

# Write the official image (SDK)

## Write the official image (SDK)

1. Preparation
  - Install SD card
2. Virtual machine
  - 2.1. Virtual machine expansion
  - 2.2. Allocate space
  - 2.3. Connect to the virtual machine
3. SDK Manager image burning
  - 3.1. Select the motherboard model
  - 3.2. Burning options
    - STEP1
    - STEP2
    - STEP3
4. Motherboard starts the system

Some users may receive the product and find that the USB interface of the carrier board cannot power external devices. Only the indicator light on the carrier board is normal and the system cannot start.

Users need to follow this tutorial and use the SDK Manager software to burn the NVIDIA official system. After the system is successfully burned, everything on the motherboard will be normal!

The system burned according to this tutorial is the official NVIDIA system. If you want to use our system image, you need to follow our [Burning System Image] tutorial to burn our image!

## 1. Preparation

- software

Ubuntu18.04 system

our information provides Ubuntu 18.04 virtual machine image. You can download and decompress it yourself, and use VMware software to open the virtual machine.

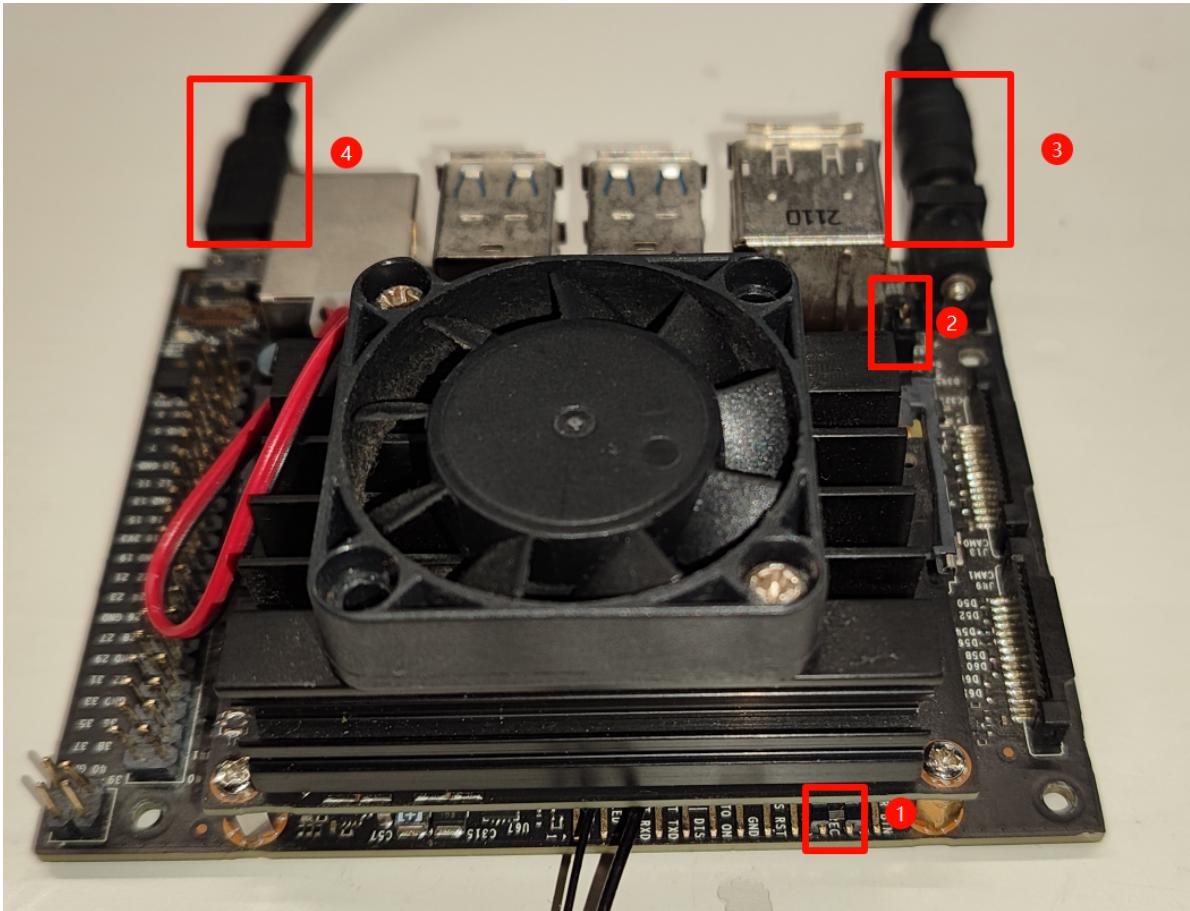
- hardware

Card reader, SD: The SD card needs to be formatted before burning the system;

Jumper cap: short-circuit the FC REC and GND pins (enter flash mode), short-circuit the DC enable (J48);

