

CH34x Driver Installation on macOS

1. Connect the ESP32/ESP32S3 board to your computer.
Remember to remove other components from the breadboard first if you are using the Starter kit.

Remove the Chips

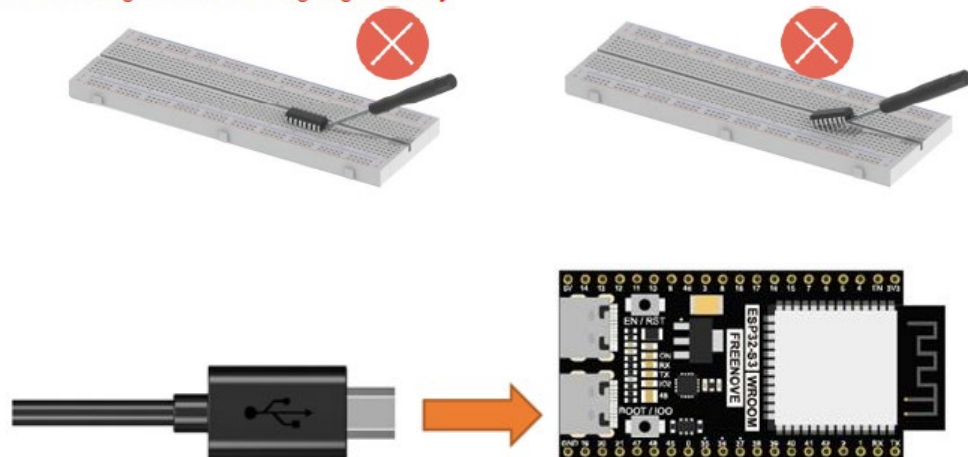
Some chips and modules are inserted into the breadboard to protect their pins.
You need to remove them from breadboard before use.
Please find a tool (like a little screw driver) to handle them as below:

Step 1, lift **one end** slightly.

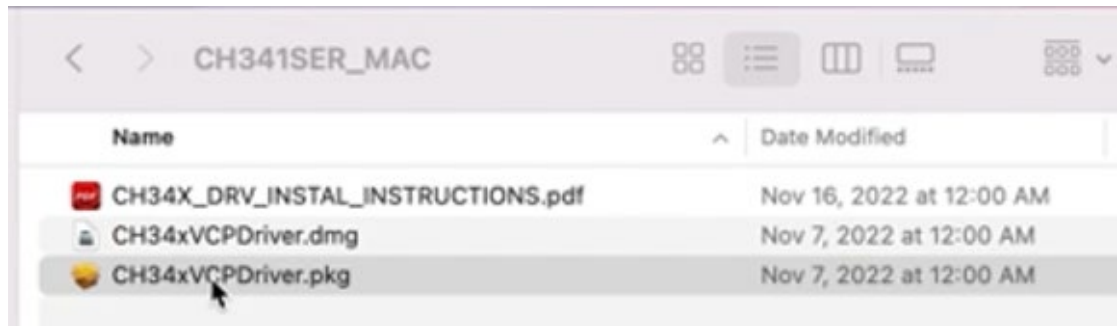
Step 2, lift **the other end** slightly.

Step 3, take off the chip with your hand.

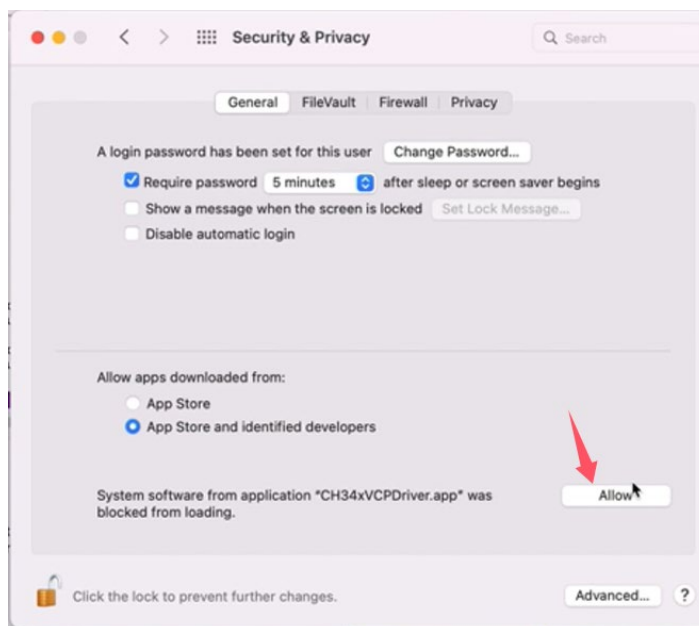
Avoid lifting **one end** with **big angle** directly.



