

<https://learn.sparkfun.com/tutorials/getting-started-with-the-tensy/all>

Teensy 4.0

The Teensy 4.0 is the same size and footprint as the Teensy 3.1/LC but even more powerful with its **whopping 600MHz clock speed!** The pin functionality is slightly different compared to the other versions. This runs off of the **NXP iMXRT1062 IC**, which is a **32-bit ARM Cortex-M7**. It is **3.3V tolerant only** on its I/O pins.

Installation

1. Install Arduino IDE based on OS
<https://www.arduino.cc/en/Guide>
2. Install Teensyduino add-on for teensy support on Arduino IDE
https://www.pjrc.com/teensy/td_download.html
3. Select the board from the 'Tools'

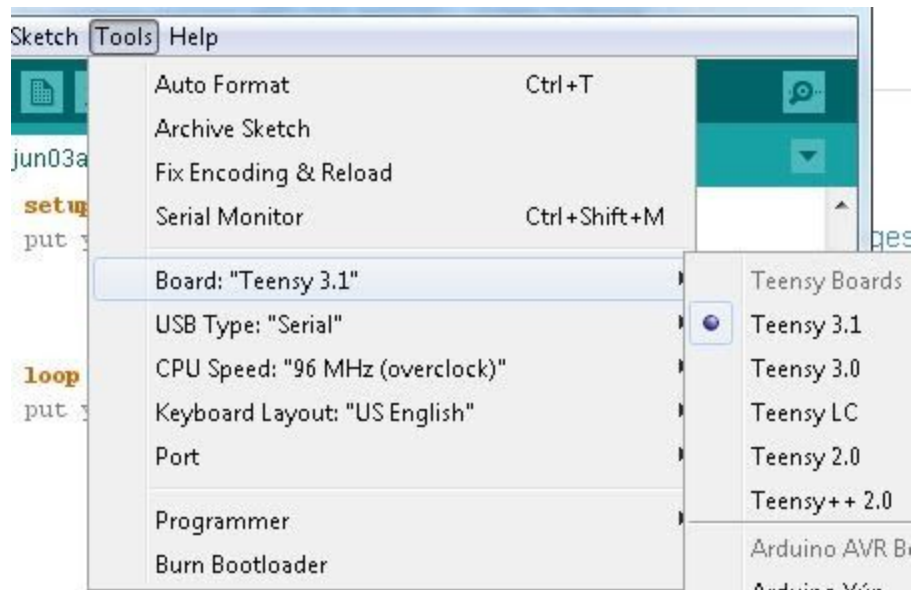
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Programming the Teensy

When you first plug the Teensy in, the appropriate drivers will be installed (if using a Windows machine). Your Teensy should default to the standard `Blink` sketch. You should see the LED blinking, as a quick check to make sure your board is functioning.

Open up the Arduino IDE, and select the appropriate Teensy board from the `Board` menu. This will provide you with additional options in the `Tools` menu.



Drop-down options in Arduino for Teensy boards.

If you would like to use the Teensy as an HID, MIDI, or user interface device (such as a keyboard or mouse), you can select that option from the `USB Type` menu.

The CPU speed can be changed for low-power applications.

Note: If you are using the Teensy 3.1, you must set the CPU speed to 24MHz or faster for proper functionality.

The `Keyboard Layout` option can be updated to your preferred style.

Press the button on the Teensy to open the Teensy loader program. You should see this window:



Teensy Loader Window

Verify your example code, and upload to the board as usual in the Arduino IDE. You will need to hit the on-board button once the IDE has compiled the code to finish uploading it to your Teensy. You should only need to do this the first time you upload code for the duration that your Teensy is powered.

Note: Most Arduino libraries work on Teensy. However, modifications to the libraries may be needed to make it cross-platform compatible. There are a few libraries curated on PJRC's website with modifications and special instructions specific to Teensy. Check out a few of the libraries below to take advantage of a Teensy's features like its **Real Time Clock (RTC)** or **capacitive touch pins**.

pjrc tutorials to get started

<https://www.pjrc.com/teensy/tutorial.html>

Paul Stoffregen tutorials

<https://www.youtube.com/watch?v=wqt55OAabVs>