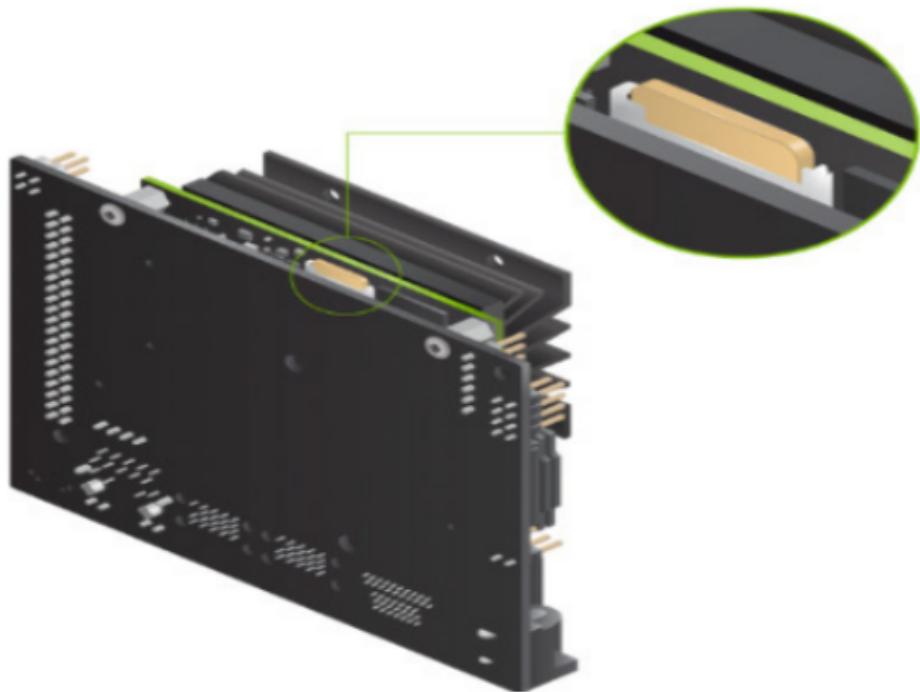
DC power adapter: To use this method of power supply, you need to use a jumper cap to short-circuit the DC enable (J48);

MicroUSB data cable: Connect to computer to transfer data.



## Install SD card

Connect the formatted SD card to the TF card slot on the motherboard.



## 2. Virtual machine

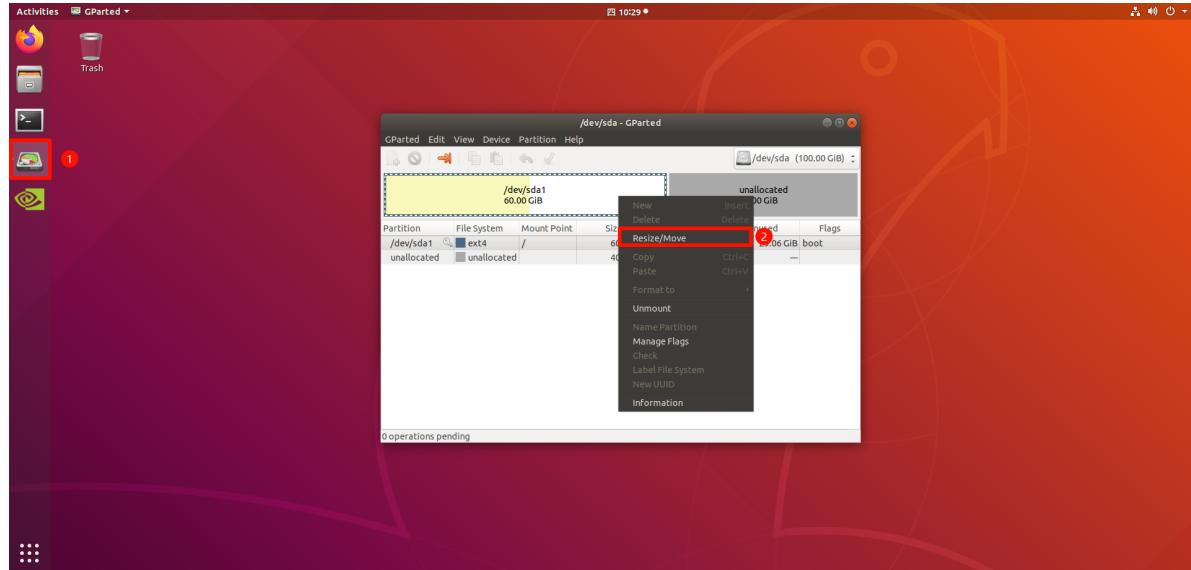
## 2.1. Virtual machine expansion

The virtual machine space requires about 100G, and the virtual machine image we provide needs to be expanded to 100G.

