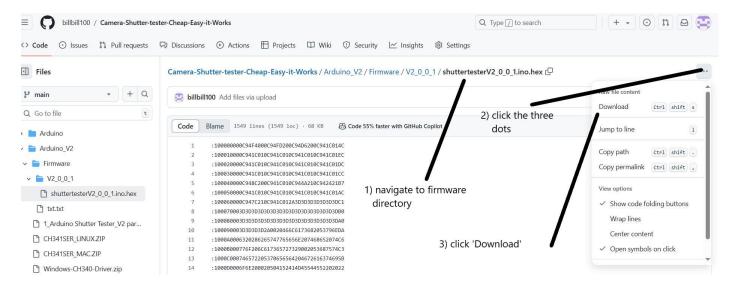
Arduino Shutter Tester Version 2 Firmware Load

If not already done so, download the code from the github page.

Navigate to the firmware directory on Github

<u>Camera-Shutter-tester-Cheap-Easy-it-Works/Arduino V2/Firmware at main · billbill100/Camera-Shutter-tester-Cheap-Easy-it-Works</u>

- 1) select the directory with the required firmware. Inside, the firmware file will be listed something like 'shuttertesterV2_0_0_1.ino.hex' Click on this file and the screen should fill with hex code as shown below
- 2) click on the three dots, top right, to open the sub-menu
- 3) click 'download'



Flashing firmware onto the Arduino Board.

A program called AVRDUDESS is required. This is included in this Github page, or can be downloaded from

Release v2.18: 🕰 · ZakKemble/AVRDUDESS

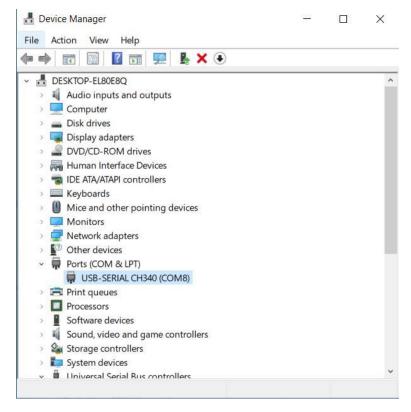
Note Windows will complain about it being unknown & possibly unsafe. You will need to click the top right of the download box and select 'keep'.

Watch this video, from 2.30 to 5.15

https://youtu.be/Wcaql0jtlUg

It explains how to load the .hex file onto your Arduino. Watch the video first, then read the below before trying to load the .hex file to your Arduino. *Ignore the first & last part of the video, it is not relevant. Watch between 2.30 and 5.15*

At 3.31, connect your Arduino to your computer using an appropriate USB cable. The drop-down menu in AVRDUDDESS should find the correct com port, if not, go to Device Manager (press Windows Key + x then select Device Manager) on your computer to find which com port has ben assigned to the Arduino board.



Device Manager showing Com port Arduino is connected to.

Note: - If the correct driver is not on your computer, you will need to download and install it. Most Chinese Nano clones use the CH340 driver

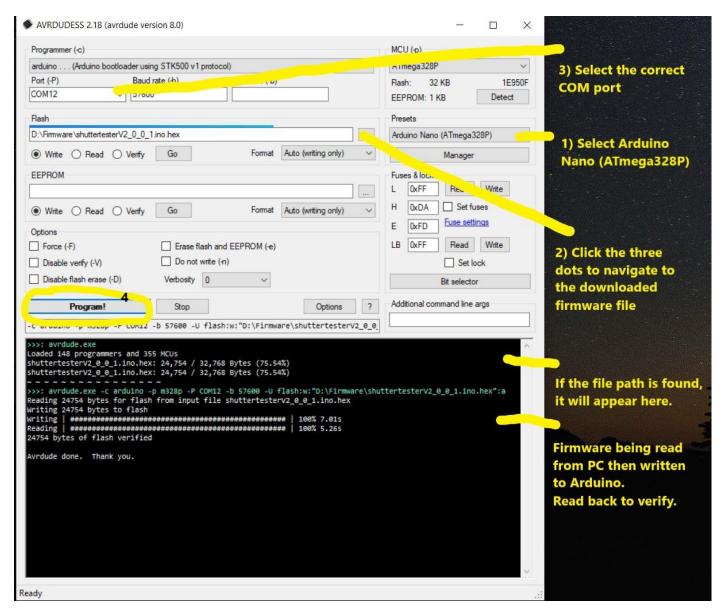
At 3.34 this is where you browse to your downloaded and un-zipped code download and select one of the .hex files

A4 4.18 'Arduino Uno (Atmega328P) is selected in the preset box. As Saravanan says this is very important ***. You will also notice, when selecting this, the comport changes to 1 and the file path disappears.

BE SURE to select the correct COM port and file path again.

Note: - Most Chinese Nano boards have the old bootloader loaded, thus 'Arduino Uno (Atmega328P);

If the program finds the Arduino board but firmware flashing fails, try changing the preset to **Arduino Uno** (**ATmega328P**), especially if using a genuine Arduino board.



Loading software as Nano (old bootloader)

- 1) Select Arduino Nano (ATmega328P) in the Preset Box.
- 2) Select the path to the downloaded firmware by clicking on the thee dots & navigating to the downloaded firmware
- 3) Select the correct Com port.

Double check the above, as sometimes the Com port will change.

If the firmware file has been found, it is shown in the lower black window.

4) Now click Program!

The black screen should now show the firmware being read and then written to the Arduino board.

It is then read back from the Arduino to verify.

Screenshot below shows flashing of firmware failing, as wrong preset has been selected.

