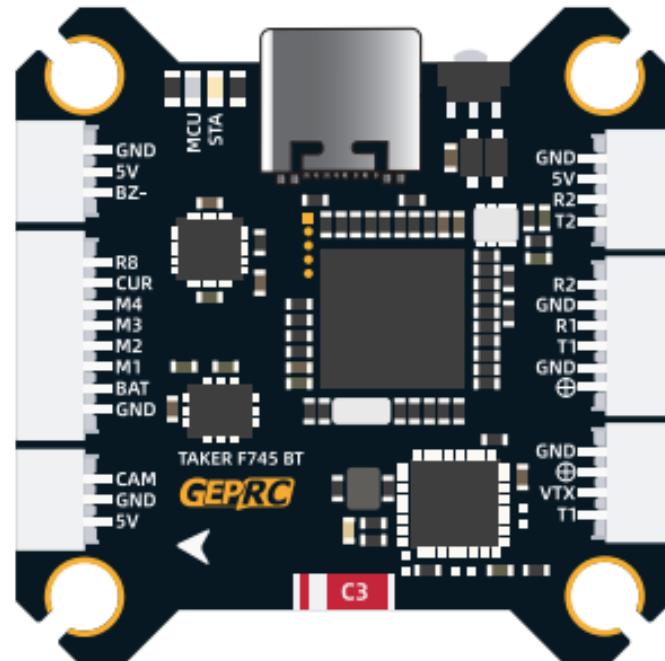
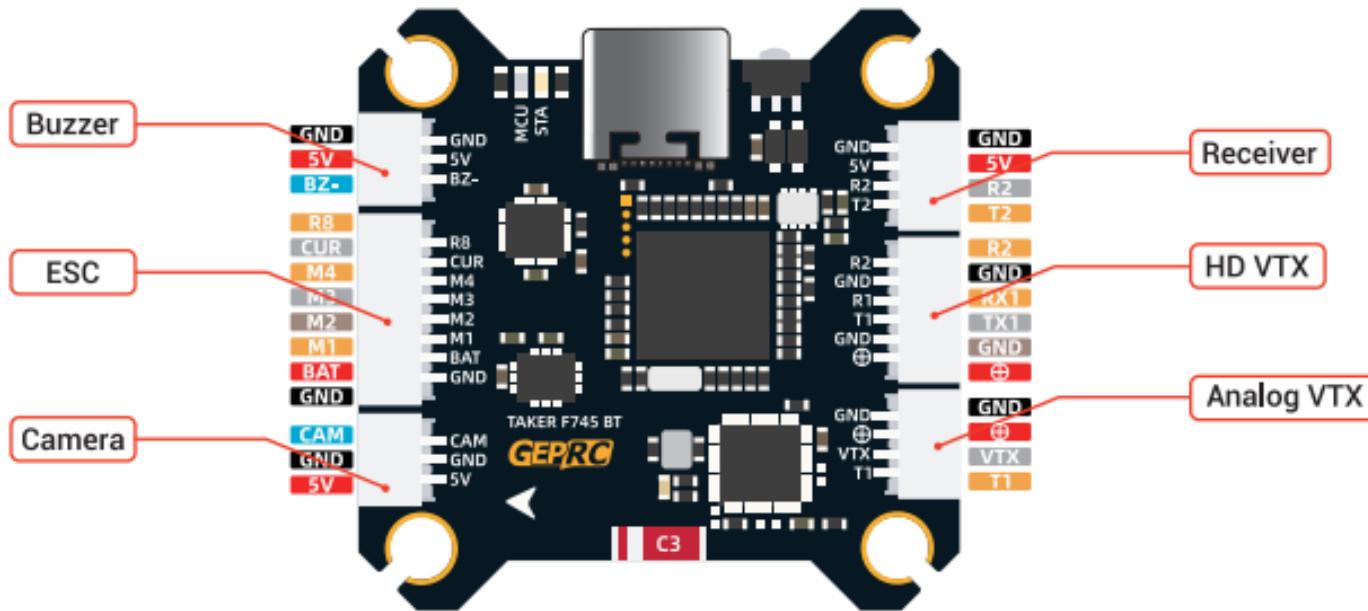


