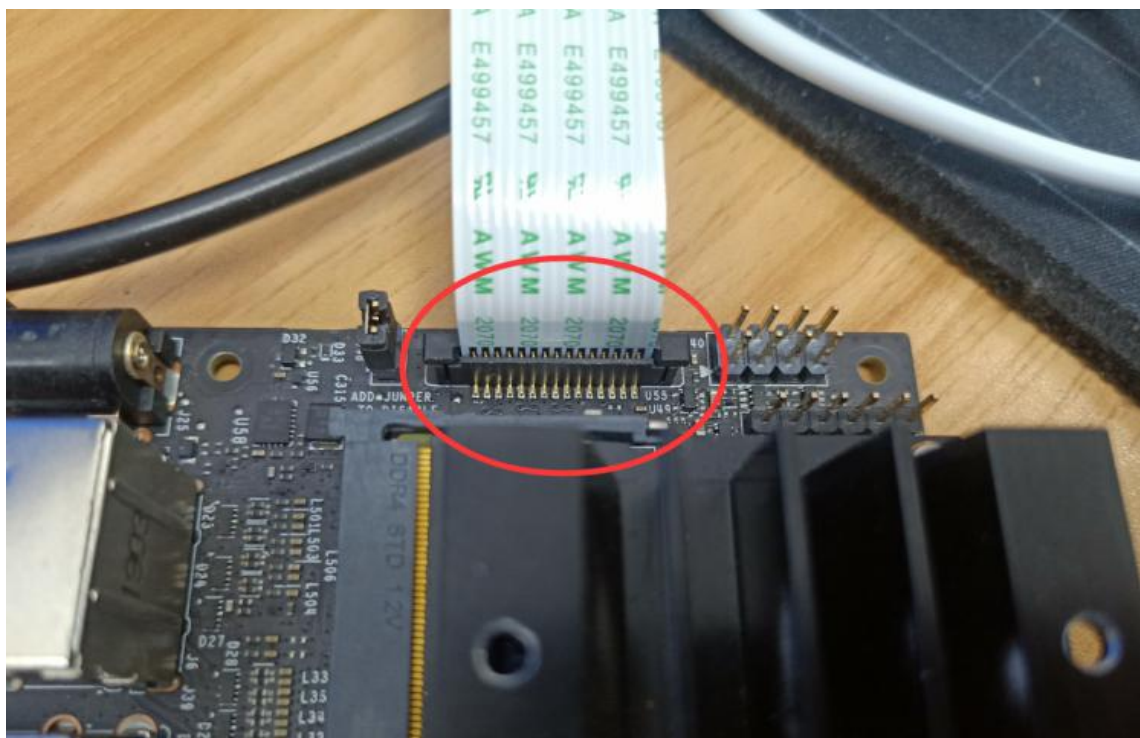
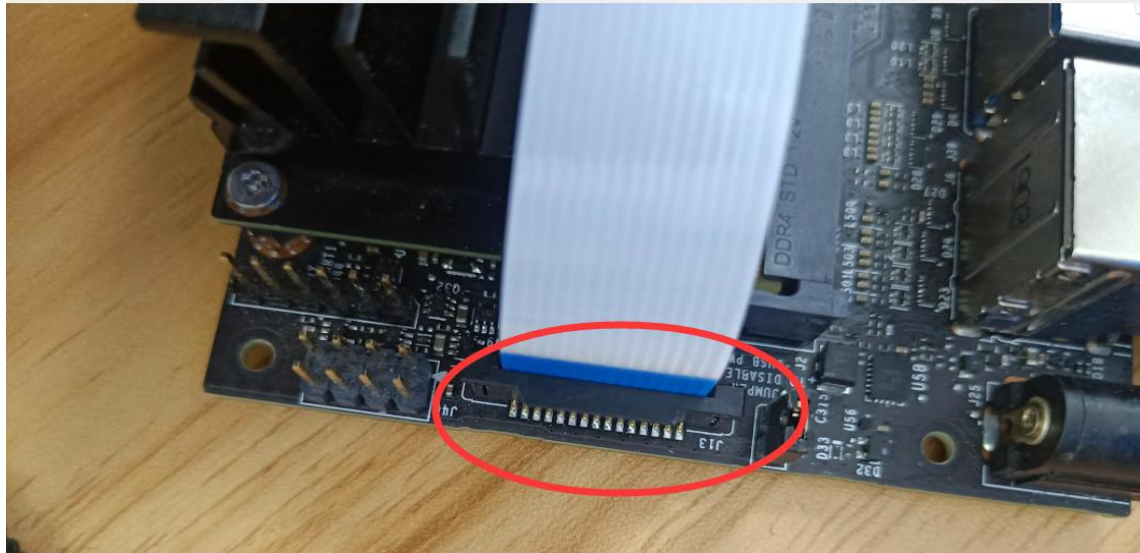