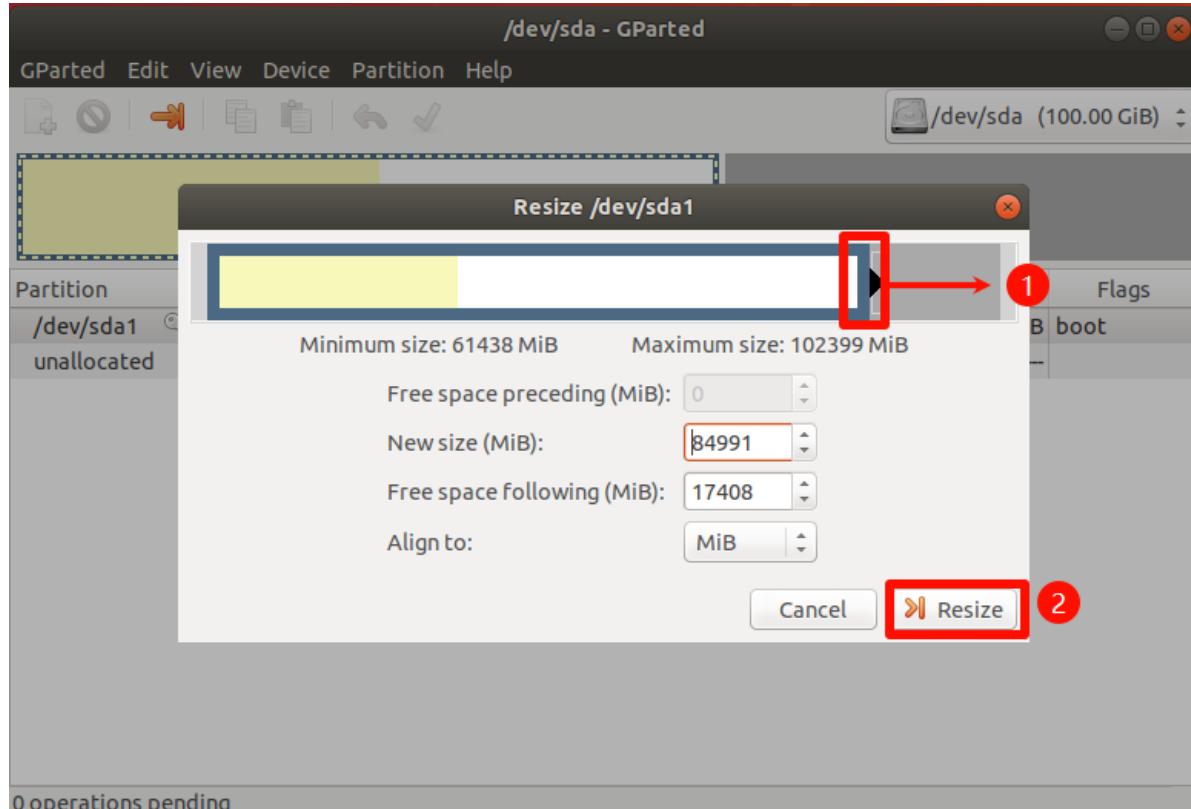
Failure to expand the capacity may result in failure to program the system!

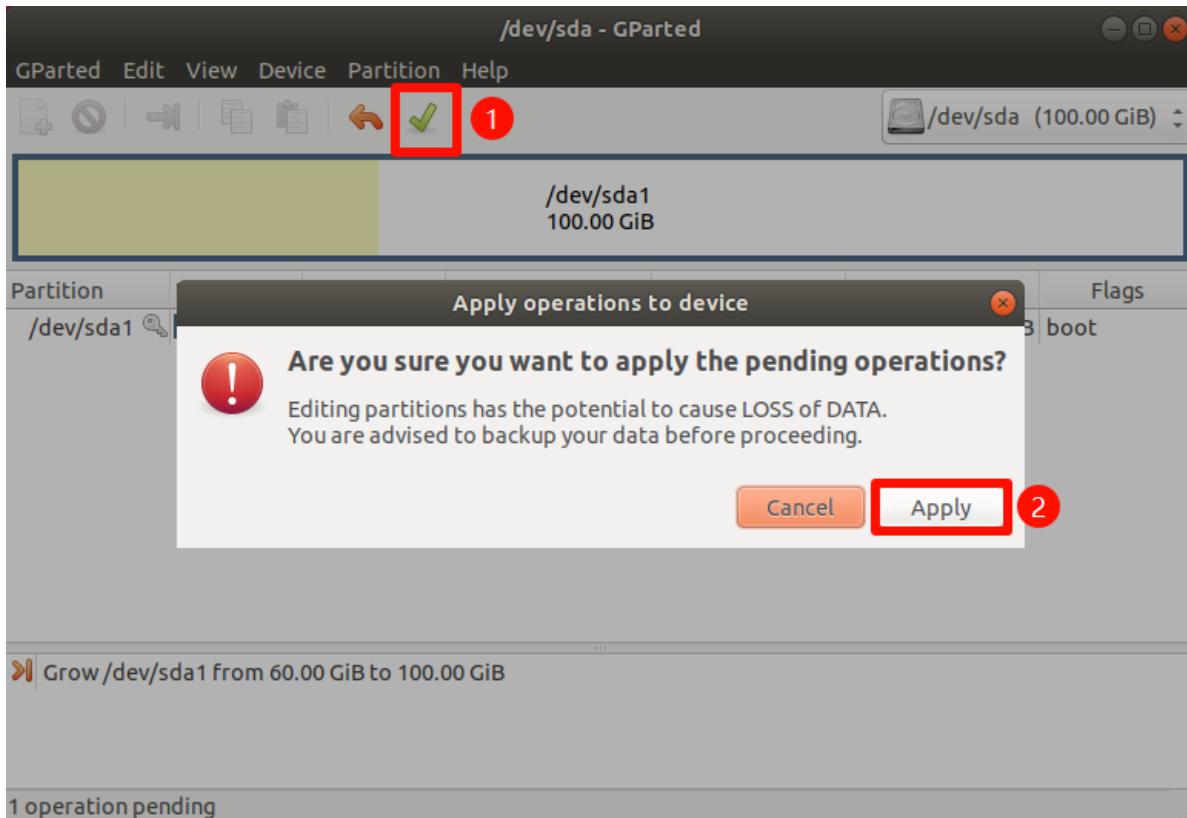
## 2.2. Allocate space

Open the "GParted" software that comes with the system



Move the border of the movable space to the far right:



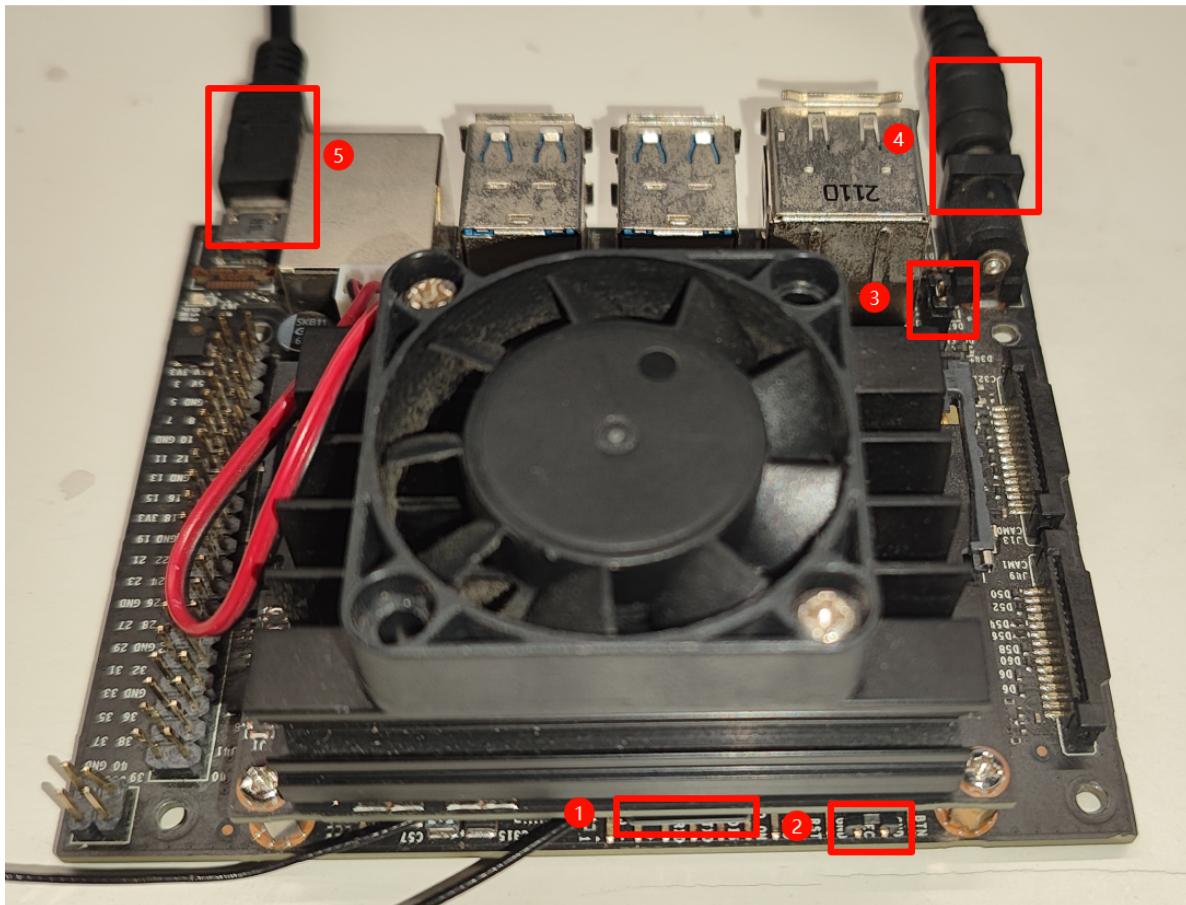


After completing the operation, close the "GParted" software!

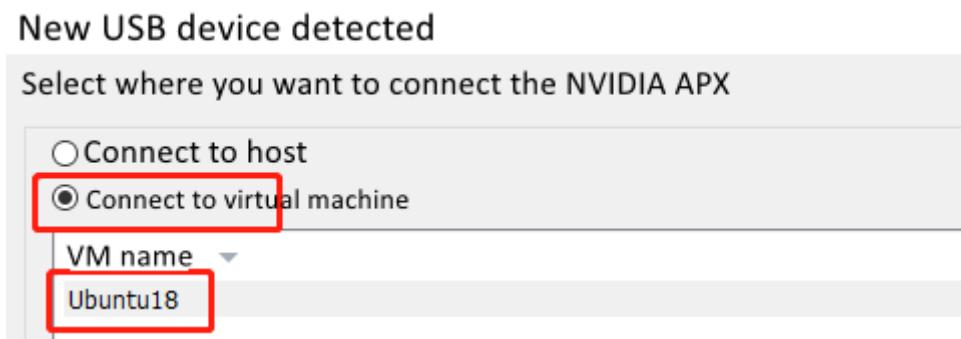
### 2.3. Connect to the virtual machine

After using the DC power adapter to supply power, connect the microUSB data cable to the computer.