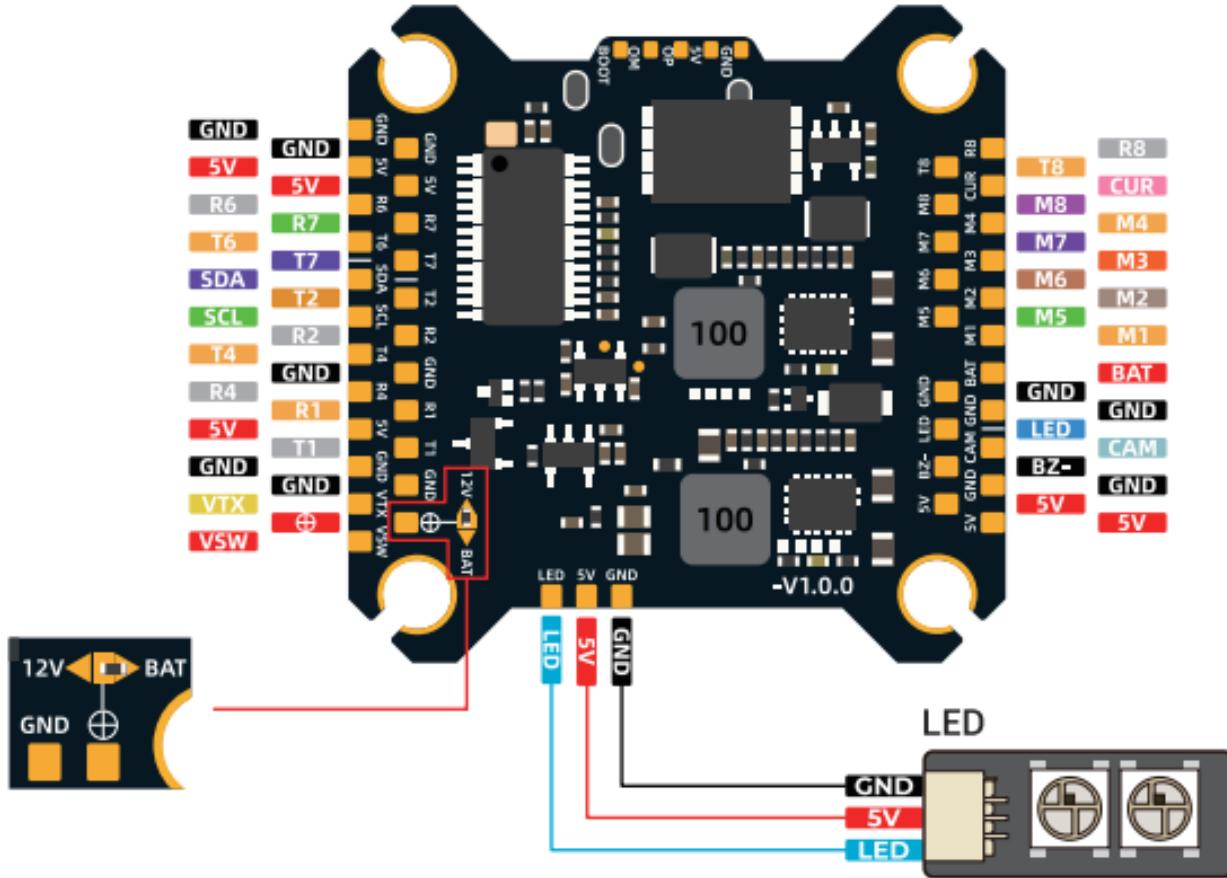
Specs

Item name:	TAKER F745 BT Flight Controller
MCU:	STM32F745
IMU:	MPU6000 + ICM42688-P(dual gyro)
Black Box:	512M onboard
Bluetooth:	Supported
Barometer:	Supported
BEC Output:	5V@3A,12V@2.5A dual BEC
Target:	GEPRCF745_BT_HD
Size:	38.5x38.5mm
Mounting:	30.5x30.5mm
Input Voltage:	3-6S LiPo
UART Ports:	7 groups (UART3 fixed for Bluetooth)



Interface definition





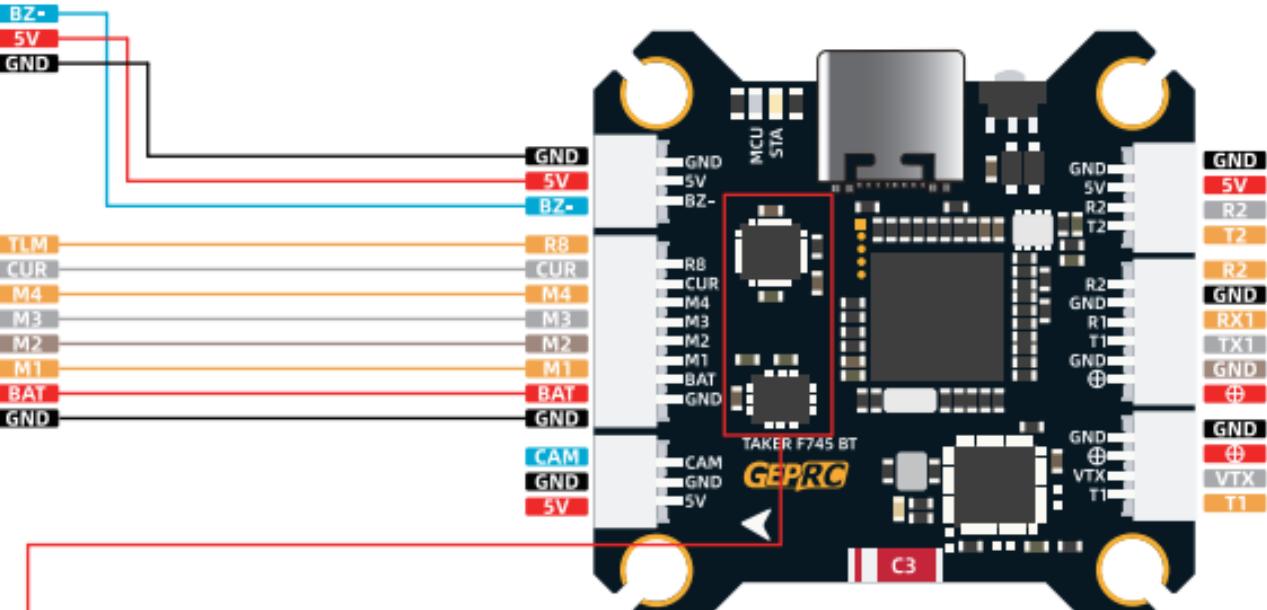
Optional VTX voltage, the default onboard output is 12V,
If the VTX requires BAT voltage, connect the BAT and \oplus pad



