ESP32 communication board configuration parameters

1. The ESP32 communication board and STM32 driver board have factory firmware burned in the factory. If other routine firmware has been burned, please re-burn the factory firmware, then power on the board and turn on the power switch.
2. Copy the configuration script (config_Balance_Car.py) file included in the product information to the virtual machine/computer.

The configuration file is stored in the [Program Source Code Summary] -> [Factory-Firmware] directory in the information.

3. If the virtual machine/computer has an external USB serial port device, please temporarily remove the USB external serial port device of the virtual machine/computer, and then use a type-C data cable to connect the serial port of the virtual machine/computer and the ESP32 communication board. At this time, the system pops up a window and asks you to select the connection to the virtual machine.
4. Edit the config_Balance_Car.py file, pull to the bottom of the file, update the parameters of the set_wifi_config function according to your own WiFi network name and password, and update the parameters of the set_udp_config function according to the IP address of the virtual machine/computer. Keep other parameters as default or modify them as needed. Save the configuration file. **At the same time, the proxy for connecting to wifi and ip of the ROS-WIFI image transmission module is also directly configured through this setting.**

```
robot.set_wifi_config("Yahboom2", "yahboom890729")
robot.set_udp_config([192, 168, 2, 108], 8899)
robot.set_car_type(robot.CAR_TYPE_COMPUTER)
#robot.set_car_type(robot.CAR_TYPE_UASRT_CAR)

robot.set_ros_domain_id(20)
robot.set_ros_serial_baudrate(921600)
robot.set_ros_namespace("")
```

5. Then run the following command to configure the robot. At this time, check whether the returned data is consistent with your settings. If it is consistent, it means that the setting is successful.

```
python3 config_Balance_Car.py
```

```
-----------------------
MY_DOMAIN_ID: 20
MY_IP: 192.168.2.108
-----------------------
yahboom@yahboom-VM:~$ python3 config_Balance_Car.py
Rebooting Device, Please wait.
version: 2.8.0
ssid: Yahboom2
passwd: yahboom890729
ip_addr: 192.168.2.108
ip_port: 8899
car_type: CAR_TYPE_COMPUTER
domain_id: 20
ros_serial_baudrate: 921600
ros_namespace:
Please reboot the device to take effect, if you change some device config.
```

6. Press the robot's reset button to reload the configuration, or you can turn the robot power on and off again. At this point, you can remove the type-C data cable that connects the robot to the virtual machine/computer.