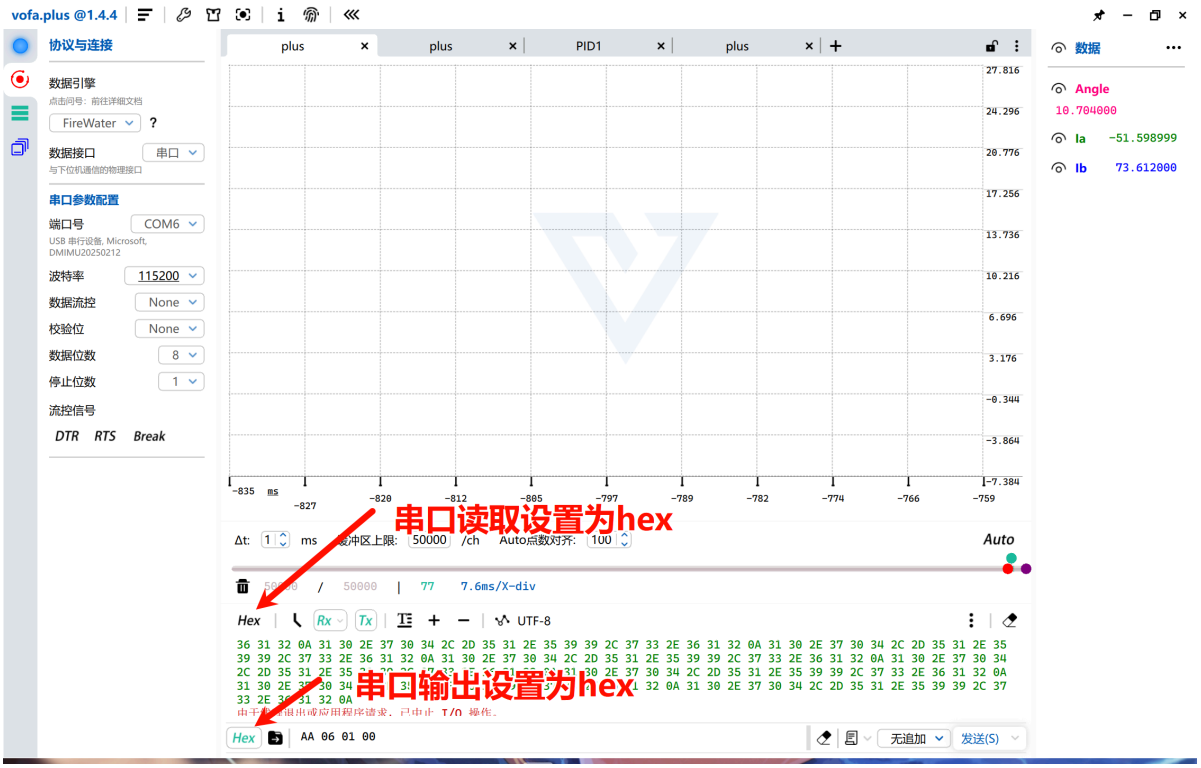
A 通信设置

使用VOFA设置，设置为hex输出模式



A.1 进入设置模式

```
AA 06 01 0D
```

发送成功后，串口读取部分会变为慢速输出数据

A.2 设置为CAN输出模式

```
AA 0A 02 0D
```

A.3 设置CANID

```
AA 08 X 0D
```

- X:是你想控制这个imu时的目标can id

A.4 设置MSTID

```
AA 09 X 0D
```

- X:是你想让这个imu反馈时的can id

A.5 开启CAN自动上报

```
AA 01 18 0D
```

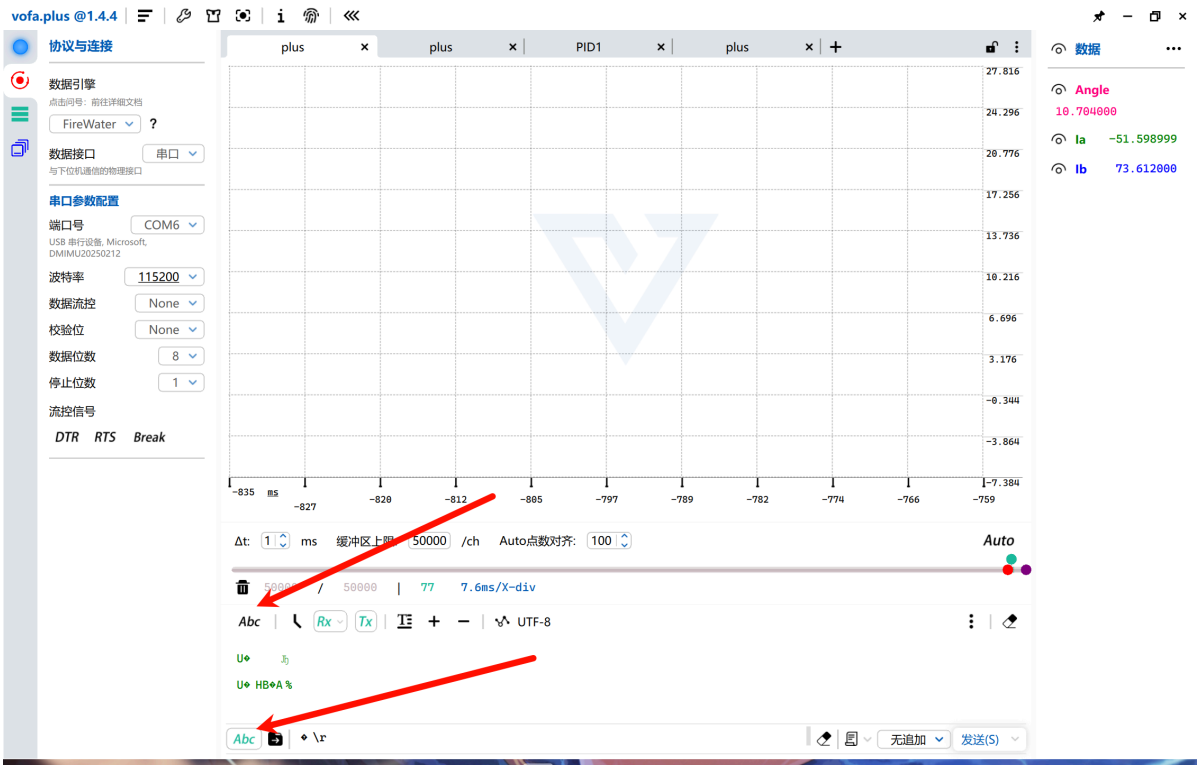
A.6 保存参数

```
AA 03 01 0D
```

A.7 退出设置模式

```
AA 06 00 0D
```

A.8 最后把串口读取和输出改回ascii

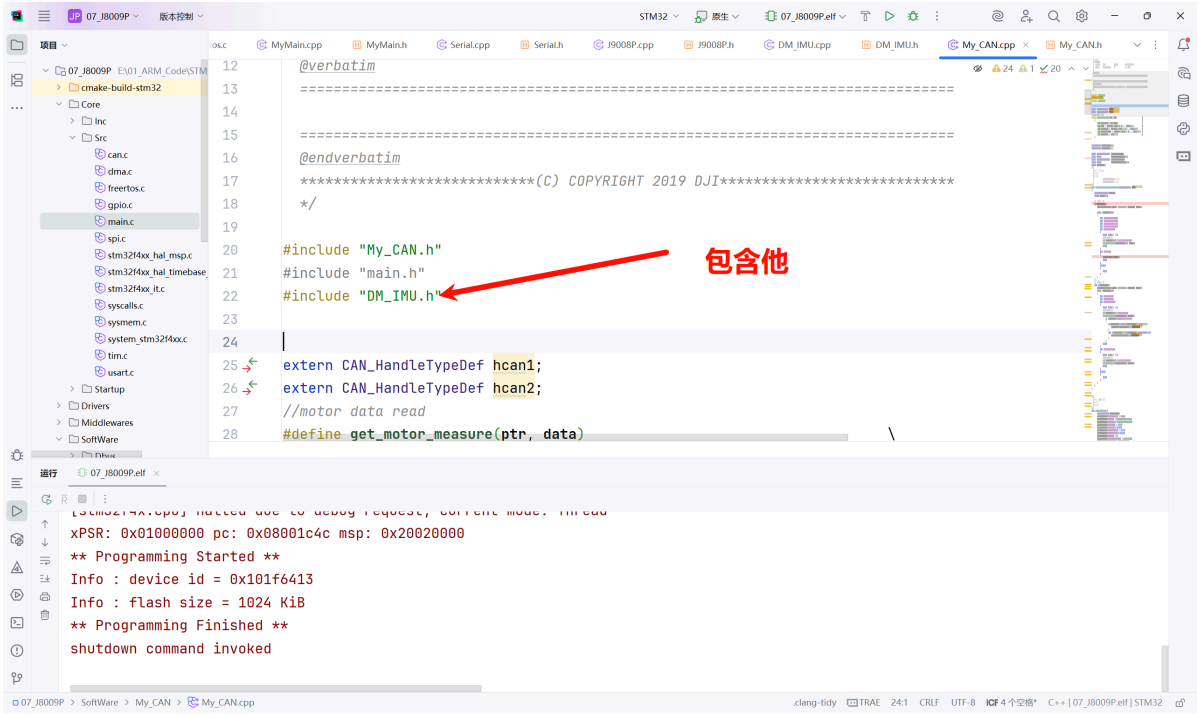


B 代码设置

B.1 包含这两个文件

DM_IMU.c	2025/12/24 22:04	JetBrains CLion	4 KB
DM_IMU.h	2025/12/24 22:04	DevCpp.h	1 KB

B.2 在大疆can通信中包含此文件



B.3 枚举类型中添加imu的mst id

```
typedef enum
{

    CAN_CHASSIS_Speed_ID = 0x200,
    CAN_LU_Meca_3510_ID = 0x201,//1