Super buzzer



ESC

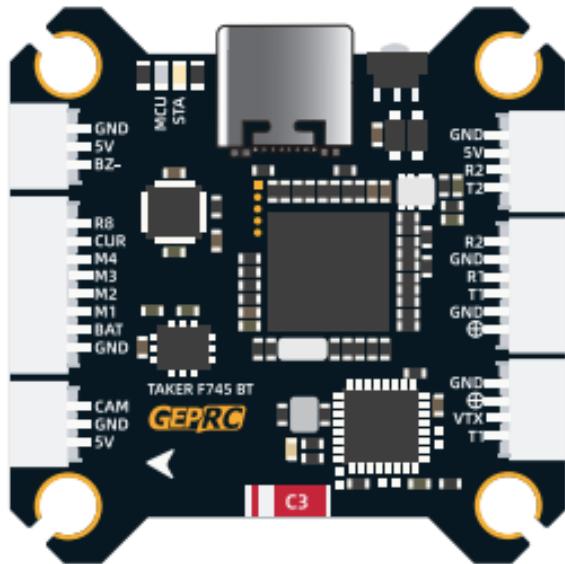


The MPU6000 is the first gyro
The ICM42688-P is the second gyro
(BF and INAV firmware support only one gyro)

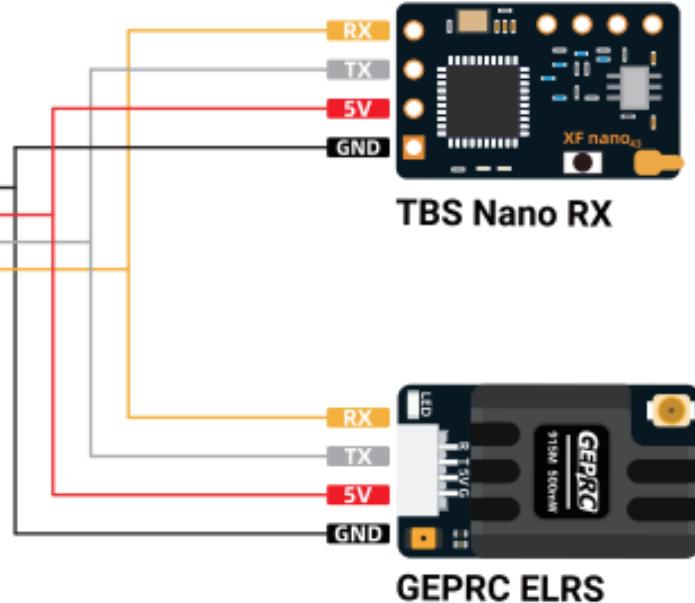
Board and Sensor Alignment

<input type="radio"/> 0	Roll Degrees	<input type="radio"/> 0	Pitch Degrees	<input type="radio"/> 0	Yaw Degrees
First	GYRO/ACCEL	CW 270°	First GYRO	CW 0°	Second GYRO
Second			MAG Alignment		

Receiver



GND
5V
R2
T2



TBS Nano RX

GEPRC ELRS

Setup
Ports
Configuration
Power&Battery
Failsafe

Identifier	Configuration/MSP	Serial RX
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART2	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>

Receiver	Receiver Mode
Serial(Via UART)	<input type="button" value="Receiver Mode"/>
<p>The UART for the receiver must be set to 'Serial RX' (in the Ports tab) Select the correct data format from the drop-down, below:</p>	
CRSF	<input type="button" value="Serial Receiver Provider"/>

