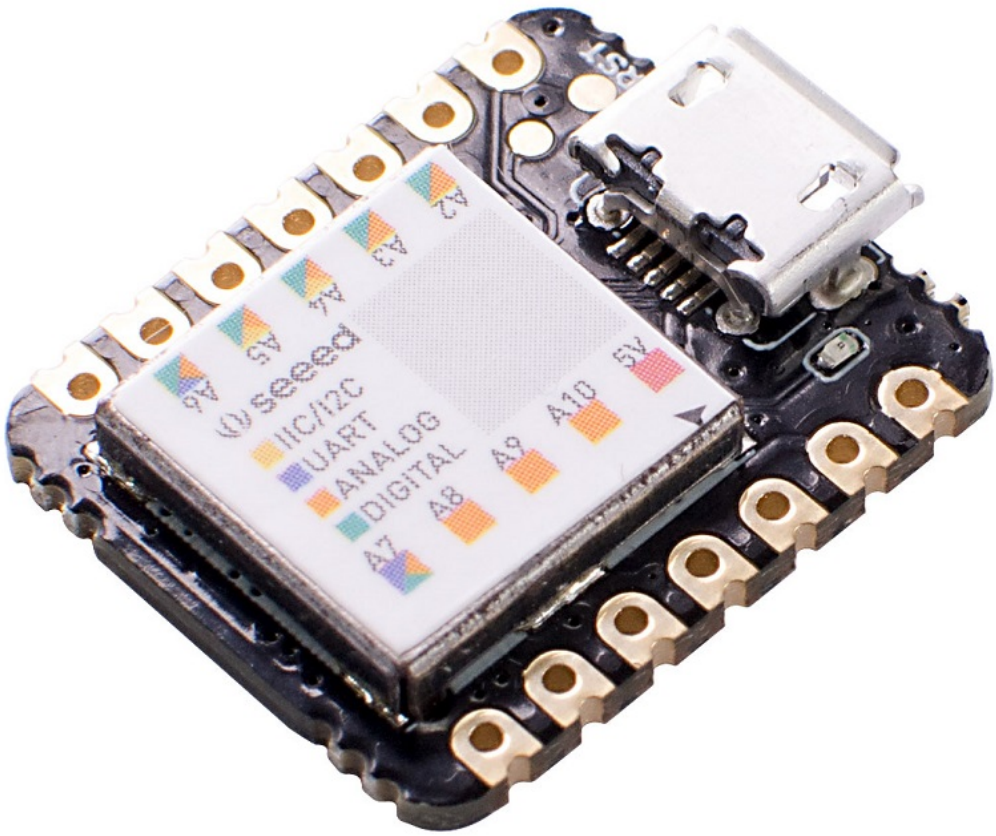
Seeeduino XIAO - ARM Cortex-M0+(SAMD21G18)



Attention

Please note that the Seeeduino Femto has been renamed to Seeeduino XIAO.

The Seeeduino Femto is the smallest member of the Seeeduino family. It carries the powerful CPU-ARM® Cortex®-M0+(SAMD21G18) which is a low-power microcontrollers. On the other hand, this little board has good performance in processing but needs less power. As a matter of fact, it is designed in a tiny size and can be used for wearable devices and small projects.

Seeeduino Femto has 14 GPIO PINs, which can be used for 11 analog PINs, 8 digital PINs, 1 I2C interface and 1 UART interface. Some PINs has various functions, that's why 14 GPIO PINs can realize more I/O PINs and interfaces. Moreover, Seeeduino Femto has a micro USB interface which can supply power and download code. There are two reset button beside the micro USB, you can short connect them to reset the board.

