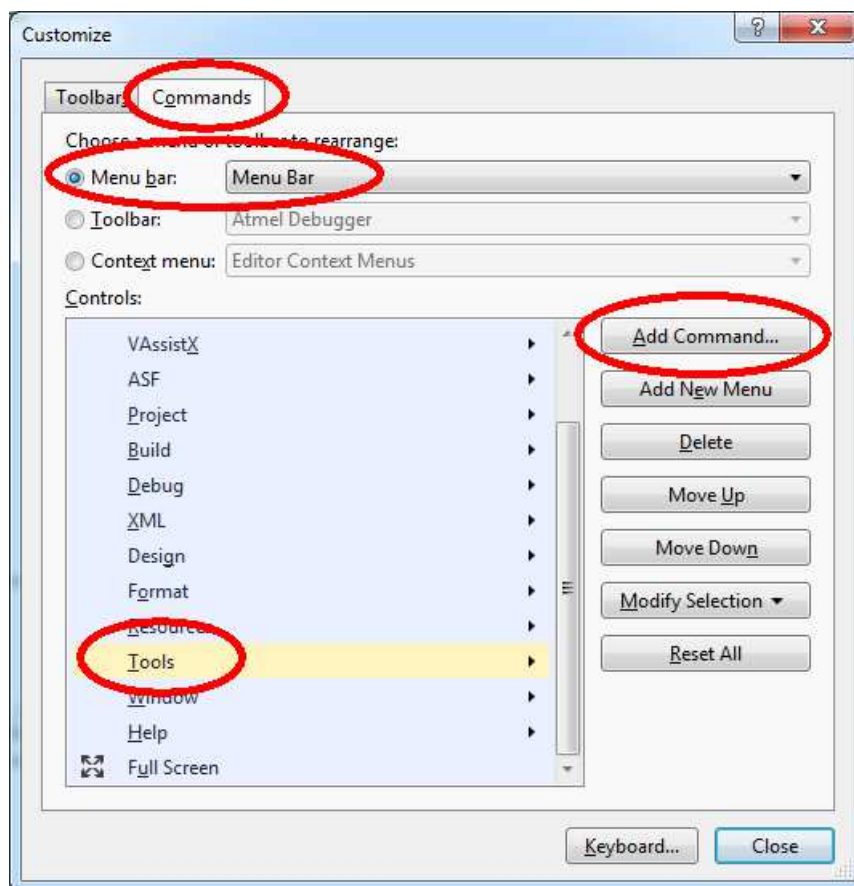

Note that you do have to "Build" (or press F7) your project before you can program with these programmers (that may be with anything too though) so don't forget to do that!
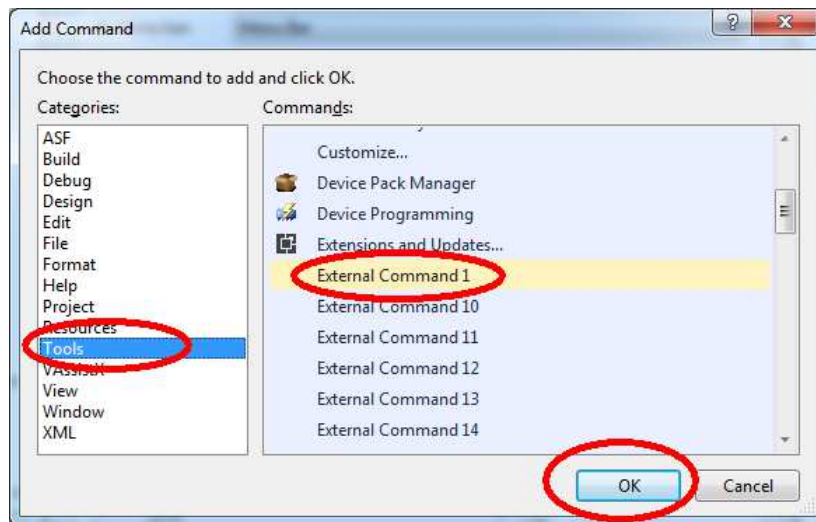
Now if you press **Tools** and **USBasp** you can see the USBasp will burn the hex to flash. You can see the messages in Atmel Studio's output window.
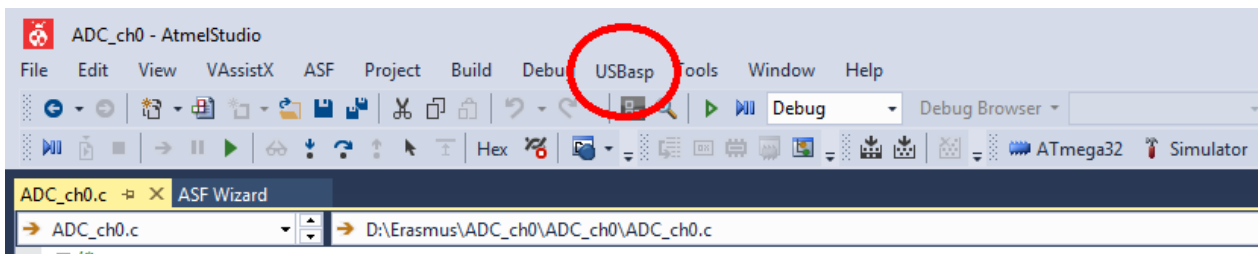
You can also put USBasp in the main menu. Select **Tools -> Customize** and select the **Commands** tab and select the options menu bar, **Tools** and **Add Command**.

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.