VTX

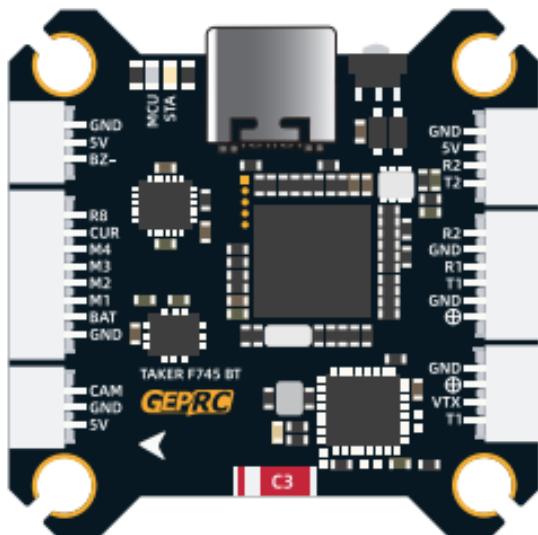
Identifier	Configuration/MSP	Serial RX
USB VCP	<input checked="" type="checkbox"/> 115200 ▾	<input type="checkbox"/>
UART1	<input checked="" type="checkbox"/> 115200 ▾	<input type="checkbox"/>
UART2	<input type="checkbox"/> 115200 ▾	<input checked="" type="checkbox"/>

Receiver

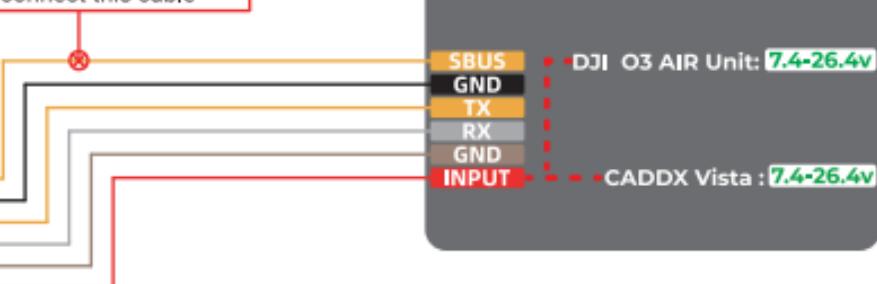
Serial (Via UART) Receiver Mode

Note: Remember to configure a Serial Port(via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