Features

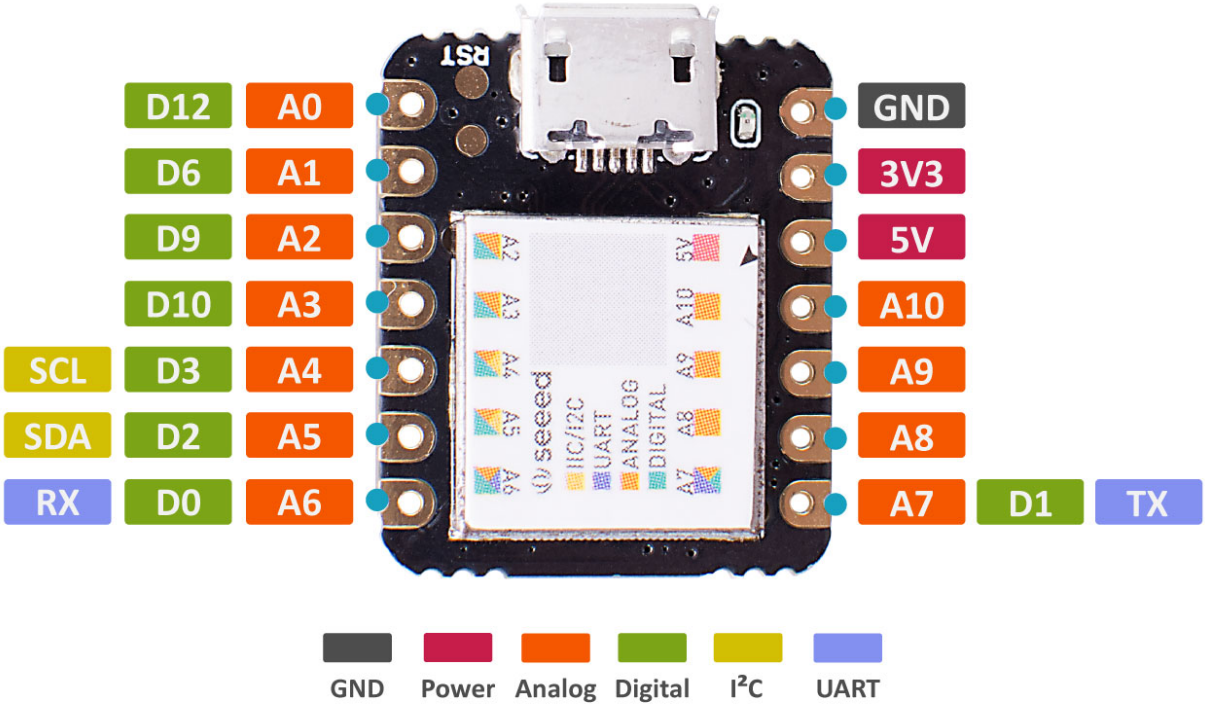
- ARM® Cortex®-M0+ 32bit 48MHz microcontroller(SAMD21G18)
- 256KB Flash,32KB SRAM
- Compatible with Arduino

- Breadboard-friendly
- Small size (23.5x17.5mm) as a thumb for wearable devices and small project.
- Protection cover for protecting the circuit

Specification

Item	Value
CPU	ARM Cortex-M0+ CPU(SAMD21G18)
Maximum CPU frequency	48MHz
Flash Memory	256KB
SRAM	32KB
Digital I/O Pins	8
Analog I/O Pins	11
I2C interface	1
UART interface	1
Power supply and downloading interface	Micro USB
I/O input Voltage	3.3V
Operating Voltage	5V

Hardware Overview



!!!Note Some of digital I/O Pins, I2C interface and Uart interface are using the same I/O Pins with Analog I/O Pins, you have to define the corresponding Pins in your project.

