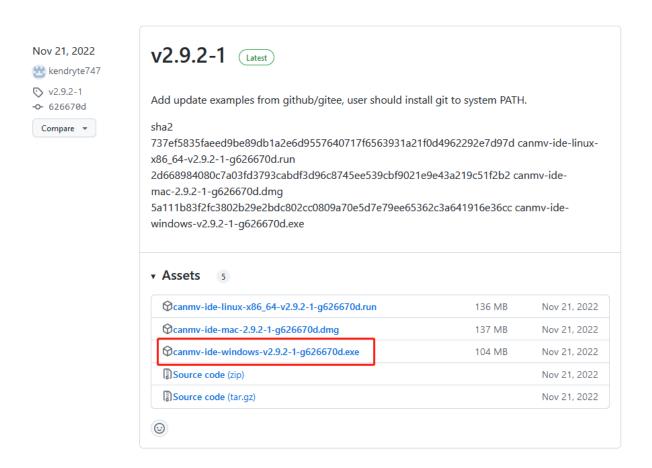
2. the installation CanMV IDE development software

- 2. the installation CanMV IDE development software
 - 2.1 download CanMV IDE
 - 2.2 interface functional description
 - 2.3 connected devices
 - 2.4 temporary run the program
 - 2.5 boot to run the program

2.1 download CanMV IDE

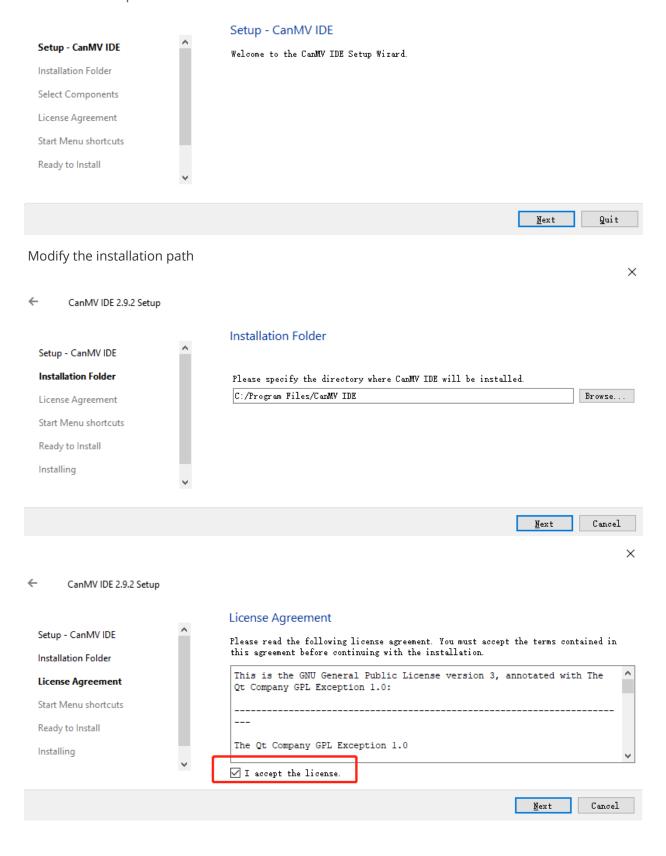
1. CanMV IDE GitHub address, according to their own system to download the corresponding software package is installed, here to win10 as an example:

https://github.com/kendryte/canmv_ide/releases



3. After the download gets canmv-ide-a windows-vx. x. x-gxxxxxx. exe file, double-click to open the installation package.

CanMV IDE 2.9.2 Setup

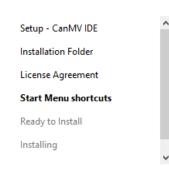




×

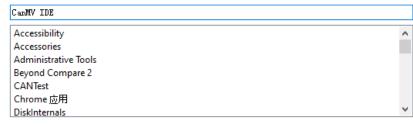
×

← CanMV IDE 2.9.2 Setup



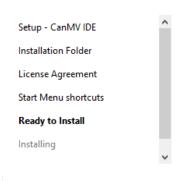
Start Menu shortcuts

Select the Start Menu in which you would like to create the program's shortcuts. You can also enter a name to create a new directory.