SBUS Serial Receiver Provider

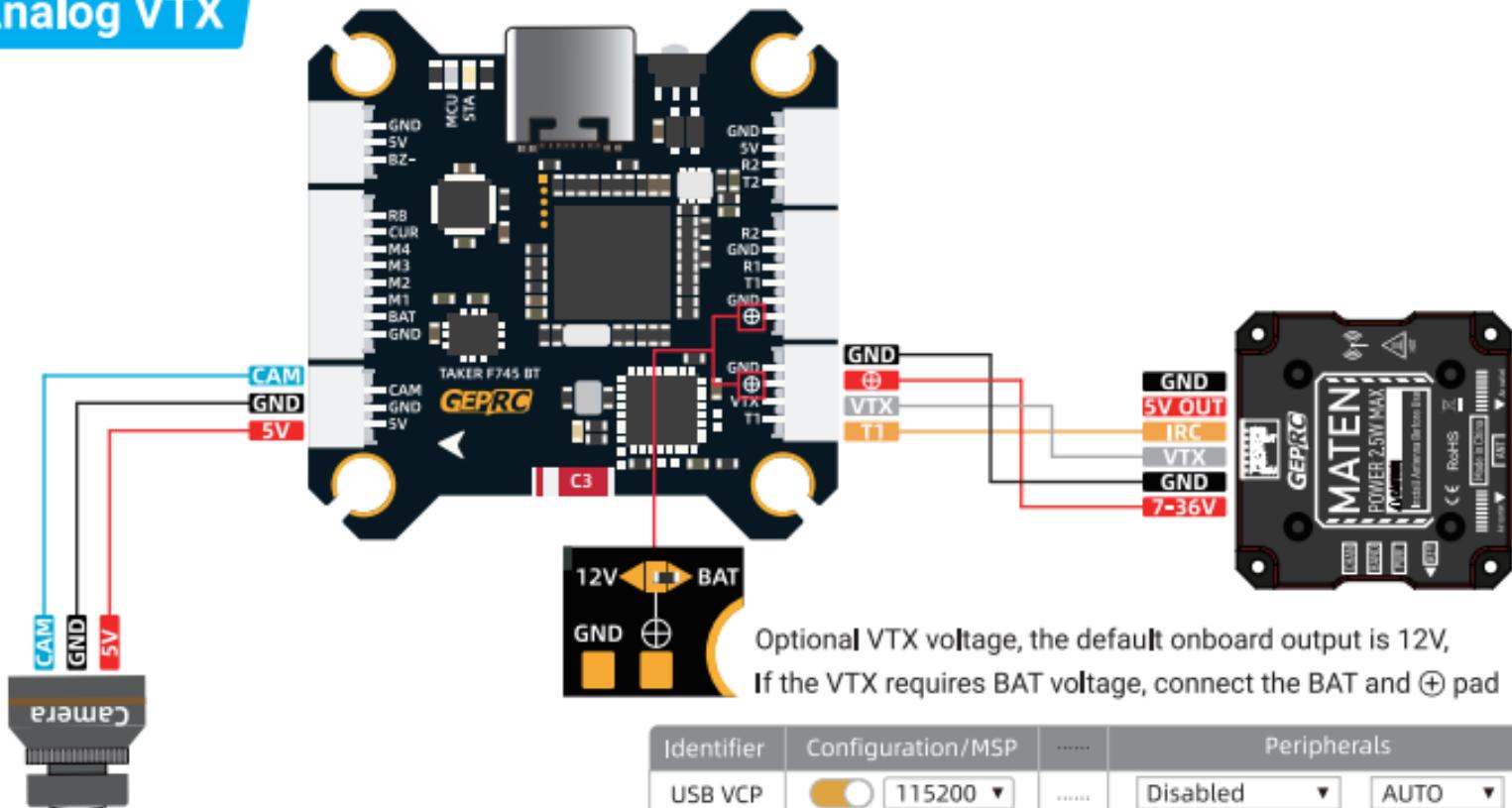


If using an external receiver,
disconnect this cable



CLI Commands:
 set osd_displayport_device = MSP
 set vcd_video_system = HD
 SAVE
 to enable high-definition OSD transmission

Analog VTX

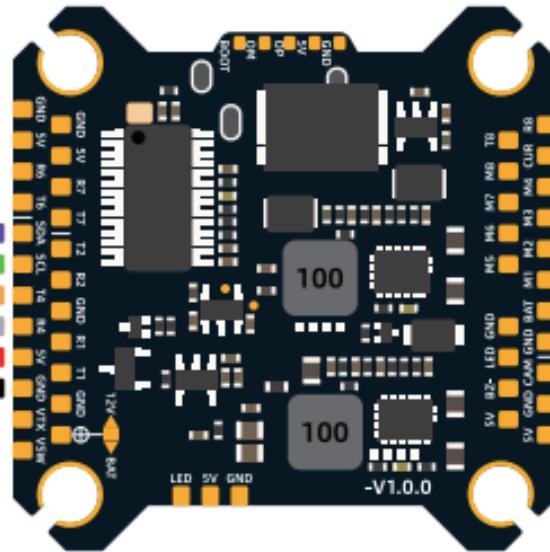


GPS

GPS



SDA and SCL are for the compass and external barometer



GPS

GPS for navigation and telemetry

Note: Remember to configure a Serial Port(via Ports tab)when using GPS feature.

Protocol: UBLOX

Auto Baud

Auto Config

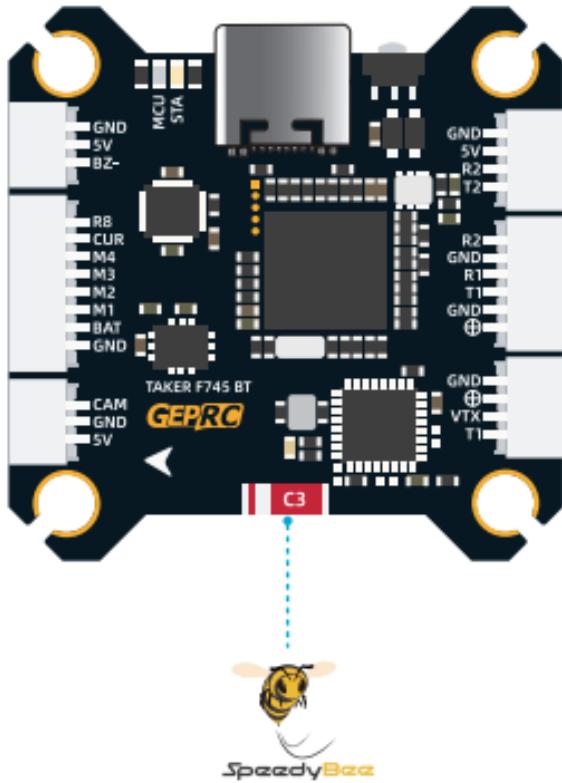
Use Galileo

Set Home Point Once

Ground Assistance Type: None

Identifier	Configuration/MSP	Sensor Input	
UART3	<input type="checkbox"/> 115200	<input type="checkbox"/> Disabled	<input type="checkbox"/> AUTO
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/> GPS	<input type="checkbox"/> 115200

Bluetooth



SpeedyBee®

My device (1)

GEPRC

Found GEPRC

GEPRC

Identifiable devices Connect

Setup

Heading: 0.0 deg
Pitch: 0.0 deg
Roll: 0.0 deg

Info

Arming Disable Flags: 3,17,25

No valid receiver signal is detected.

MSP connection is active.