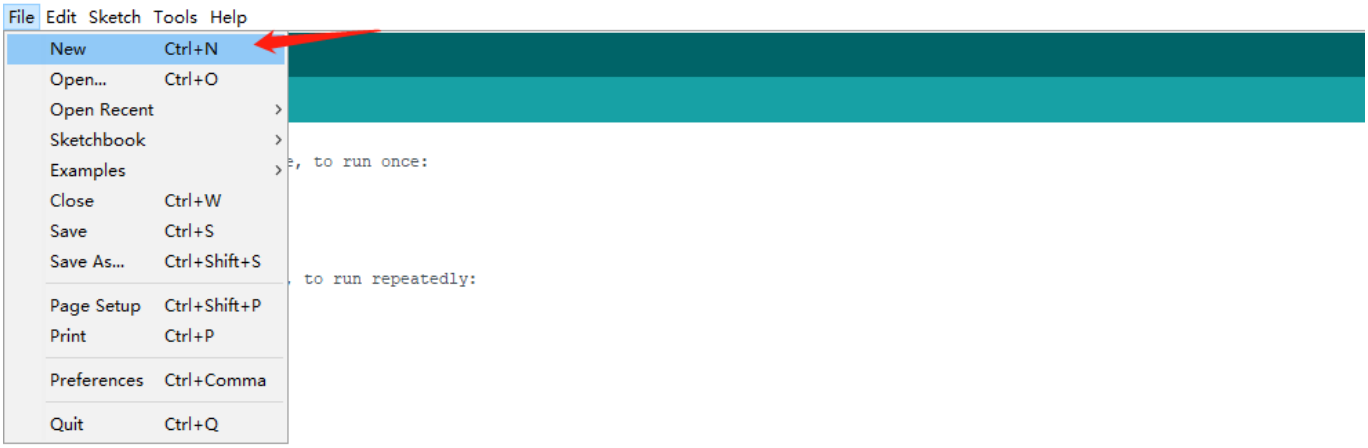
Getting Started

First of all, you need to install the latest version of Arduino IDE.

