

Part 02 -Arduino IDE

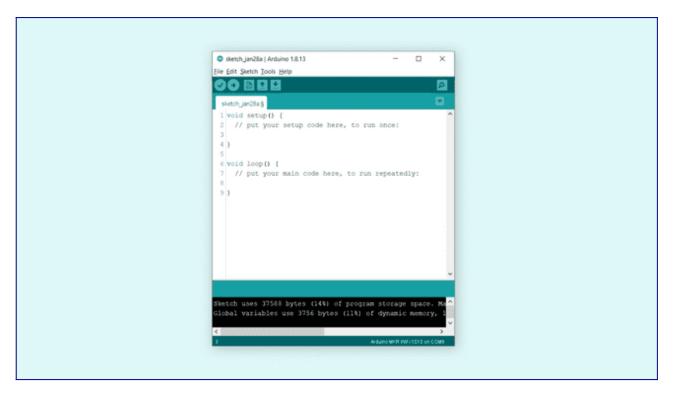
Version: 2021-06-01

Installing Mbed OS Nano boards

We will go through a few simple steps on installing the core needed for Mbed OS Nano boards. This installation is necessary to use your board with the offline Arduino IDE.

If you are using the Web Editor, you can follow the getting started with the Web Editor tutorial. Boards using the Mbed core Arduino Nano 33 BLE, Arduino Nano 33 BLE Sense, Arduino Nano RP2040 Connect

When we open the editor, we will see an empty sketch.



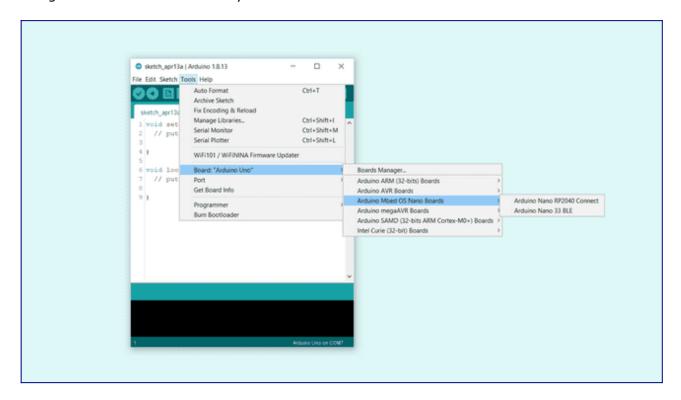
Here we need to navigate to Tools > Board > Board Manager.

This will open up a new window, with all available cores. Find the one named Arduino Mbed OS Nano Boards and install it.

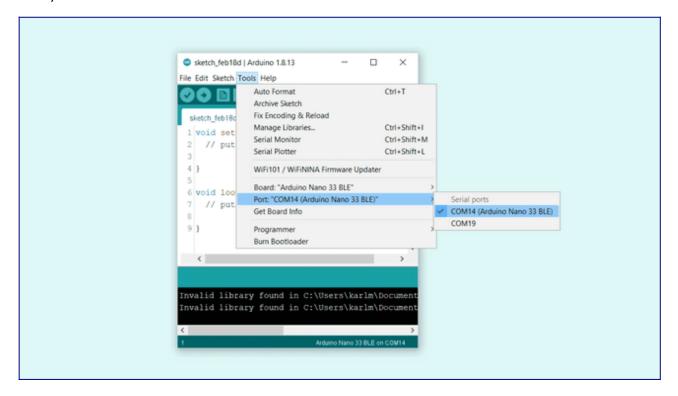


This process may take may take several minutes, and you may need to accept the installation window that comes up (depending on your operative system). When it is finished, it should say "INSTALLED" under the title.

Exit the board manager, and go to ${\tt Tools} > {\tt Board} > {\tt Arduino} > {\tt Arduino} > {\tt Mbed}$ OS ${\tt Nano}$ ${\tt Boards}$. Here you can see all the Mbed boards listed, where you can select the board you are using. You have now successfully installed the core.



Now, let's make sure that our board is found by our computer, by selecting the port. Regardless what kind of program we are uploading to the board, we always need to choose the port for the board we are using. This is simply done by navigating to ${\tt Tools} > {\tt Port}$, where you select your board from the list.



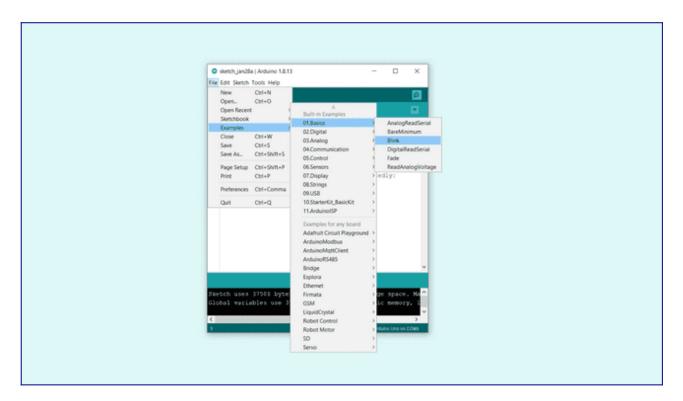
This will look different depending on what kind of operative system you are using. For Windows users, it could look like this:

<COM14> (Arduino Nano BLE)

For MAC users, it could look like this:

/dev/cu.usbmodem14112 (Arduino Nano BLE)

You are now ready to start using your board! The easiest way to check that everything is working, is to upload just a simple blink example to your board. This is done by navigating to File > Examples > 01.Basics > Blink.



To upload the sketch, simply click on the arrow in the top left corner. This process takes a few seconds, and it is important to not disconnect the board during this process.



When the code is uploaded, the text "Done uploading." is visible in the bottom left corner. If you look closely at your board, you will notice an orange LED blink with an interval of one second. This means you have successfully uploaded a program to your board.