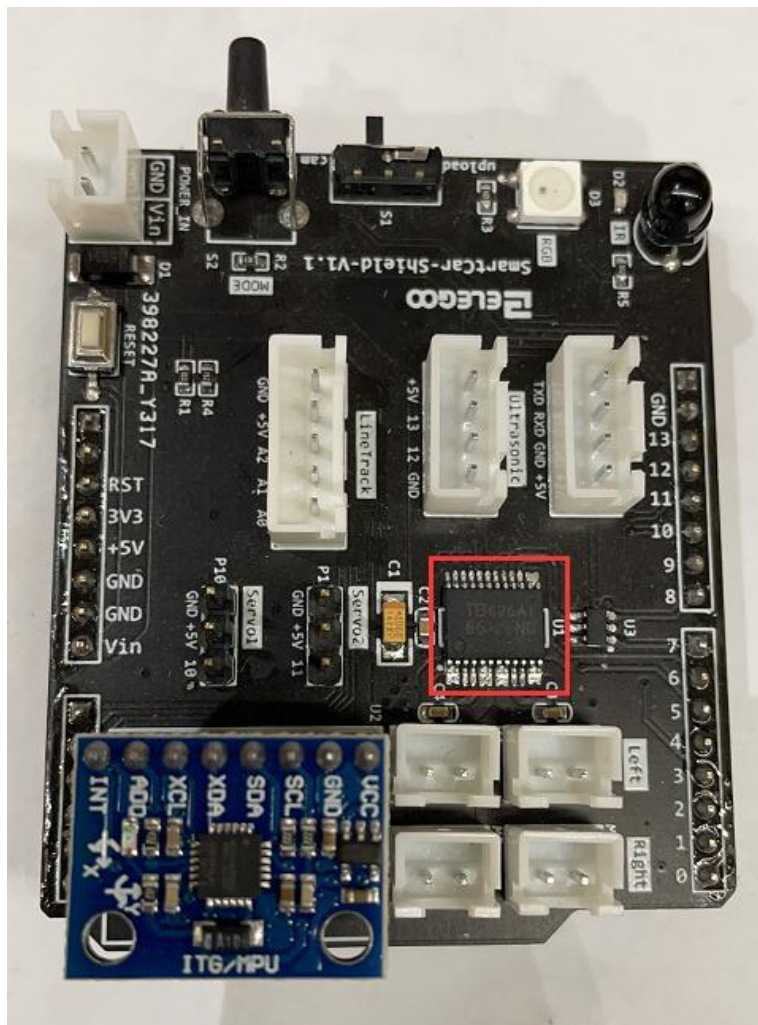


1. Due to the ongoing global chip shortage affecting the DRV8835 motor driver chip, MPU6050 gyro module, and the HT42B534 USB-to-Serial chip, we use the TB6612 motor driver chip, the QMI8658C gyro module, and the CH340 USB-to-Serial chip to replace them.

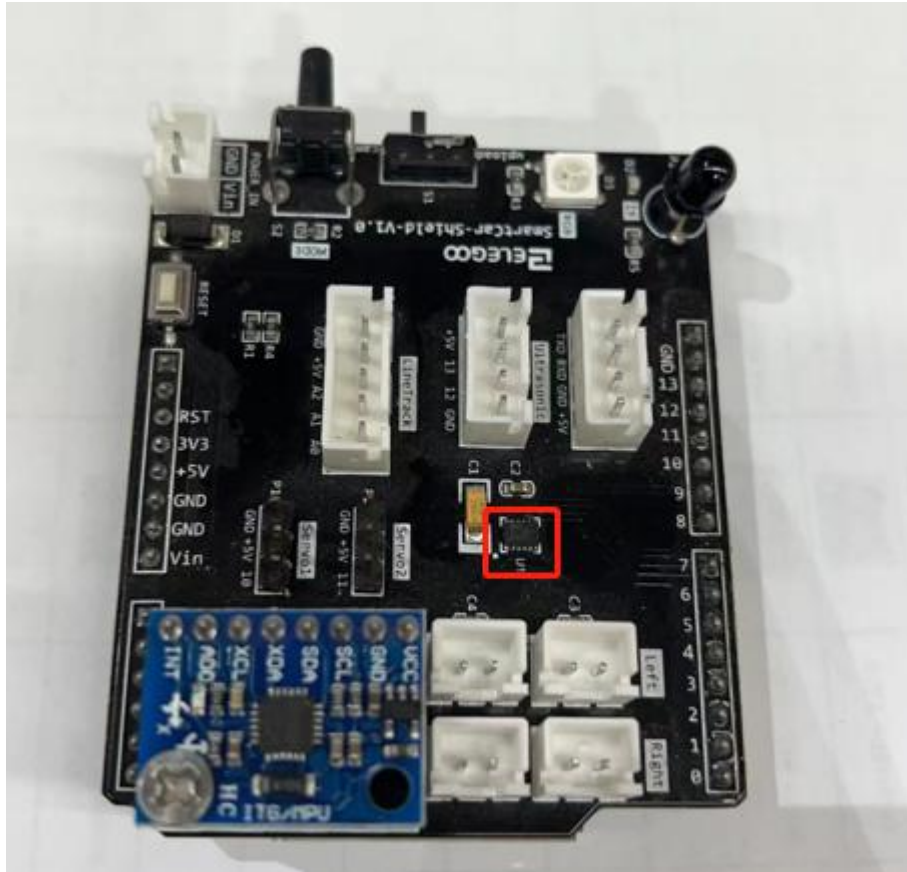
Therefore, in the folder for the main program, you need to select the correct program according to the type of motor driver chip and the gyro module on the expansion board.