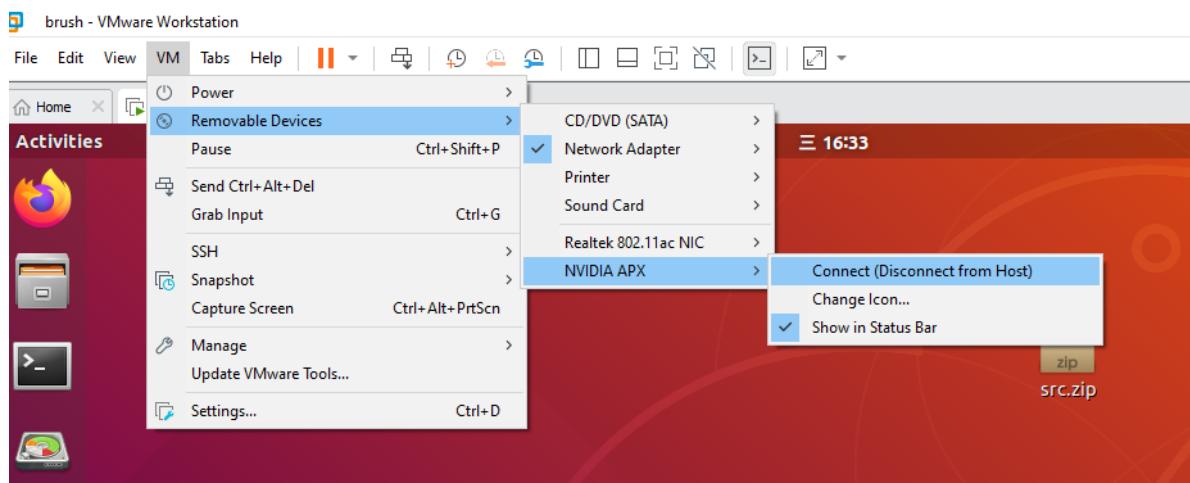
If the carrier board indicator light does not light up when DC power is supplied, you can try to plug in and out the DC port (number 4 in the picture)



After connecting to the computer, a "New USB Device Detected" pop-up window will generally appear. You can connect through the "Connect to Virtual Machine" option:



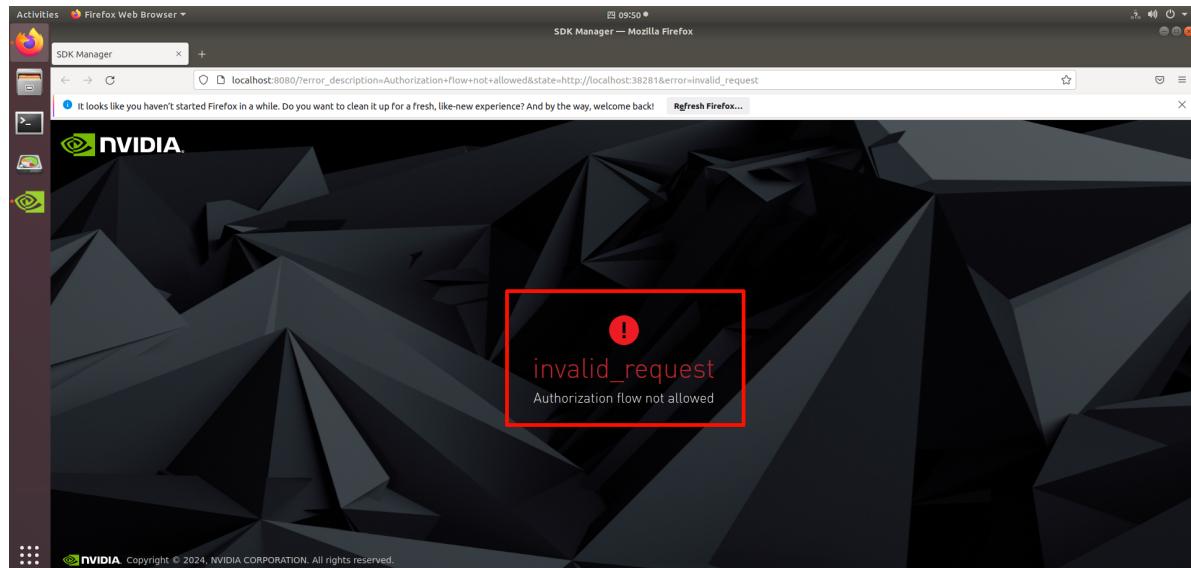
Here is another way to connect a USB device to a virtual machine:



