# Installation

To program the microcontrollers (Teensy 3.5 and ESP32), you need to install PlatformIO IDE as an extension in Visual Studio Code. To install it, click on the extensions icon and then search for **PlatformIO IDE** and then install it. After the installation a new icon will be added to the icon bar of Visual Studio Code(🐜). If you click on this icon, you get a menu list.

New Project For Teensy 3.5

To create a new project for Teensy 3.5, click on the **platformio icon** and then click on **Open**, then the PIO Home is opened.
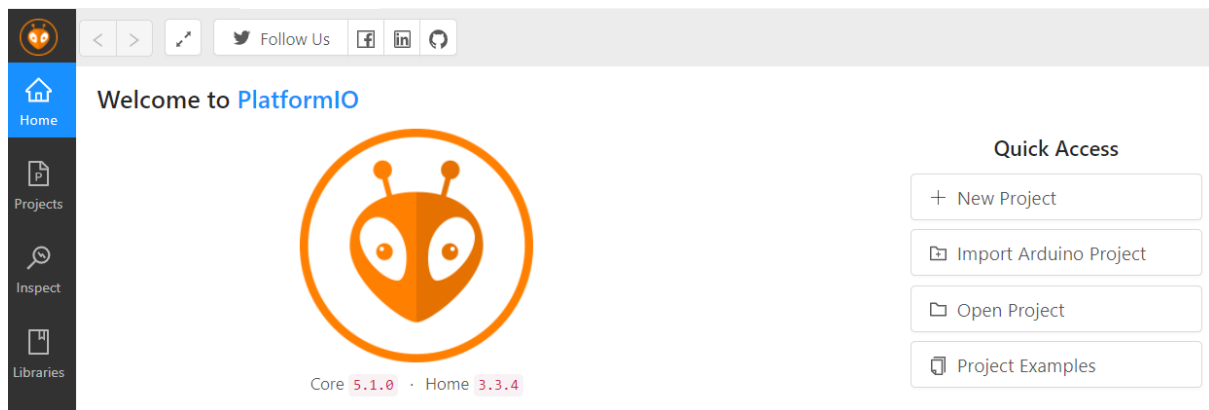
 If you click on **New Project**, a window is opened. In this window, there are three boxes. The first one is a box to enter the name of the project. In the second box, you can select the board and you need to select **Teensy 3.5**. And in the last box, you need to select **Arduino** as the framework.

Then click on finish and wait until the project is created. For the first time it takes a few minutes.

New Project For ESP32

To create a new project for ESP32, click on the **platformio icon** and then click on **Open**, then the PIO Home is opened.
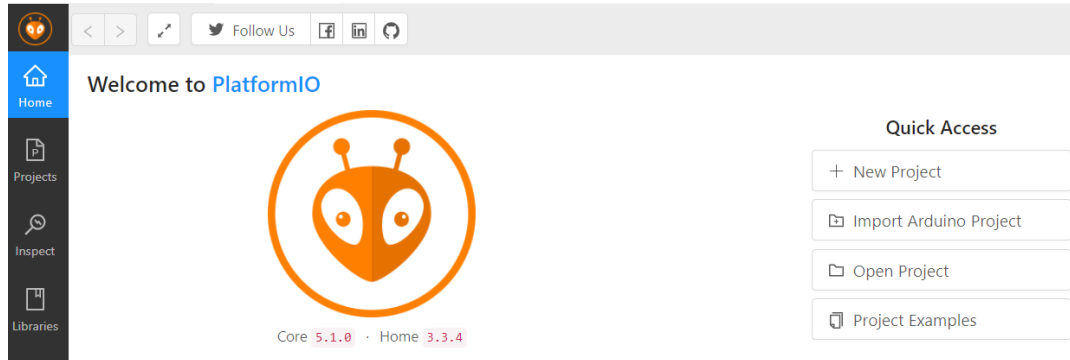
 If you click on **New Project**, a window is opened. In this window, there are three boxes. The first one is a box to enter the name of the project. In the second box, you can select the board and you need to select **Adafruit ESP32 Feathe**r. And in the last box, you need to select Arduino as the framework.Then click on finish and wait until the project is created. For the first time it takes a few minutes.

The projects by default are created in Documents/Platformio/Projects.

To upload a program click on the platformio icon and then click on **Upload**. If you have problems with uploading, you probably need to install [CP210x USB to UART Bridge VCP Drivers](#). (download CP210x_Windows_Drivers.zip and install CP210xVCPInstaller_x64) To monitor a program and interact with the program in a terminal, you need to click on **Monitor**.

Some useful links:
1. [Platfromio](#)
2. [Arduino](#)
3. [Teensy 3.5](#)
4. [ESP32](#)