<u>N</u>ext Cancel

← CanMV IDE 2.9.2 Setup

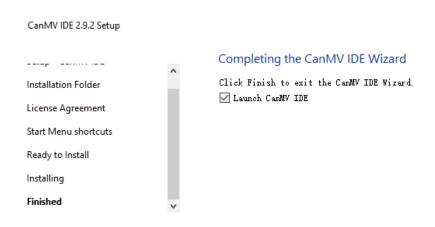


Ready to Install

Setup is now ready to begin installing CanMV IDE on your computer. Installation will use 311.05 MB of disk space.

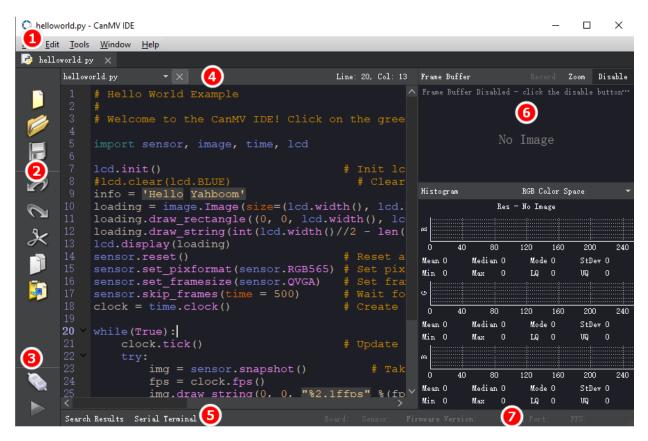
<u>I</u>nstall Cancel

Wait for the installation Assembly can be completed.



<u>F</u>inish

2.2 interface functional description



Area ① menu bar: the operation file, use tools, etc.

Area ② shortcut buttons: regional ① file And edit Some of the features of the shortcut.

Area ③ connect the device: connect the device and program the control button.

Region 4 code editing area: edit to run the code.

Region ⑤ serial terminal: display the serial port to print debugging information.

Region 6 image preview: display the camera image preview.

Region ⑦ firmware information: shows the connection of the serial number and the firmware information.

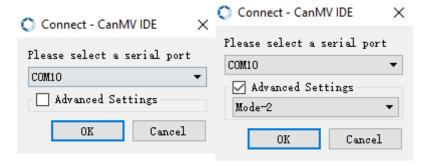
2.3 connected devices

The K210 module via the microUSB cable is connected to the computer USB port.

Then click on the CanMV IDE in the lower left corner of the Connect button

```
helloworld.py - CanMV IDE
File Edit Tools Window Help
🎅 helloworld.py
      helloworld.py
                                                  Line: 1, Col: 1
       1
           # Hello World Example
           import sensor, image, time, lcd
           lcd.init()
                                                     Init lc
           #lcd.clear(lcd.BLUE)
                                                      # Clear
           info = 'Hello Yahboom'
           loading = image.Image(size=(lcd.width(), lcd.
           loading.draw rectangle((0, 0, lcd.width(), lc
      11
           loading.draw string(int(lcd.width()//2 - len(
      13
           lcd.display(loading)
           sensor.reset()
                                                     Reset a
           sensor.set pixformat(sensor.RGB565)
                                                     Set pix
           sensor.set framesize(sensor.QVGA)
                                                     Set fra
           sensor.skip frames(time = 500)
           clock = time.clock()
      20 while (True):
      21
                clock.tick()
                                                    # Update
                try:
                    img = sensor.snapshot()
                                                          Tak
      24
                    fps = clock.fps()
      25
                    ima.draw string(0, 0, "%2.1ffps"
      Search Results Serial Terminal
```

The pop-up select the serial port, select the K210 module corresponding to the serial number. If there are multiple serial ports, first determine the corresponding serial port number and then click OK to open.



If the connection is not on, you can click Advanced settings, Select the Mode to 2.

A successful connection will be the icon changes to a connected state, while the gray play button becomes green.