Name	Date modified	Type	Size
DRV8835	3/16/2021 5:34 PM	File folder	
TB6612 & MPU6050	3/16/2021 5:34 PM	File folder	
TB6612 & QMI8658C	12/15/2021 5:27 PM	File folder	

2. The chip inside the red rectangle in the picture below is the TB6612 motor driver chip.

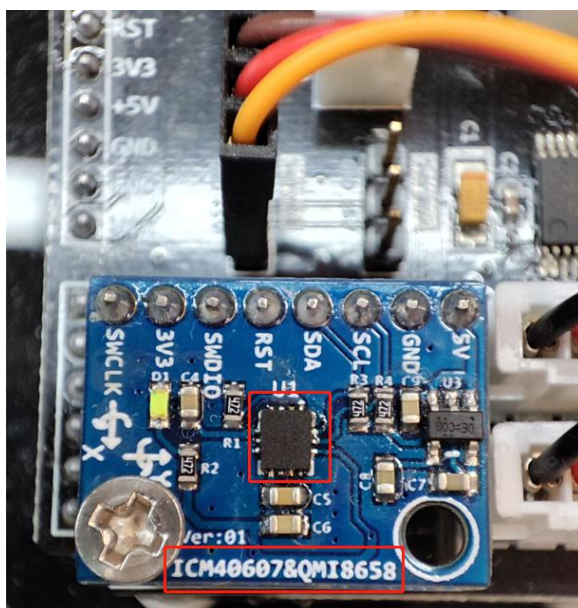


3. The chip inside the red rectangle in the picture below is the DRV8835 motor driver chip.

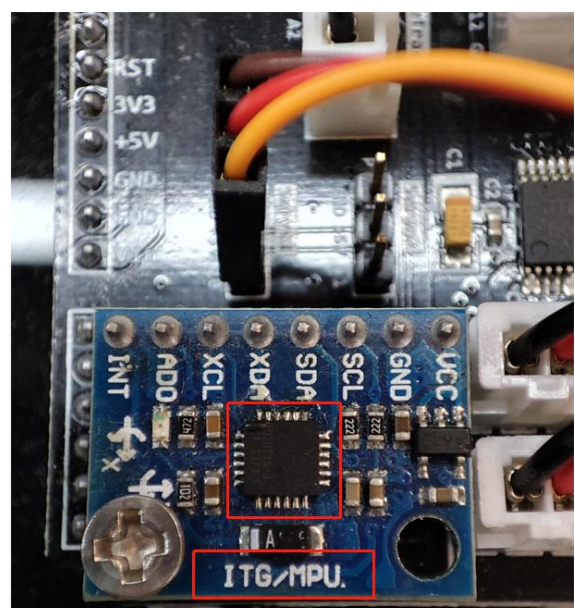


4.The silkscreen on the QMI8658C module and MPU6050 module is different, you can identify the chip by the silkscreen in the pictures below.

QMI8658C gyro module



MPU6050 gyro module





5.The USB-to-Serial chip allows the computer to recognize the controller board as a USB device, so we can upload code to the controller board via Arduino IDE.

The chip inside the red rectangle in the picture below is the HT42B534 USB-to-Serial chip. On the device manager, it will display as a USB Serial device (COMX).

It does not require driver software installation on Windows 10, Linux, and macOS operating systems. If your computer OS is Windows 7, please open the “HT42B534 driver software” folder under the current folder path and install the driver software. Please select “USB to UART Bridge” when you install the driver software.



6.The chip inside the red rectangle in the picture below is the CH340 USB-to-Serial chip. On the device manager, it will display as a USB-Serial CH340 device (COMX).

If your computer cannot recognize the controller board. Please open the “CH340 driver software” folder under the current folder path and install the driver software according to your OS.

