

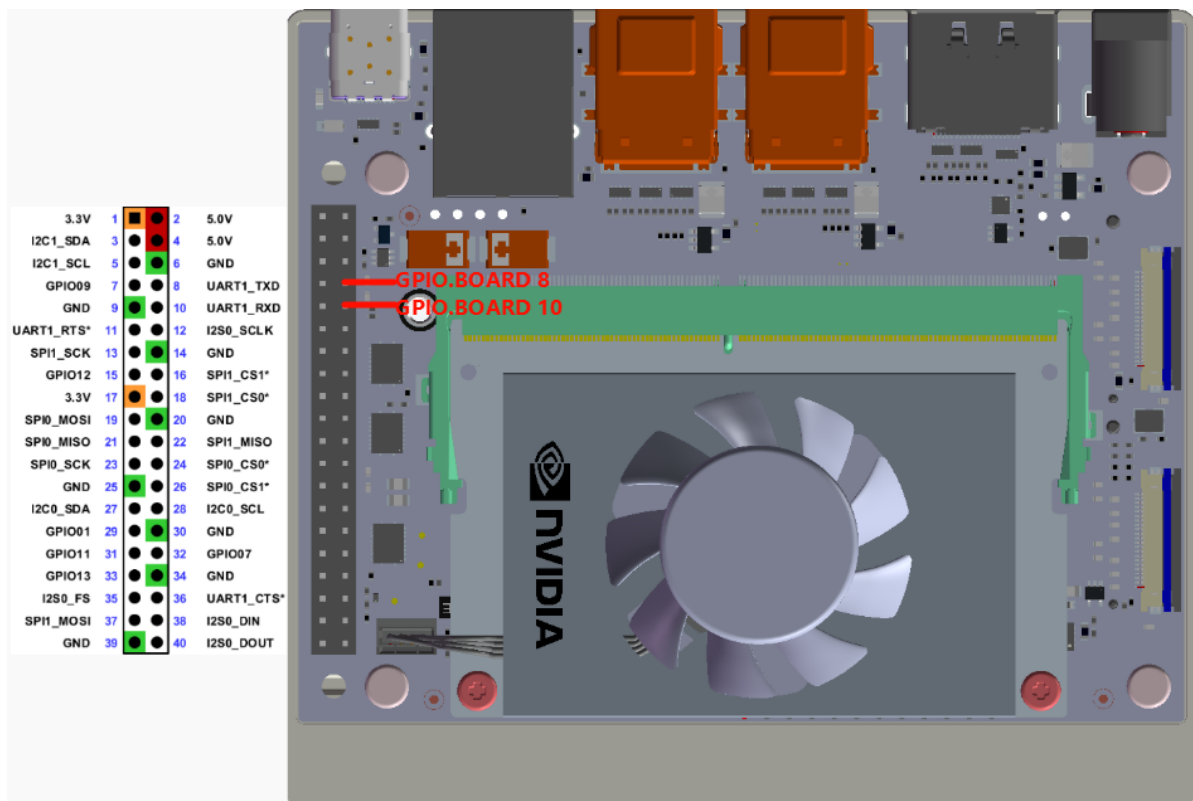
# Serial communication

## Serial communication

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## 1. GPIO pin diagram

GPIO.BOARD pin 8 corresponds to GPIO.BCM 14, GPIO.BOARD pin 10 corresponds to GPIO.BCM 15:



## 2. Serial port test

### 2.1. Install cutecom

```
sudo apt update
sudo apt install cutecom -y
```

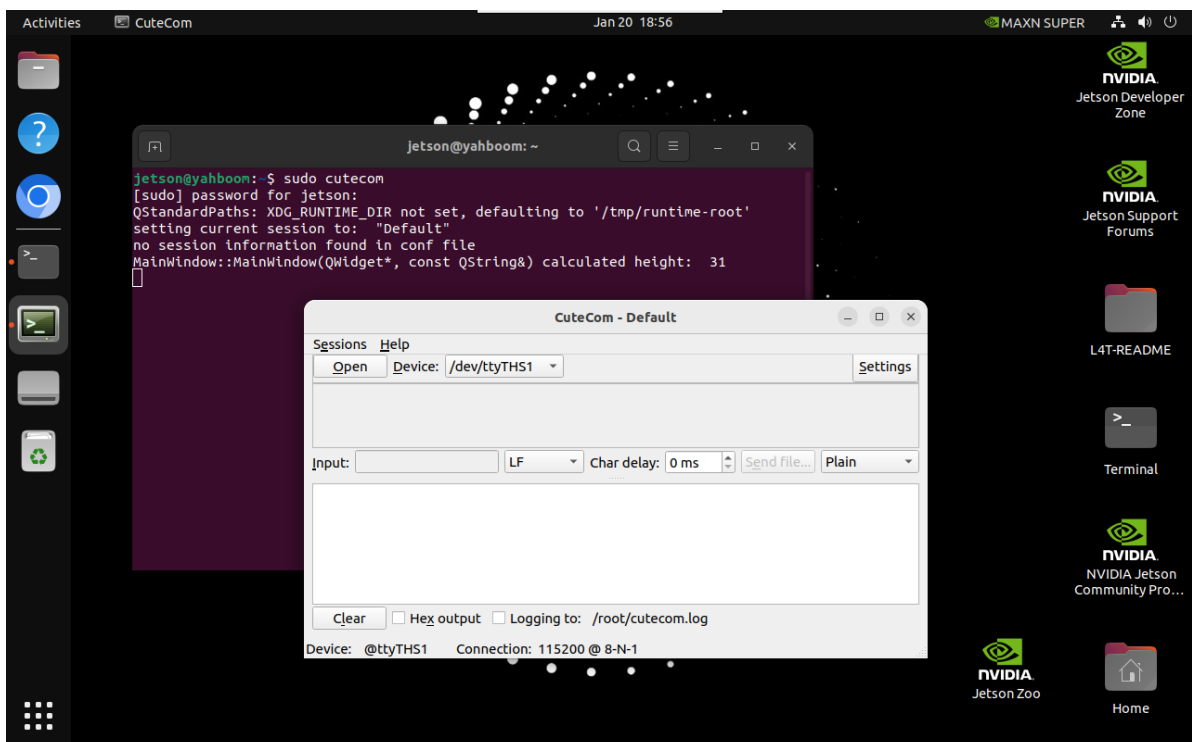
```
Activities Terminal Jan 20 18:54 MAXN SUPER jetson@yahboom: ~

jetson@yahboom:~$ sudo apt update
[sudo] password for jetson:
Ign:1 https://download.docker.com/linux/ubuntu jammy InRelease
Hit:2 http://ports.ubuntu.com/ubuntu-ports jammy InRelease
Hit:3 https://repo.download.nvidia.cn/jetson/common r36.4 InRelease
Hit:4 http://ports.ubuntu.com/ubuntu-ports jammy-updates InRelease
Hit:5 https://repo.download.nvidia.cn/jetson/t234 r36.4 InRelease
Hit:6 http://ports.ubuntu.com/ubuntu-ports jammy-backports InRelease
Hit:7 https://repo.download.nvidia.cn/jetson/ffmpeg r36.4 InRelease
Get:8 http://ports.ubuntu.com/ubuntu-ports jammy-security InRelease [129 kB]
Hit:9 https://download.docker.com/linux/ubuntu jammy InRelease
Get:10 http://ports.ubuntu.com/ubuntu-ports jammy-security/universe arm64 Packages [926 kB]
Get:10 http://ports.ubuntu.com/ubuntu-ports jammy-security/universe Translation-en [205 kB]
Fetched 1,260 kB in 4s (311 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
57 packages can be upgraded. Run 'apt list --upgradable' to see them.
jetson@yahboom:~$ sudo apt install cutecom -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  gdal-data libaec0 libarmadillo10 libarpack2 libavcodec-dev libavformat-dev libavutil-dev
  libblosc1 libcfitsio9 libcharls2 libdc1394-dev libdeflate-dev libexif-dev libfreexl1
  libfyba0 libgdal30 libgdcm-dev libgdcm3.0 libgeos-civ5 libgeos3.10.2 libgeotiff5
  libgl2ps1.4 libglew2.2 libgphoto2-dev libhdf4-0-alt libhdf5-103-1 libhdf5-hl-100 libheif1
  liblmbase-dev libjbig-dev libjpeg-dev libjpeg-turbo8-dev libjpeg8-dev libkmlbase1
  libkmlcore1 libkmlengine1 liblpt5 libminizip1 libmysqlclient21 libnetcdf19 libodbc2
  libodbcinst2 libogdi4.1 libopencv-calib3d4.5d libopencv-contrib4.5d libopencv-dnn4.5d
  libopencv-features2d4.5d libopencv-flann4.5d libopencv-highgui4.5d libopencv-imgcodecs4.5d
  libopencv-legacy4.5d libopencv-m4.5d libopencv-ml4.5d libopencv-objdetect4.5d libopencv-photo4.5d
  libopencv-shape4.5d libopencv-stitching4.5d libopencv-superres4.5d libopencv-video4.5d
  libopencv-videoio4.5d libopencv-videostab4.5d libopencv-viz4.5d libopenexr-dev libpng-dev
  libpq5 libproj22 libraw1394-dev librttopo1 libsocket++1 libspatialite7 libsuperlu5
  libswresample-dev libswscale-dev libsz2 libtbb-dev libtesseract4 libtiff-dev libtiffxx5
  liburiparser1 libvtk9.1 libxerces-c3.2 mysql-common proj-data unixodbc-common
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  libnd4c0 libqt5core5a libqt5dbus5 libqt5gui5 libqt5network5 libqt5serialport5 libqt5svg5
```

## 2.2. Use cutecom

Start `cutecom` in the terminal:

```
sudo cutecom
```



## 3. Experimental effect

Use a jumper cap or Dupont wire to short-circuit GPIO.BOARD 8 and GPIO.BOARD 10 pins.

Use `cutecom` to open the `/dev/ttyTHS1` serial port number: Enter the data to be sent by the serial port in `Input`, the upper window displays the data sent by the `/dev/ttyTHS1` serial port, and the lower window displays the data received by `/dev/ttyTHS1`:

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