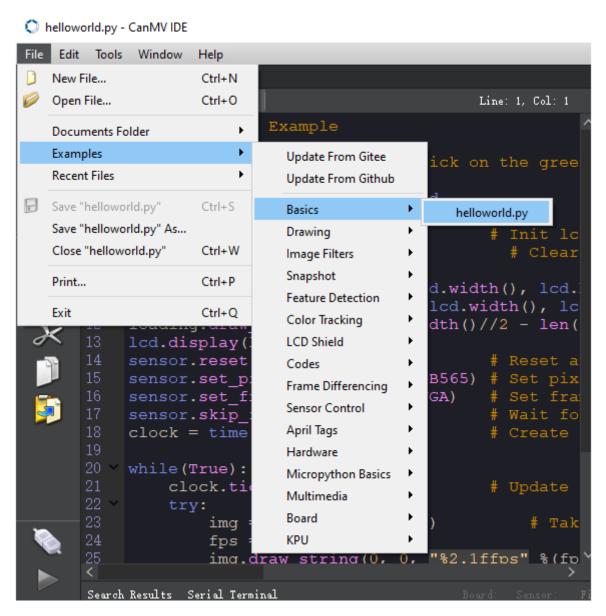


2.4 temporary run the program

Note: This step is to run the program, disconnect, press the reset button or shut down, the program lost not saved.

After the connection is complete, you can see in the lower left corner of the connection icon turns into a connected symbol.

If there is no open routine, you can open the file->examples->Basics->helloworld.py



Click on the green play button to run the program.

```
File Edit Tools Window Help
📄 helloworld.py 💢
      helloworld.py
                                                 Line: 20, Col: 13
           # Hello World Example
           # Welcome to the CanMV IDE! Click on the gree
           import sensor, image, time, lcd
           lcd.init()
                                                  # Init lc
           #lcd.clear(lcd.BLUE)
                                                     # Clear
           info = 'Hello Yahboom'
           loading = image.Image(size=(lcd.width(), lcd.)
           loading.draw rectangle((0, 0, lcd.width(), lc
           loading.draw string(int(lcd.width()//2 - len(
           lcd.display(loading)
      14
           sensor.reset()
                                                  # Reset a
           sensor.set pixformat(sensor.RGB565)
                                                  # Set pix
           sensor.set framesize(sensor.QVGA)
                                                    Set fra:
 sensor.skip frames(time = 500)
                                                    Wait fo
           clock = time.clock()
                                                    Create
      20
          while (True):
      21
               clock.tick()
                                                  # Update
      22 🔻
               try:
                    img = sensor.snapshot()
                                                        Tak
      24
                   fps = clock.fps()
      25
                   ima.draw string(0, 0, "%2.1ffps"
      Search Results Serial Terminal Board: CanMV Sensor:
                                                    Firmware Versi
```

At this point you can see the LCD display the camera screen, while the IDE the upper right corner also display the camera screen.

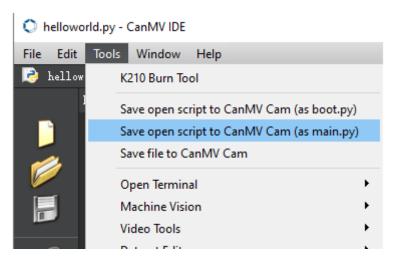
The green play button icon turns into the red stop button, one click can stop the running program.

```
File Edit Tools Window Help
🎅 helloworld.py 💢
      helloworld.py
                                                  Line: 20, Col: 13
           # Hello World Example
           # Welcome to the CanMV IDE! Click on the gree
           import sensor, image, time, lcd
           lcd.init()
                                                   # Init lc
           #lcd.clear(lcd.BLUE)
           info = 'Hello Yahboom'
           loading = image.Image(size=(lcd.width(), lcd.)
           loading.draw rectangle((0, 0, lcd.width(), lc
      11
           loading.draw string(int(lcd.width()//2 - len(
           lcd.display(loading)
      14
           sensor.reset()
                                                     Reset a
           sensor.set pixformat(sensor.RGB565)
                                                   # Set pix
           sensor.set framesize(sensor.QVGA)
                                                   # Set fra:
           sensor.skip frames(time = 500)
                                                   # Wait fo
           clock = time.clock()
      20
           while (True):
      21
                                                   # Update
                clock.tick()
                try:
                    img = sensor.snapshot()
                                                        # Tak
                    fps = clock.fps()
                    img.draw string(0, 0, "%2.1ffps"
       Search Results Serial Terminal
                                   Board: CanMV Sensor:
                                                     Firmware Vers
```

2.5 boot to run the program

Note: This step of the procedure to re-power automatically after running.

In keeping connected to the case, click on Tools->Save the currently open script of main.py to CanMV Cam



Click Yes to save the program, after completion, disconnect, or press the reset button, the program will run automatically.

If insert the TF card, the program priority saved to the TF card, and the priority to run the TF card in the main. py file.

