

**Before starting with this step, you must successfully install the virtual machine on your computer.**

## **1. Jetson NANO connects to the virtual machine**

1.1 Prepare Jetson NANO board, jumper caps, display screen, mouse and keyboard, etc.

1.2 Connect the jumper caps to the FC REC and GND pins, that is, the second and third pins of the carrier board below the core board, as shown below.

This step will make Jetson NANO board enter the system REC flashing mode.



1.3 Connect the HDMI display, mouse, and keyboard to the Jetson Nano, then connect the power supply.

1.4 Connect Jetson NANO to your computer(virtual machine) by micro USB cable.

Since the jumper cap has been connected to the FC REC and GND pins in the previous step, it will automatically enter the REC flashing mode after power on.



1.5 In normally, the following window will pop up after connecting Jetson NANO to your computer(virtual machine) by micro USB cable.

We need to choose “connect this device to virtual machine(VMWare)”.

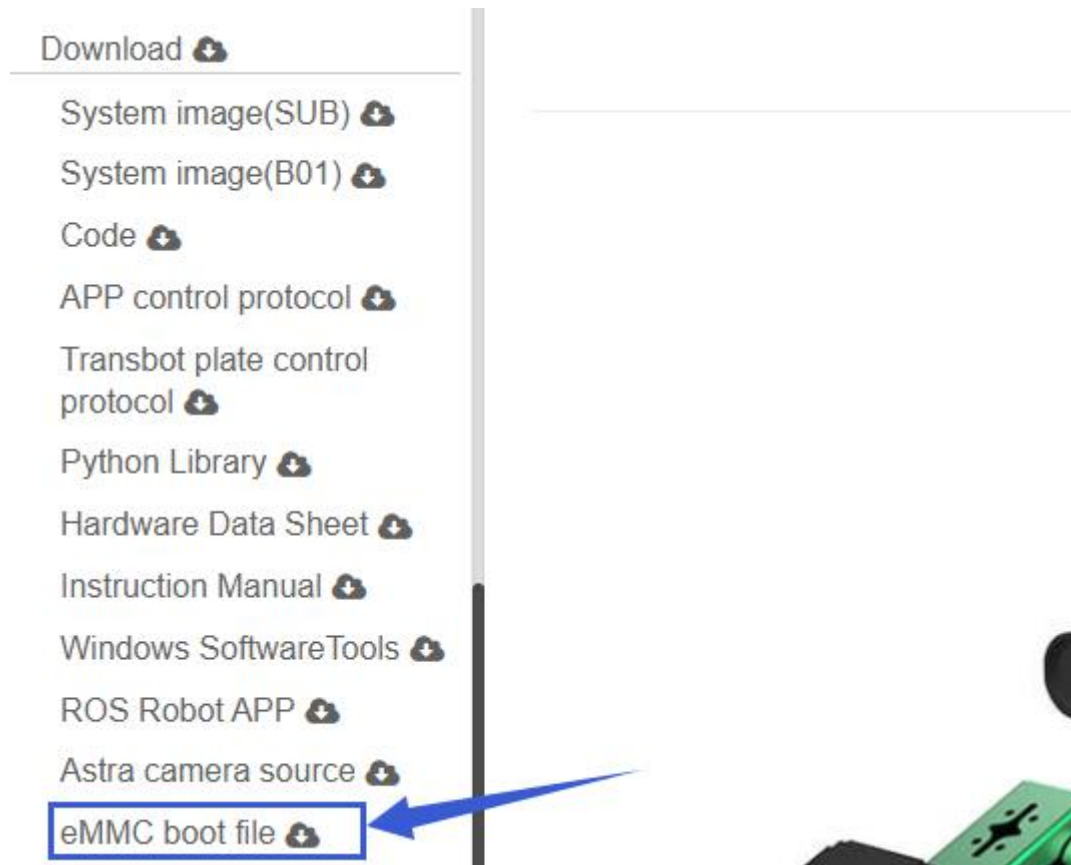
## **2. Writing**

Note: If you are using the virtual machine provided by Yahboom, and the Jetson\_Boot\_USB file is already included in the virtual machine file, you do not need to transfer it to the system again.

Users name: yahboom

Password: yahboom

**Download this file.**



2.1 Please transfer the Jetson\_Boot\_USB.tar.gz file in the data to the Ubuntu 18.04 system, and open the terminal to run the decompression command.

**tar xzvf Jetson\_Boot\_USB.tar.gz**

```
yahboom@YAB:~$ tar xzvf Jetson_Boot_USB.tar.gz
./Jetson_Boot_USB/
./Jetson_Boot_USB/jetson-nano-devkit.conf
./Jetson_Boot_USB/jetson-nano-devkit-emmc.conf
./Jetson_Boot_USB/jetson-tx1-devkit.conf
./Jetson_Boot_USB/nv_tools/
./Jetson_Boot_USB/nv_tools/scripts/
```

2.2 After the extract is complete, enter the following command to enter the Jetson\_Boot\_USB folder,

**cd Jetson\_Boot\_USB/**

**ls**

```

yahboom@YAB:~$ cd Jetson_Boot_USB/
yahboom@YAB:~/Jetson_Boot_USB$ ls
apply_binaries.sh      p2597-0000+p2180-1000-24x7.conf
bootloader             p2597-0000+p2180-1000.conf
build_l4t_bup.sh       p3448-0000.conf.common
flash.sh               p3448-0000-max-spi.conf
hybrid-qspi.conf       p3448-0000-max-spi-sd.conf
jetson-nano-2gb-devkit.conf p3449-0000+p3448-0000-qspi.conf
jetson-nano-devkit.conf p3449-0000+p3448-0000-qspi-sd.conf
jetson-nano-devkit-emmc.conf p3449-0000+p3448-0002.conf
jetson-nano-emmc.conf  p3450.conf
jetson-nano-qspi.conf  p3542-0000+p3448-0003-qspi.conf
jetson-nano-qspi-sd.conf p3542-0000+p3448-0003-qspi-sd.conf
jetson-tx1.conf        p3542.conf
jetson-tx1-devkit.conf README_Autoflash.txt
kernel                README_Massflash.txt
l4t_generate_soc_bup.sh rootfs
nvautoflash.sh        source
nvmassflashgen.sh     source_sync.sh
nv_tegra              tools
nv_tools              TX1_boot-firmware-redundancy.txt
p2371.conf

```

2.3 Enter the following command to run the EMMC boot file.

**sudo ./flash.sh -r jetson-nano-devkit-emmc mmcblk0p1**

```

yahboom@YAB:~/Jetson_Boot_USB$ sudo ./flash.sh -r jetson-nano-devkit-emmc mmcblk0p1
[sudo] password for yahboom:
#####
# L4T BSP Information:
# R32 , REVISION: 5.2
#####
# Target Board Information:
# Name: jetson-nano-devkit-emmc, Board Family: t210ref, SoC: Tegra 210,
# OpMode: production, Boot Authentication: ,
# Disk encryption: disabled ,

```

2.4 Be patient, the file is written on the EMMC.

If the writing is successful, the system will prompt "\*\*\* The target t210ref has been flashed successfully. \*\*\*"

Reset the board to boot from internal eMMC."

As shown below.

```

[ 8.3892 ]
*** The target t210ref has been flashed successfully. ***
Reset the board to boot from internal eMMC.

```

If an error message appears, please confirm whether the Jetson Nano is connected normally and whether it has entered the flashing mode.

Repeat the above steps.

2.5 After the writing is completed, please unplug the jumper cap of the Jetson Nano, then insert the U disk with Yahboom system, and open the power switch.

Jetson NANO board will start up normally.