Download Arduino IDE

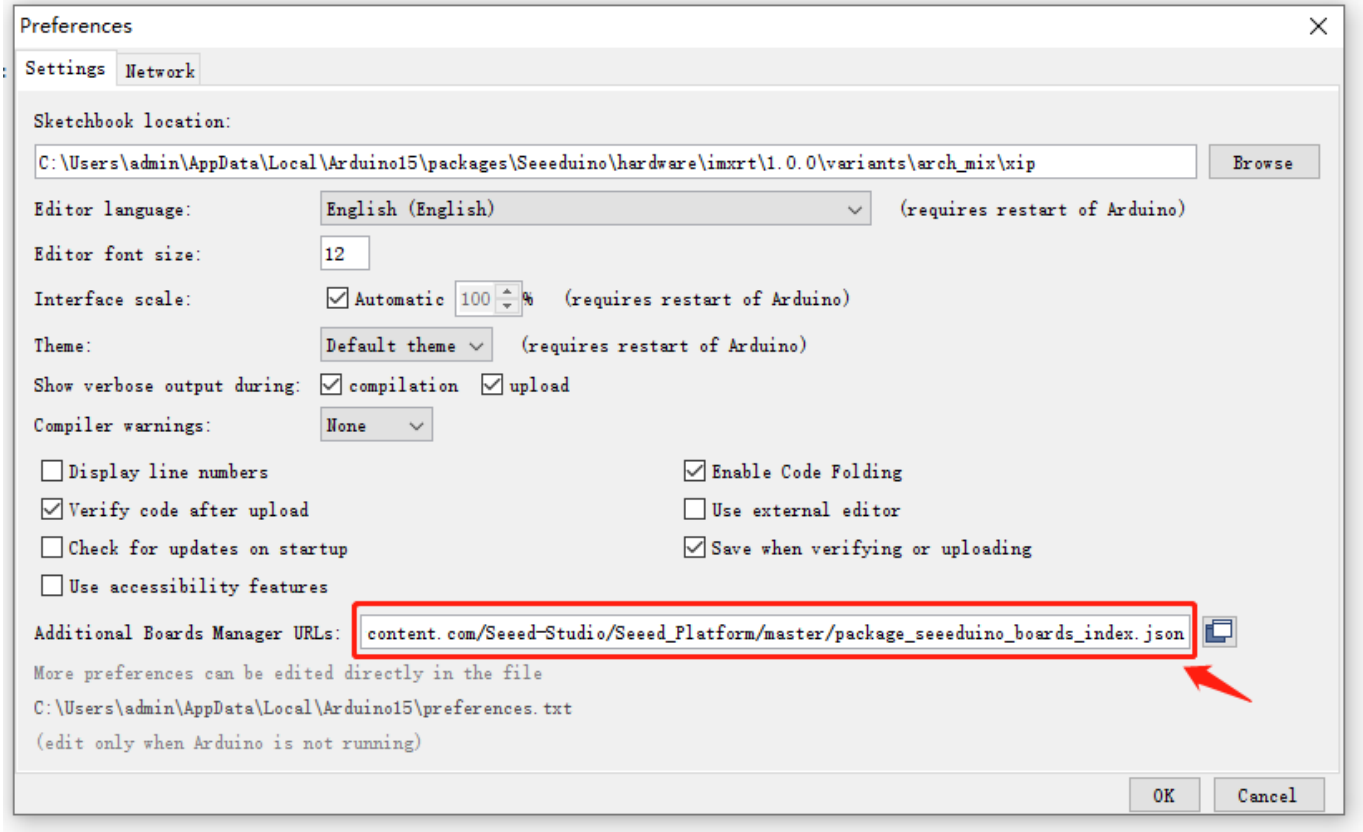
Install the board in Arduino IDE

- **Step1** Open the Arduino IDE, click **File -> New** to create a new sketch.

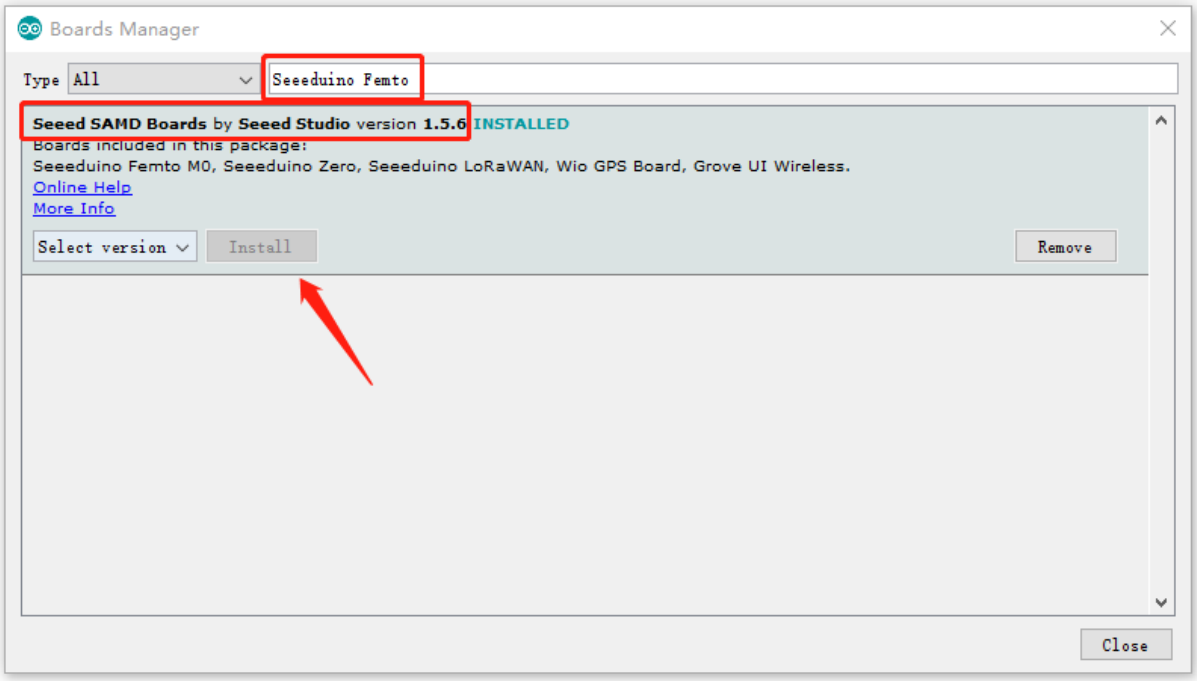


- **Step2** Click **File-> Preferences**, and copy below url to **Additional Boards Manager URLs**.