## On-board camera tutorial

Note: Only supports **IMX219** sensor camera.

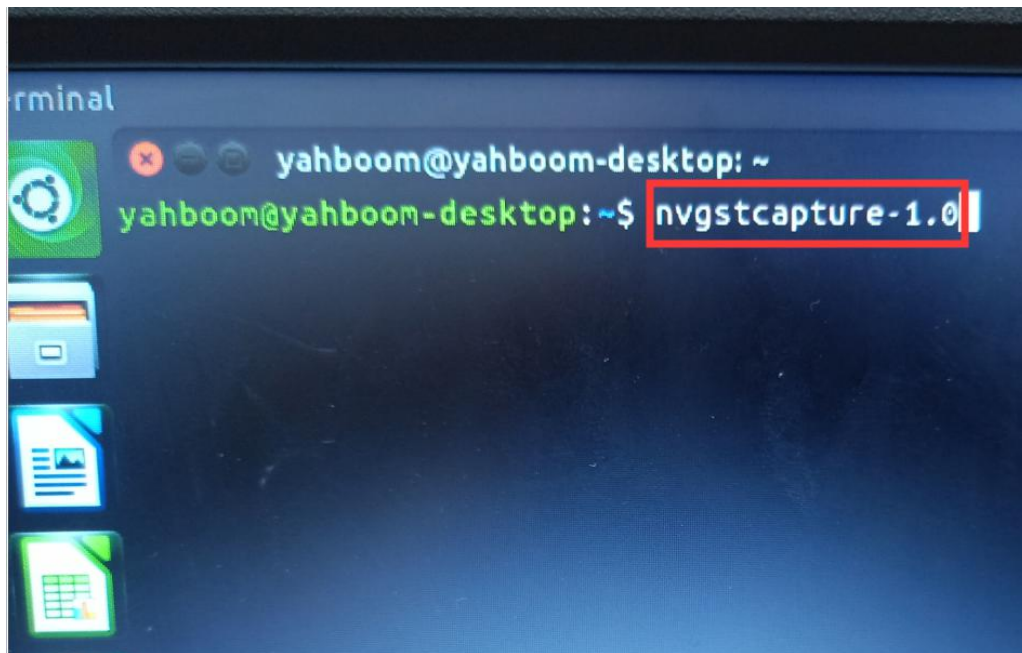
### 1. About wiring

Please complete the wiring between the camera module and the Jetson Nano board as shown below.



### 2. Test the camera

We need to open the terminal of Jetson Nano and input command: **nvgstcapture-1.0**  
Then, the camera will start.