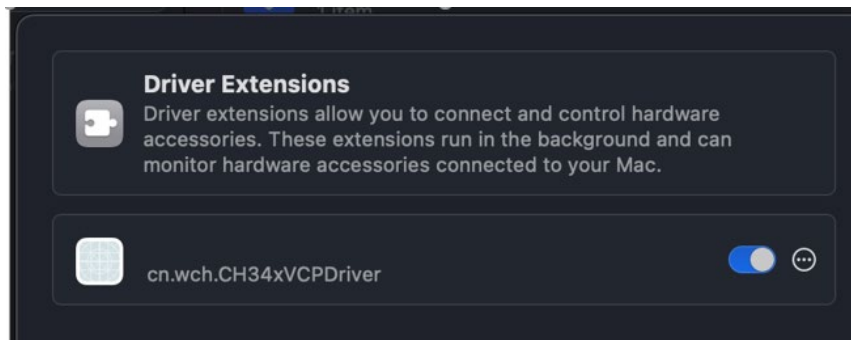
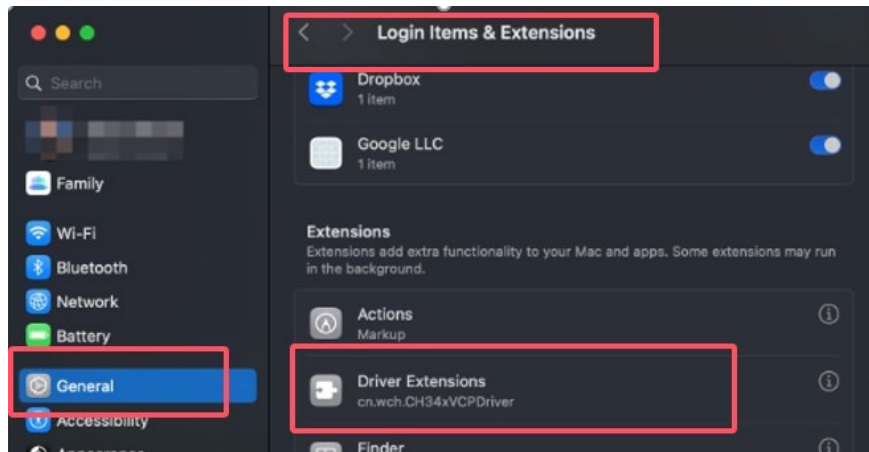
2. Download the ch34x driver from WCH official.
https://www.wch-ic.com/downloads/CH34XSER_MAC_ZIP.html
3. Open the CH34xVCPDriver.pkg to install the driver.



If it is blocked, please open Security Preferences to allow it.



If your OS is Sequoia 15.0.1 and above, please go to System settings - General - login items - extensions to enable the driver.



4. Run `ls /dev/cu.wchusbserial*` to check the port. The port `/dev/cu.wchusbserialxxx` is the one to select on Arduino IDE.

```
freenove --zsh -- 96x24
Last login: Thu Jan  2 17:24:27 on ttys000
freenove@PandeMacBook-Air ~ % ls /dev/cu*
/dev/cu.Bluetooth-Incoming-Port /dev/cu.wchusbserial14230
/dev/cu.usbserial-14230
freenove@PandeMacBook-Air ~ %
```