Battery voltage: 8.82V

Capacity down: 0 mAh

Current draw: 0.0A

RSSI: 0%

CPU Temperature: 4°C

GPS

3D Fix:

Calibrate Accelerometer Calibrate Magnetometer

SpeedyBee®

UART1

UART2

UART3

115200

Serial RX

Identifier	Configuration/MSP	Serial RX
USB VCP	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART2	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>
UART3	<input type="checkbox"/> 115200	<input type="checkbox"/>

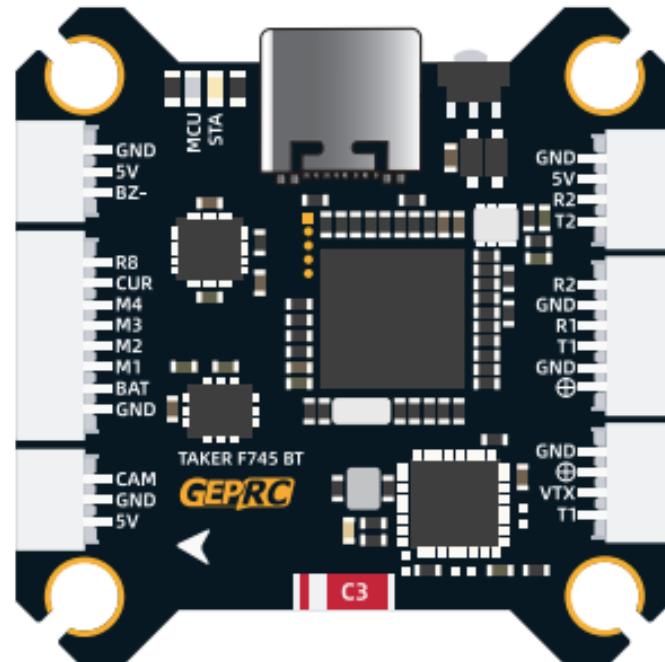
CAUTION:

- 1 All wires should try to avoid the gyroscope,
so as not to affect the normal work of the gyroscope.
 - 2 After soldering, please check that all connections are correct
to avoid damage after power-on.
-