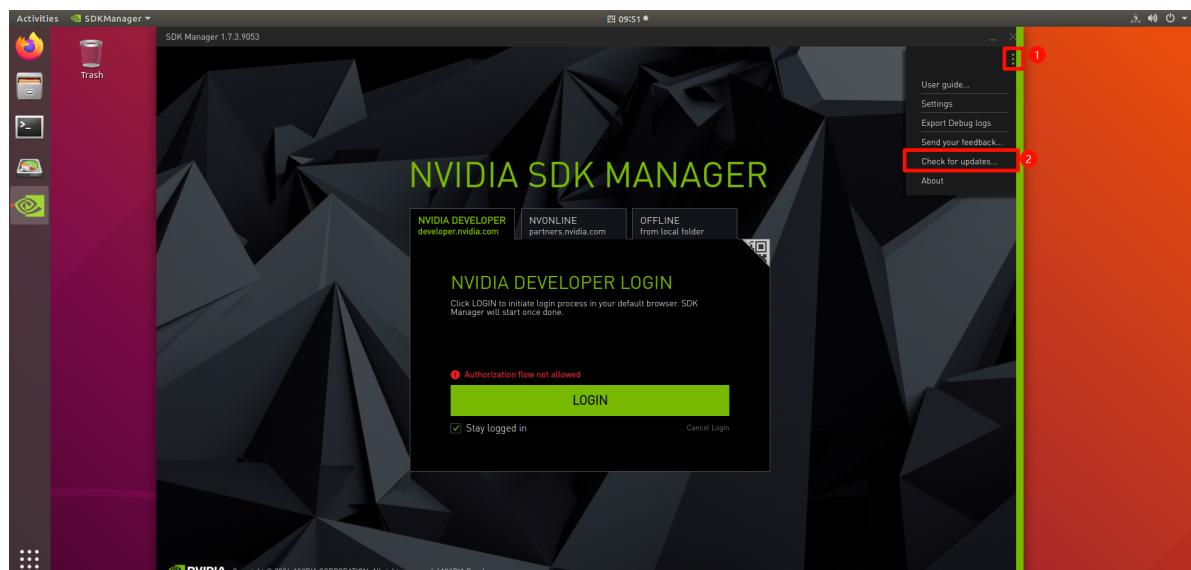
### 3. SDK Manager image burning

Open the system "SDK Manager" software and log in to your account.

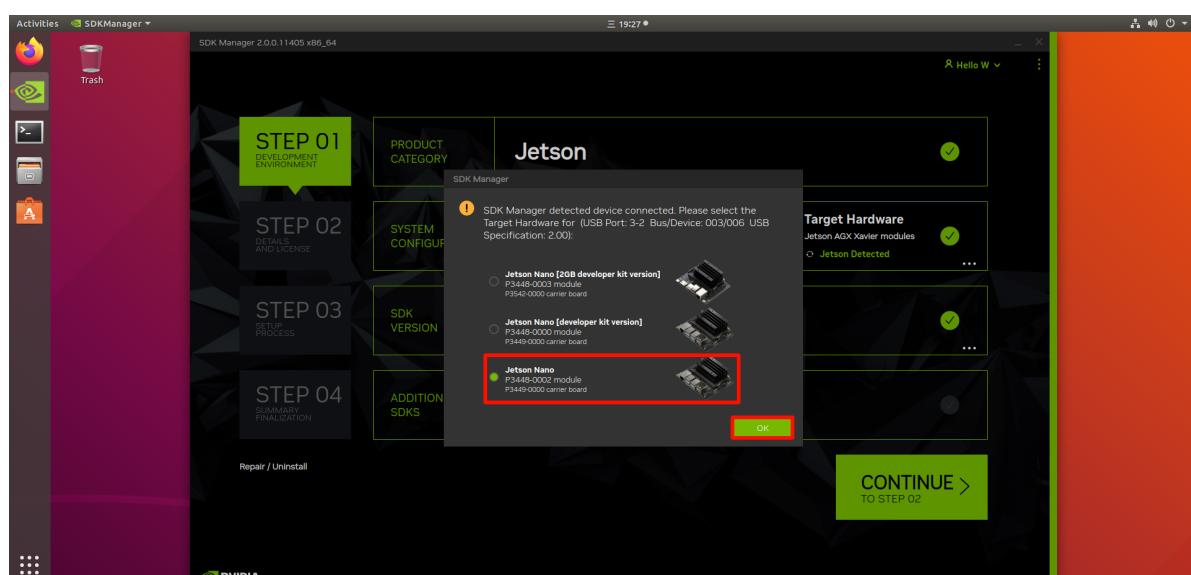
If the account login page pops up and displays an invalid request



