

Step 1: Download and Install WinAVR

- Download WinAVR from the official Source Forge page <https://sourceforge.net/projects/winavr/>
- Run the installer and follow the on-screen instructions to install WinAVR. Make sure to note the installation directory.

Step 2: Install USBASP Driver

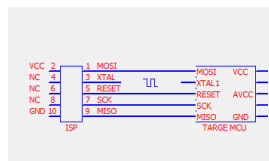
- Download the USBASP driver from <https://deviceinbox.com/drivers/913-usbasp-isp-usb-programmer-for-atmel-avr-controllers-drivers.html>.
- Follow the driver installation instructions provided on the website. This typically involves running an installer executable and connecting the USBASP programmer when prompted.

Step 3: Download and Install progISP

- Download progISP from the provided link: <https://www.phippselectronics.com/support/prog-isp-software/>
- Extract the downloaded ZIP folder to a location on your computer.

Step 4: Connect Hardware

- Connect the USBASP programmer to a USB port on your computer.
- Connect the USBASP programmer to the target AVR microcontroller using the appropriate connectors.



Step 5: Flashing Code

- Open the progISP software you extracted earlier.
- In progISP, select the USBASP programmer from the available options.
- Load your HEX file in progISP.
- Connect the USBASP programmer to the target AVR microcontroller.
- In progISP, select the target AVR microcontroller model from the supported devices list.
- Erase the microcontroller's flash memory using the "Erase" button in progISP.
- Program the microcontroller with your HEX file using the "Program" button in progISP.
- Verify the programmed code against the HEX file using the "Verify" button in progISP.
- Once programming and verification are successful, disconnect the USBASP programmer from the microcontroller.