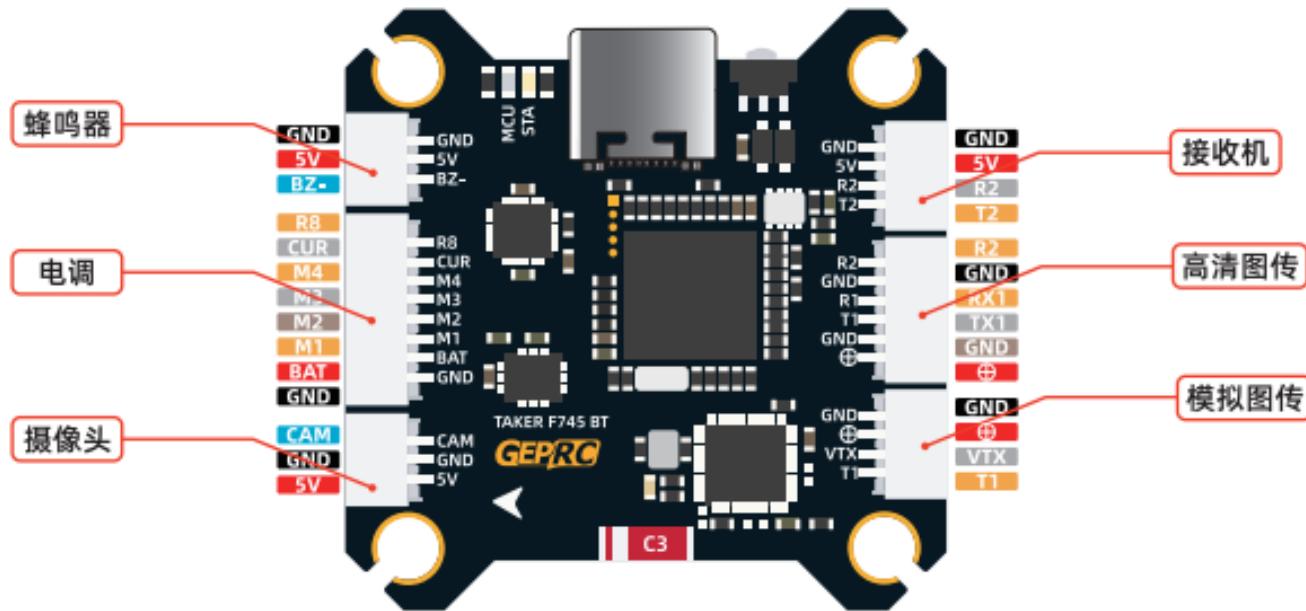


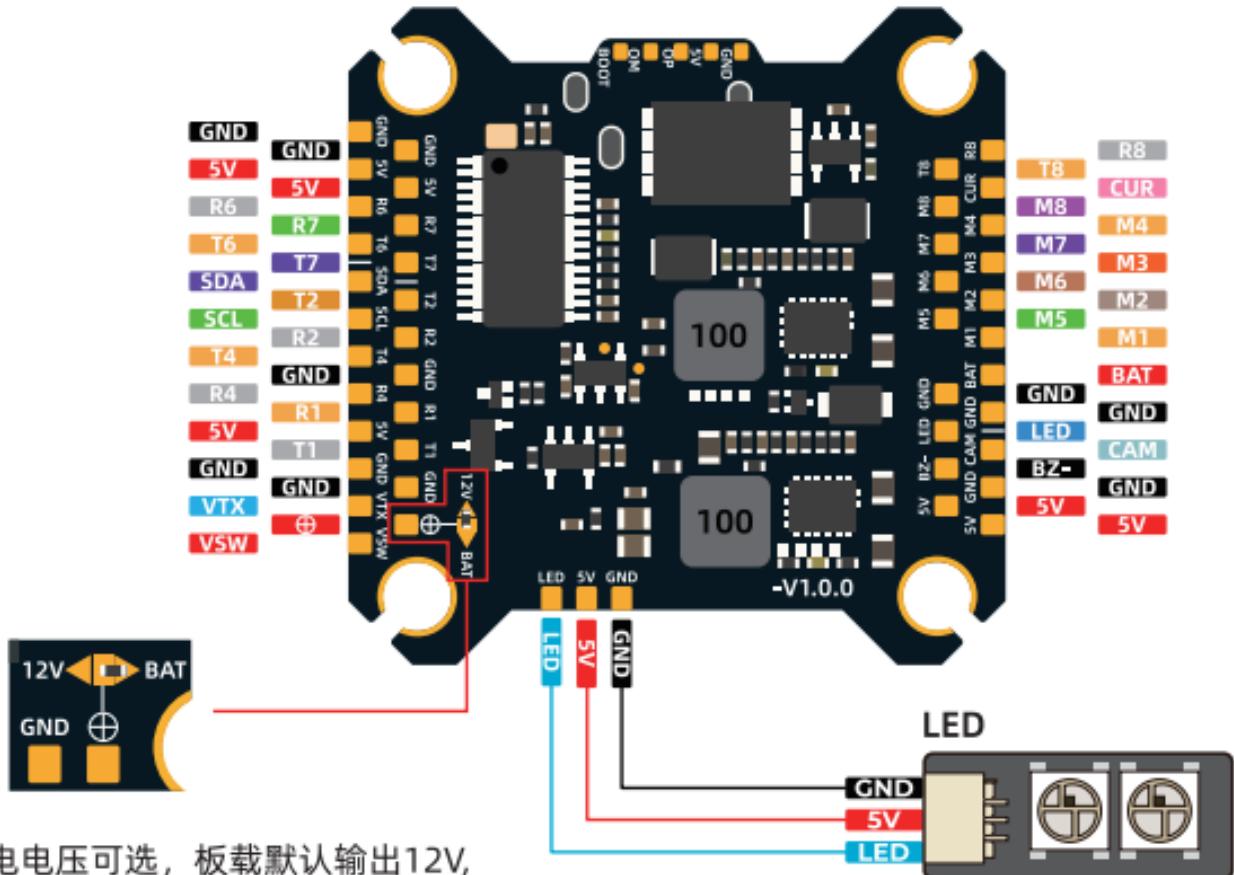
规格

产品名称:	TAKER F745 BT 飞控
MCU:	STM32F745
IMU:	MPU6000 + ICM42688-P(双陀螺仪)
黑匣子:	512M板载
蓝牙:	支持
气压计:	支持
BEC输出:	5V@3A,12V@2.5A双路输出
固件目标:	GEPRCF745_BT_HD
最大外尺寸:	38.5x38.5mm
安装孔距:	30.5x30.5mm
输入电压:	3-6S LiPo
UART串口:	7组(UART3固定用于蓝牙)