Solution: Update the software version and log in again

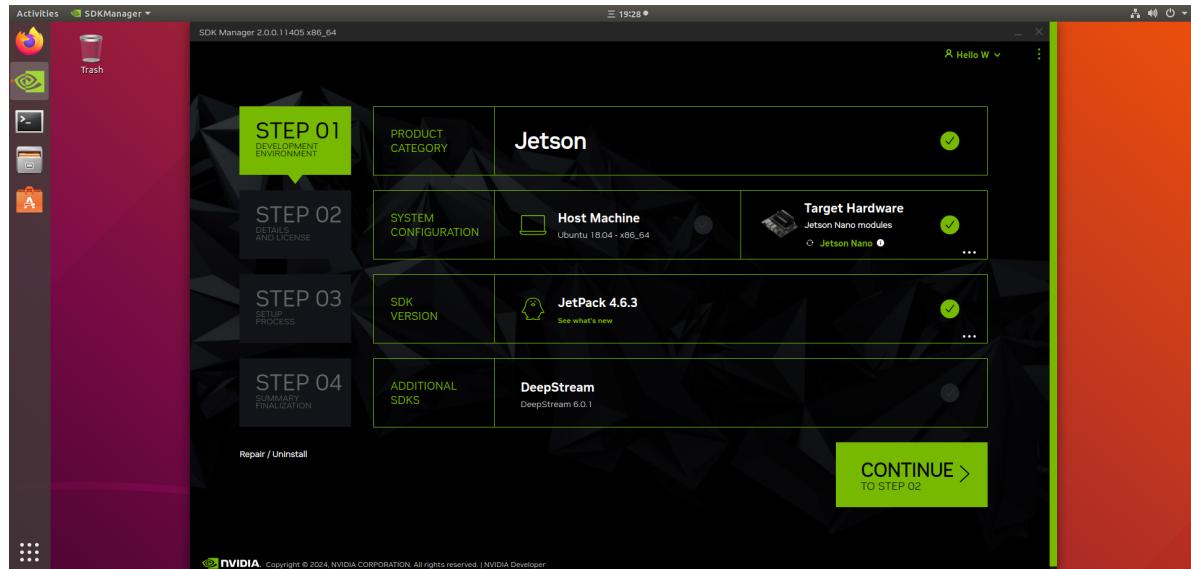


### 3.1. Select the motherboard model



## 3.2. Burning options

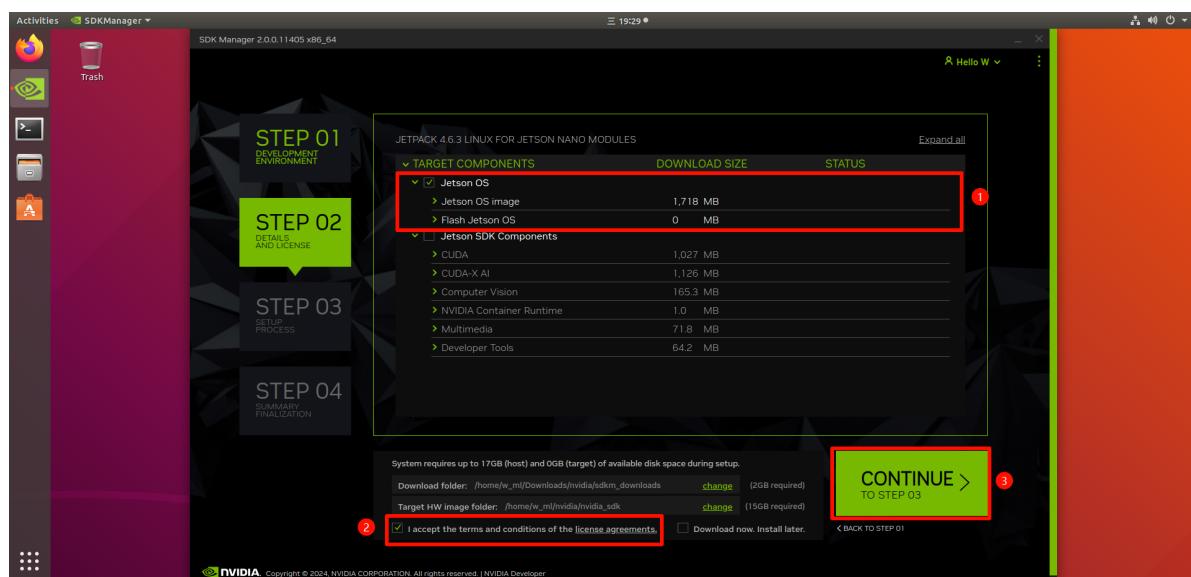
### STEP1



### STEP2

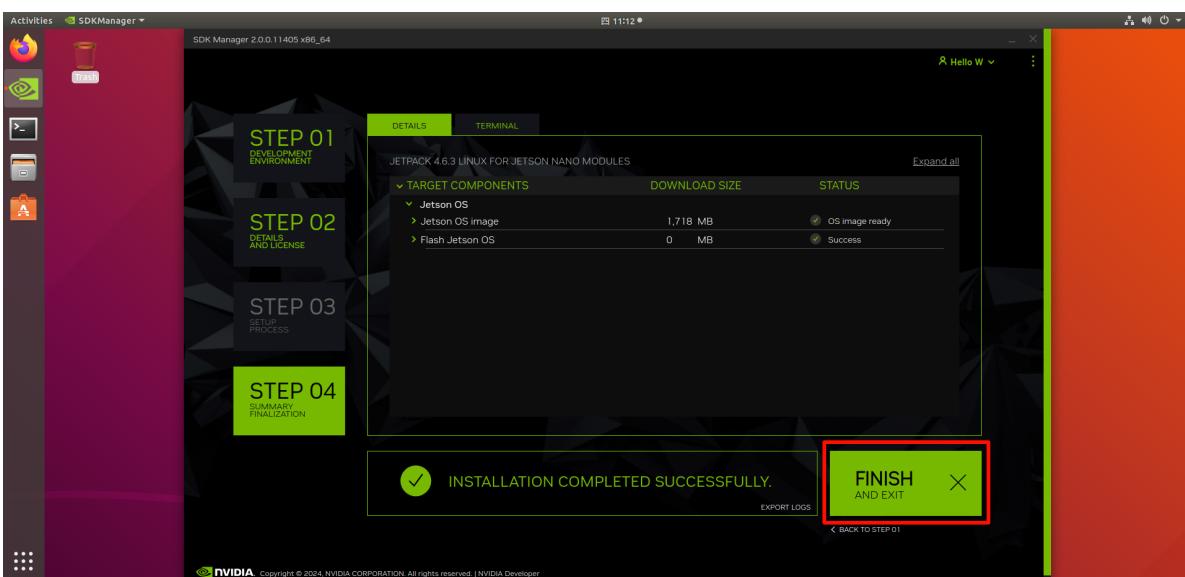
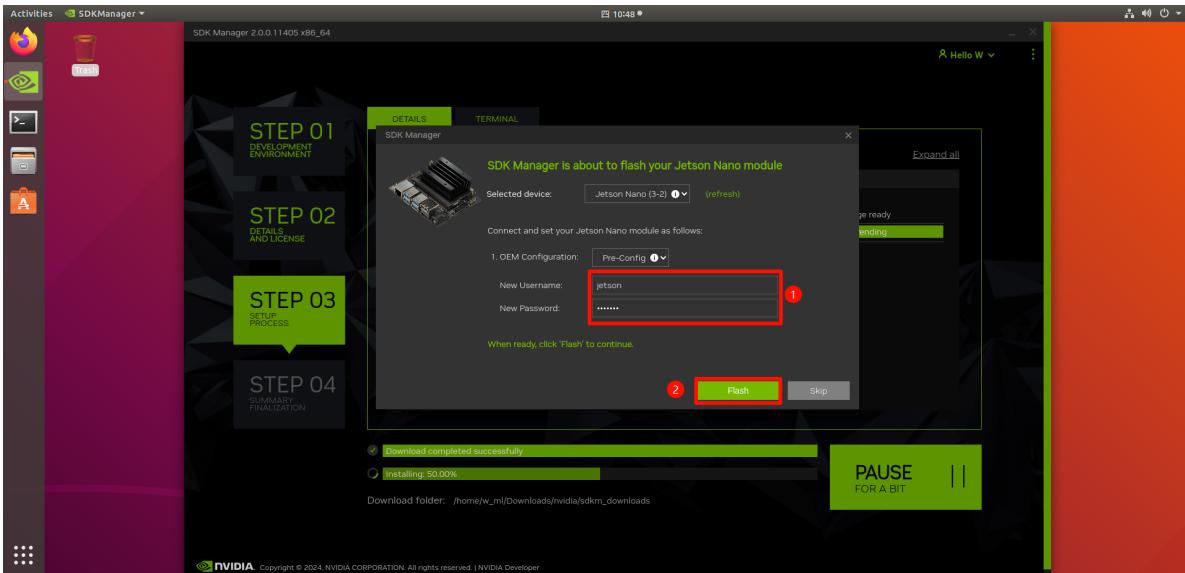
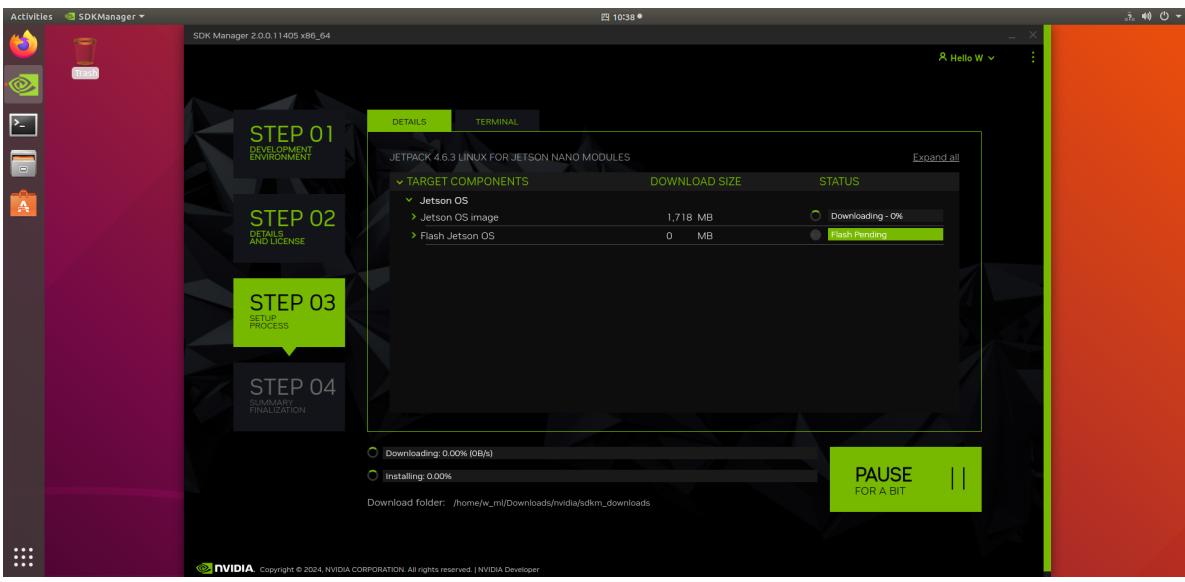
After completing the following options, you need to enter the password for confirmation, just follow the software prompts to complete!

If this step prompts that there is insufficient space, you need to check whether the system disk space is insufficient, and you can continue to expand the virtual machine disk space!



### STEP3

Wait for the system download and installation to complete. You need to enter your username and password during installation, you can fill it in yourself!



The above is a demonstration of the steps to successfully burn the system to the motherboard.

If the burning fails, you can follow the tutorial again and try a few more times!

## 4. Motherboard starts the system

Unplug the data cable and DC power adapter connecting the motherboard to the computer, and then unplug the jumper cap that shorts the FC REC and GND pins.

Start the system: Use the DC power adapter to provide power (you need to use a jumper cap to short the DC enable (J48)), and connect the monitor to confirm whether the system starts normally!