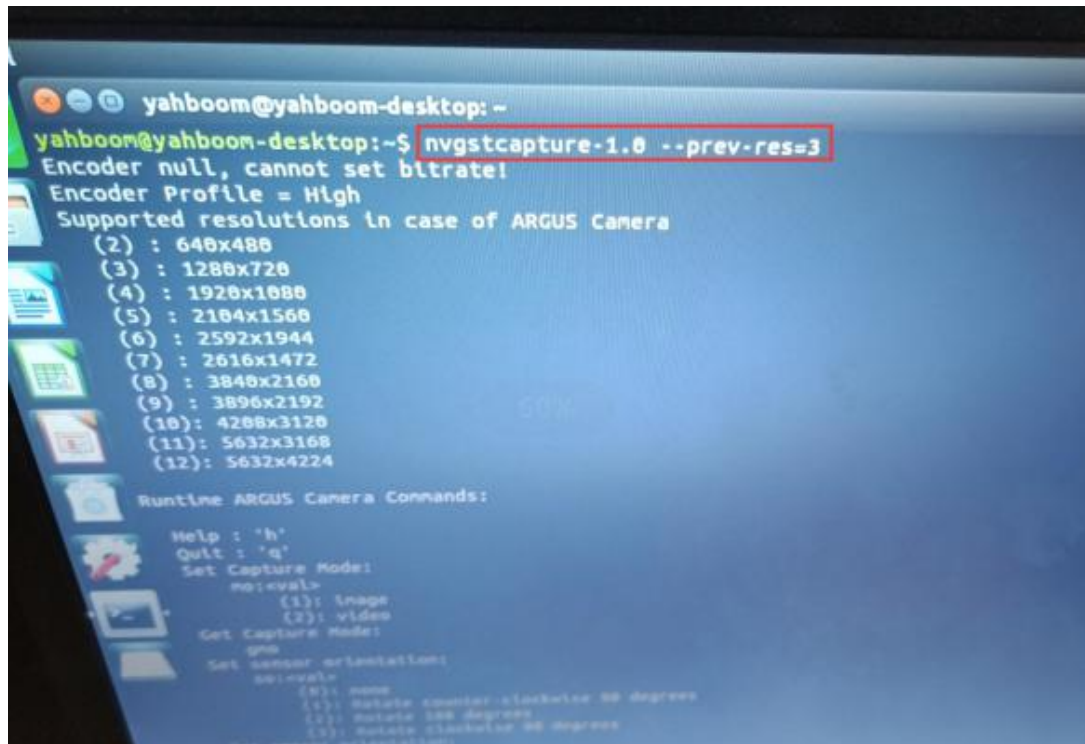
2.2 We can use several commands in the manual.

1) **--prev\_res**

This command is be used to preview the resolution, height and width of the video, CSI camera with a range of 2 to 12 (5632x4224)

e.g: **nvgstcapture-1.0 --prev-res=3**

As shown below:



```

yahboom@yahboom-desktop: ~
yahboom@yahboom-desktop:~$ nvgstcapture-1.0 --prev-res=3
Encoder null, cannot set bitrate!
Encoder Profile = High
Supported resolutions in case of ARGUS Camera
(2) : 640x480
(3) : 1280x720
(4) : 1920x1080
(5) : 2160x1560
(6) : 2592x1944
(7) : 2616x1472
(8) : 3840x2160
(9) : 3896x2192
(10): 4208x3120
(11): 5632x3168
(12): 5632x4224

Runtime ARGUS Camera Commands:
Help : 'h'
Quit : 'q'
Set Capture Mode:
mo=<val>
(1): Image
(2): Video
Get Capture Mode:
gmo
Set sensor orientation:
so=<val>
(0): none
(1): Rotate counter-clockwise 90 degrees
(2): Rotate 180 degrees
(3): Rotate clockwise 90 degrees

```



## 2) `--cus-prev-res`

This command is be used to custom preview resolution, width and height, only support CSI camera

e.g: `nvgstcapture-1.0 --cus-prev-res=1920x1080`

As shown below:



```

yahboom@yahboom-desktop: ~
GST_ARGUS: adding repeat capture requests.
CONSUMER: Producer has connected; continuing.
^C** Message: 18:42:40.038: <_intr_handler:4197> User Interrupted..

Terminating the camera pipeline ...
GST_ARGUS: Cleaning up
CONSUMER: Done Success
GST_ARGUS: Done Success
** Message: 18:42:40.421: <main:4609> Capture completed
** Message: 18:42:40.421: <main:4658> Camera application will now exit
GST_ARGUS:
PowerServiceHwVlc::cleanupResources
yahboom@yahboom-desktop:~$ nvgstcapture-1.0 --cus-prev-res=1920x1080
Encoder null, cannot set bitrate!
Encoder Profile = High
Supported resolutions in case of ARGUS Camera
(2) : 640x480
(3) : 1280x720
(4) : 1920x1080
(5) : 2160x1560
(6) : 2592x1944
(7) : 2616x1472
(8) : 3840x2160
(9) : 3896x2192
(10): 4208x3120
(11): 5632x3168
(12): 5632x4224

Runtime ARGUS Camera Commands:

```



If multiple commands are used at the same time, we need to use **!** separated.

If you want to turn off the camera, we need to input **"q"** directly in the terminal and press **"Enter"**.

If you want to capture the picture, we need to input **"j"** in the terminal and press **"Enter"**. The picture will be saved in the current directory.