

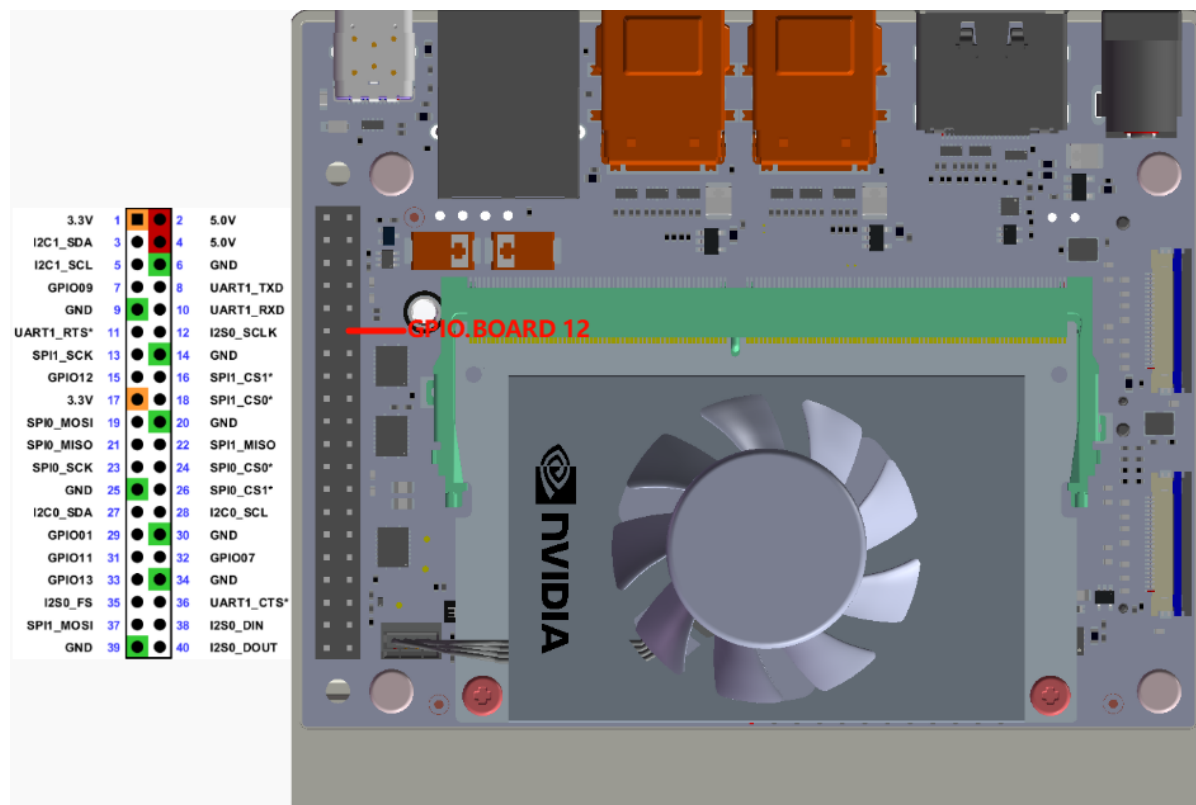
# GPIO reading

## GPIO reading

1. GPIO pin diagram
2. Run the program
3. Program effect

## 1. GPIO pin diagram

GPIO.BOARD 12 pin corresponds to GPIO.BCM 18 pin:



## 2. Run the program

```
cd ~/jetson-gpio/samples
```

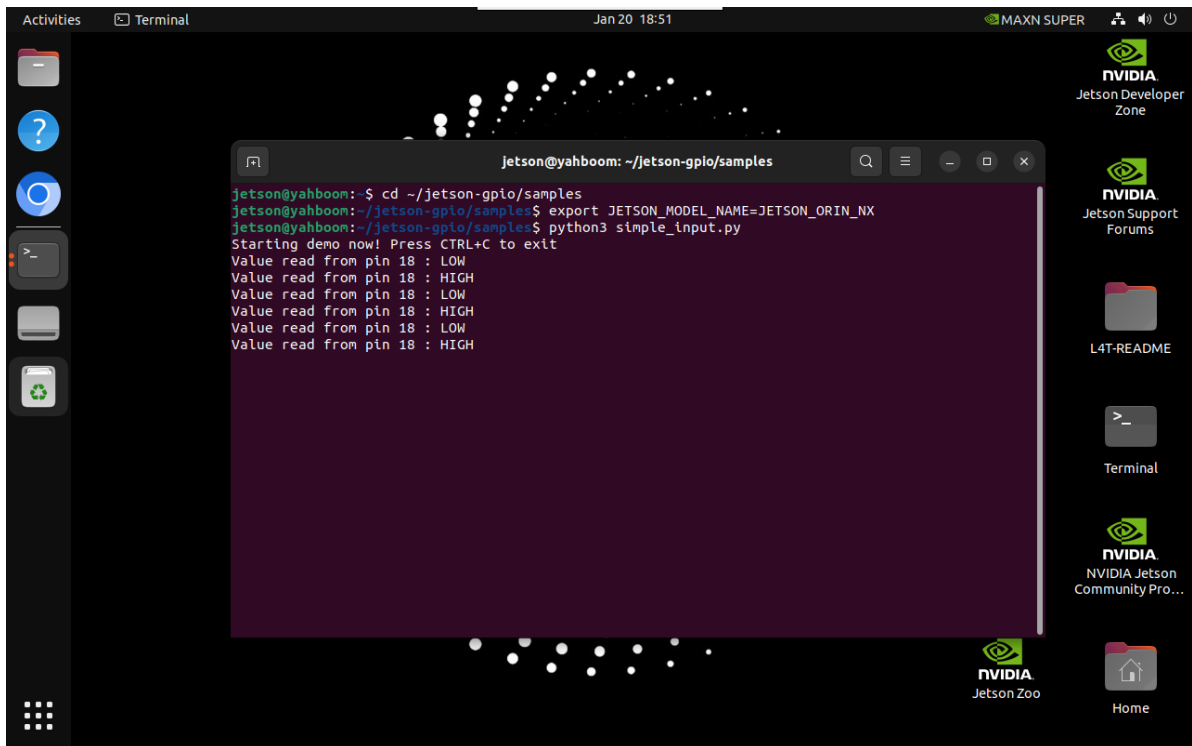
```
export JETSON_MODEL_NAME=JETSON_ORIN_NX
```

```
python3 simple_input.py
```

## 3. Program effect

Use Dupont wire to connect GPIO.BOARD 12 pin to GND and 3.3V pin on the motherboard, and test the reading of high and low levels:

**Note: Do not connect incorrectly or cause pin short circuit, as mistakes may cause damage to the motherboard hardware!**



The screenshot shows a Linux desktop environment with a dark theme. A terminal window is open in the center, displaying the output of a GPIO demo. The terminal title is "Jetson@yahboom: ~/jetson-gpio/samples". The output shows the user navigating to the directory, setting an environment variable, and running a Python script that reads the value of pin 18 repeatedly, alternating between LOW and HIGH. The desktop background features a pattern of white dots. On the left is a vertical dock with icons for Activities, Terminal, and other applications. On the right is a sidebar with NVIDIA logos and links to the Jetson Developer Zone, Support Forums, L4T-README, and Home. The top status bar shows the date and time as "Jan 20 18:51" and the system name "MAXN SUPER".

```
Jetson@yahboom: ~/jetson-gpio/samples
Jetson@yahboom:~$ cd ~/jetson-gpio/samples
Jetson@yahboom:~/jetson-gpio/samples$ export JETSON_MODEL_NAME=JETSON_ORIN_NX
Jetson@yahboom:~/jetson-gpio/samples$ python3 simple_input.py
Starting demo now! Press CTRL+C to exit
Value read from pin 18 : LOW
Value read from pin 18 : HIGH
Value read from pin 18 : LOW
Value read from pin 18 : HIGH
Value read from pin 18 : LOW
Value read from pin 18 : HIGH
```