    CAN_RU_Meca_3510_ID = 0x202,//2
    CAN_RD_Meca_3510_ID = 0x203,//3
    CAN_LD_Meca_3510_ID = 0x204,//4

    CAN_CHASSIS_YAW_ID = 0x1FF,
    CAN_YAW_6020_ID = 0x205,   //1

    CAN_GIMBAL_PITCH_ID = 0x1FF,
    CAN_PIT_6020_ID = 0x205,   //1

    CAN_CLIP_ALL_ID=0x200,
    CAN_L_3510_ID = 0x201,     //1
    CAN_R_3510_ID = 0x202,     //2
    CAN_CLIP_2006_ID=0x203,    //3
    CAN_DM_IMU=0xBC,
} CAN_ID;
```

B.4 在can中断回调函数加上此函数

```
    /*  Chasis  */
    if(hcan==&hcan1){
        HAL_CAN_GetRxMessage(&hcan1,  RxFifo: CAN_RX_FIFO0, &rx_header, rx_data);

        switch (rx_header.StdId)
        {
            case CAN_LU_Meca_3510_ID:
            case CAN_RU_Meca_3510_ID:
            case CAN_RD_Meca_3510_ID:
            case CAN_LD_Meca_3510_ID:
            case CAN_YAW_6020_ID:
            {
                static uint8_t i = 0;
                //get motor id
                i = rx_header.StdId - CAN_LU_Meca_3510_ID;
                get_motor_measure(&motor_chassis[i], rx_data);
                break;
            }
            case CAN_DM_IMU:
            {
                IMU_UpdateData(rx_data);
                break;
            }
```

加上这个函数

B.5 最后就可以使用了(记得包含头文件)

```
void MyMain(){

    for (;;)
    {
        Serial_TransmitFloat(imu.pitch);
        Serial_TransmitByte(',');
        Serial_TransmitFloat(imu.roll);
        Serial_TransmitByte(',');
        Serial_TransmitFloat(imu.yaw);
        Serial_TransmitByte('\n');
        osDelay( ticks: 1);
    }
}
```

即可使用