\MDK-ARM\app\

sys.h

```
#define CHASSIS_CAN hcan1
#define ZGYRO_CAN hcan2
#define CHASSIS_ZGYRO_CAN hcan1
#define GIMBAL_CAN hcan1

#define DBUS_HUART huart1
//for dji remote controler reciever
#define JUDGE_HUART huart3
//connected to judge system
#define CV_HUART huart6
//connected to manifold/TXone
```

\bsp\

mytype.h

```
typedef uint8_t u8;
typedef uint16_t u16;
typedef uint32_t u32;

typedef int8_t s8;
typedef int16_t s16;
typedef int32_t s32;

typedef volatile uint8_t vu8;
typedef volatile uint16_t vu16;
typedef volatile uint32_t vu32;

typedef volatile int8_t vs8;
typedef volatile int16_t vs16;
typedef volatile int32_t vs32;

typedef unsigned char u8;
typedef unsigned short u16;
typedef unsigned long u32;

typedef signed char s8;
typedef signed short s16;
typedef signed long s32;

typedef volatile unsigned char vu8;
typedef volatile unsigned short vu16;
typedef volatile unsigned long vu32;

typedef volatile signed char vs8;
typedef volatile signed short vs16;
typedef volatile signed long vs32;
```

bsp_can.c

```
CAN_TxGimbal_ID = 0x1FF,
CAN_YAW_FEEDBACK_ID = 0x205
CAN_PIT_FEEDBACK_ID = 0x206,
CAN_trigger_FEEDBACK_ID = 0x207,
CAN_ZGYRO_RST_ID = 0x404,
CAN_ZGYRO_FEEDBACK_MSG_ID = 0x401,
CAN_ZGYRO_CHASSIS_MSG_ID = 0x402,

CAN_MotorLF_ID = 0x041,
CAN_MotorRF_ID = 0x042,
CAN_MotorLB_ID = 0x043,
CAN_MotorRB_ID = 0x044,
CAN_4Moto_Target_Speed_ID = 0x046,
CAN_GyroRecev_ID = 0x011,
CAN_GyroReset_ID = 0x012,

CAN_3510MotoAll_ID = 0x200,
CAN_3510Moto1_ID = 0x201,
CAN_3510Moto2_ID = 0x202,
CAN_3510Moto3_ID = 0x203,
CAN_3510Moto4_ID = 0x204,
CAN_DriverPower_ID = 0x80,

CAN_HeartBeat_ID = 0x156,
```

main.c

Receive data thru UART from DBus, Bluetooth, judging system, Manifold, etc.

calibrate.c

calibrate gimbal_offset, imu_data, and save these calibration data in flash

mpu.c

Config MPU6500 and read the data from accelerator& gyrometer using SPI interface