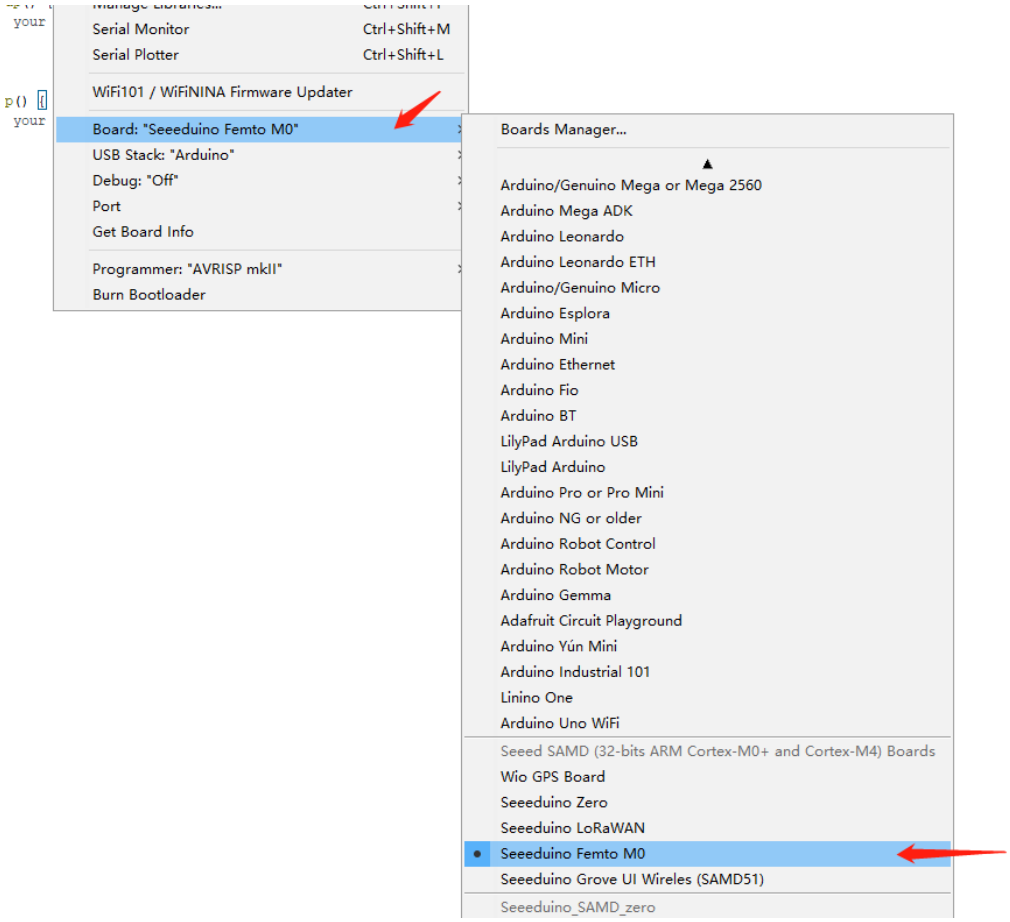
https://raw.githubusercontent.com/Seeed-Studio/Seeed_Platform/master/package_seeeduino_boards_index.json



- **Step3** Click **Tools-> Board-> Boards Manager...**, print "Seeeduino Femto" in the searching blank. Here comes the "Seeed SAMD Boards". Install it.



- **Step4** After installing the board, click **Tools-> Board**, find "Seeeduino Femto M0" and select it. Now you have already set up the board of Seeeduino Femto for Arduino IDE.



From now on, you can build your own project with Seeeduino Femto based on Arduino IDE platform.

Resourses

- **[Zip]** Seeeduino Femto Repository
- **[PDF]** SAMD datasheet
- **[PDF]** Hardware manual

Tech Support

Please do not hesitate to submit the issue into our forum.