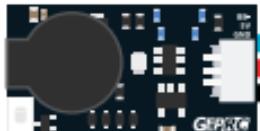


接口定义





图传供电电压可选，板载默认输出12V，
如图传有BAT电压需求可短接BAT与+焊盘



超级BB响

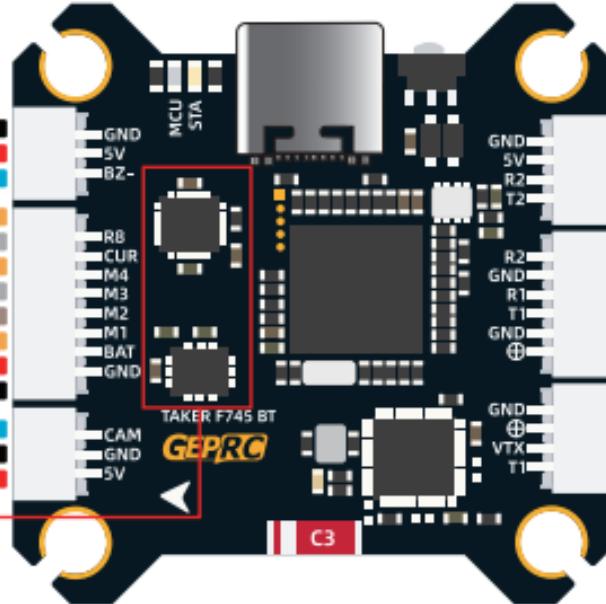


ESC

BZ+
5V
GND

———

———



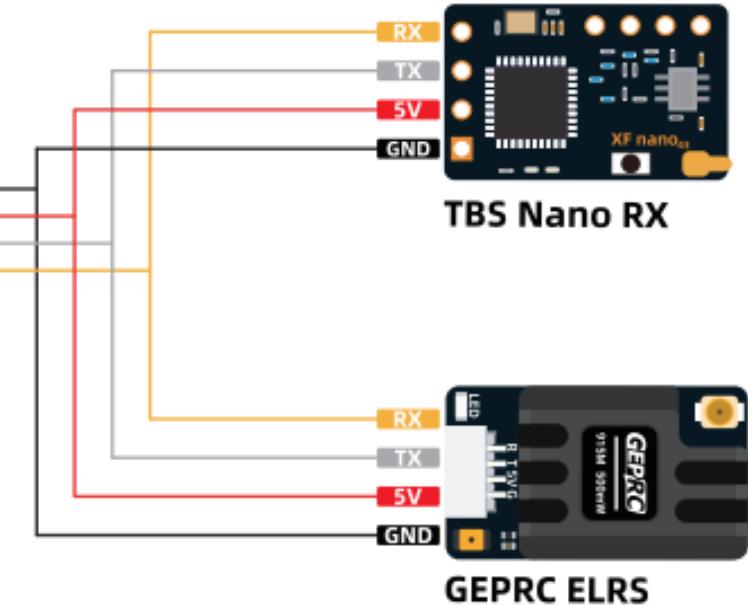
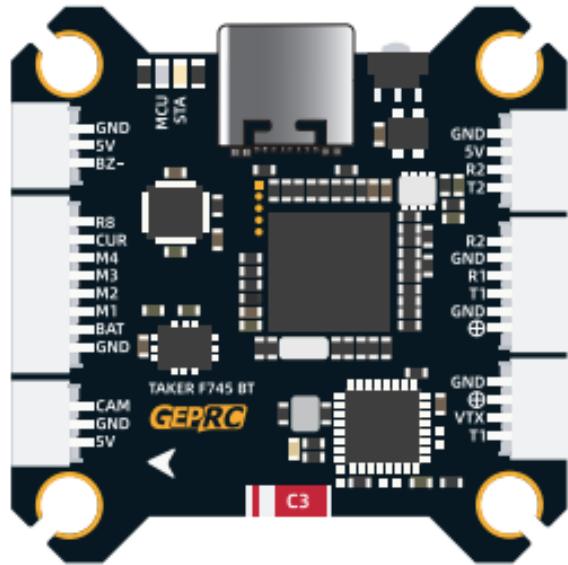
GND
5V
R2
T2
R2
GND
RX1
TX1
GND
⊕
GND
⊕
VTX
T1

第一个陀螺仪为MPU6000
第二个陀螺仪为ICM42688-P
(BF和INAV暂不支持双陀螺仪同时运行)

飞控和传感器方向

0	↑	横滚度	0	↑	俯仰度	0	↑	偏航度
第一个	陀螺仪/加速度计	CW 270°	第一个陀螺仪	CW 0°	第二个陀螺仪			
第一个 第二个	▼	磁力计方向	▼	▼	▼	▼	▼	

接收机



TBS Nano RX

GEPRC ELRS

设置
端口
配置
动力电池
失控保护

标识符	设置/MSP	串行数字接收机
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART2	<input type="checkbox"/> 4115200	<input checked="" type="checkbox"/>

接收机
<input checked="" type="button"/> 串行接收机 (通过UART)
接收机模式 必须将接收机对应的UART设置为“数字串行接收机”(在端口页面) 从下拉列表中选择正确的数据格式,如下: CRSF

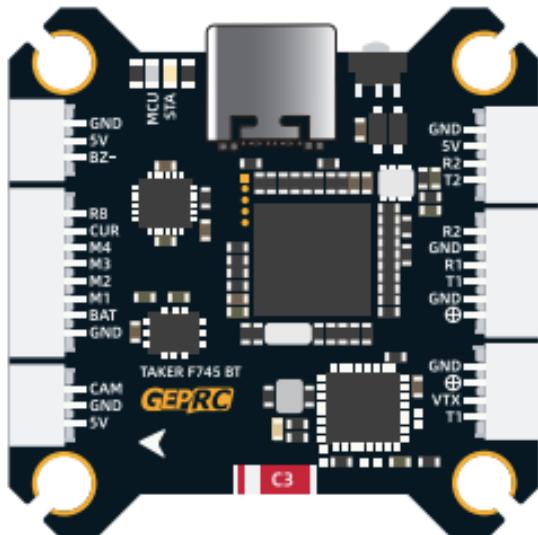
高清图传

标识符	设置/MSP	串行数字接收机
USB VCP	<input checked="" type="checkbox"/> 115200 ▾	<input type="checkbox"/>
UART1	<input checked="" type="checkbox"/> 115200 ▾	<input type="checkbox"/>
UART2	<input type="checkbox"/> 115200 ▾	<input checked="" type="checkbox"/>

接收机

Serial (Via UART) 接收机模式
注意: 使用串行接收机时, 请选择串口接收机类型, 并在串口页面设置相应的串口。

SBUS 串行数字接收机协议

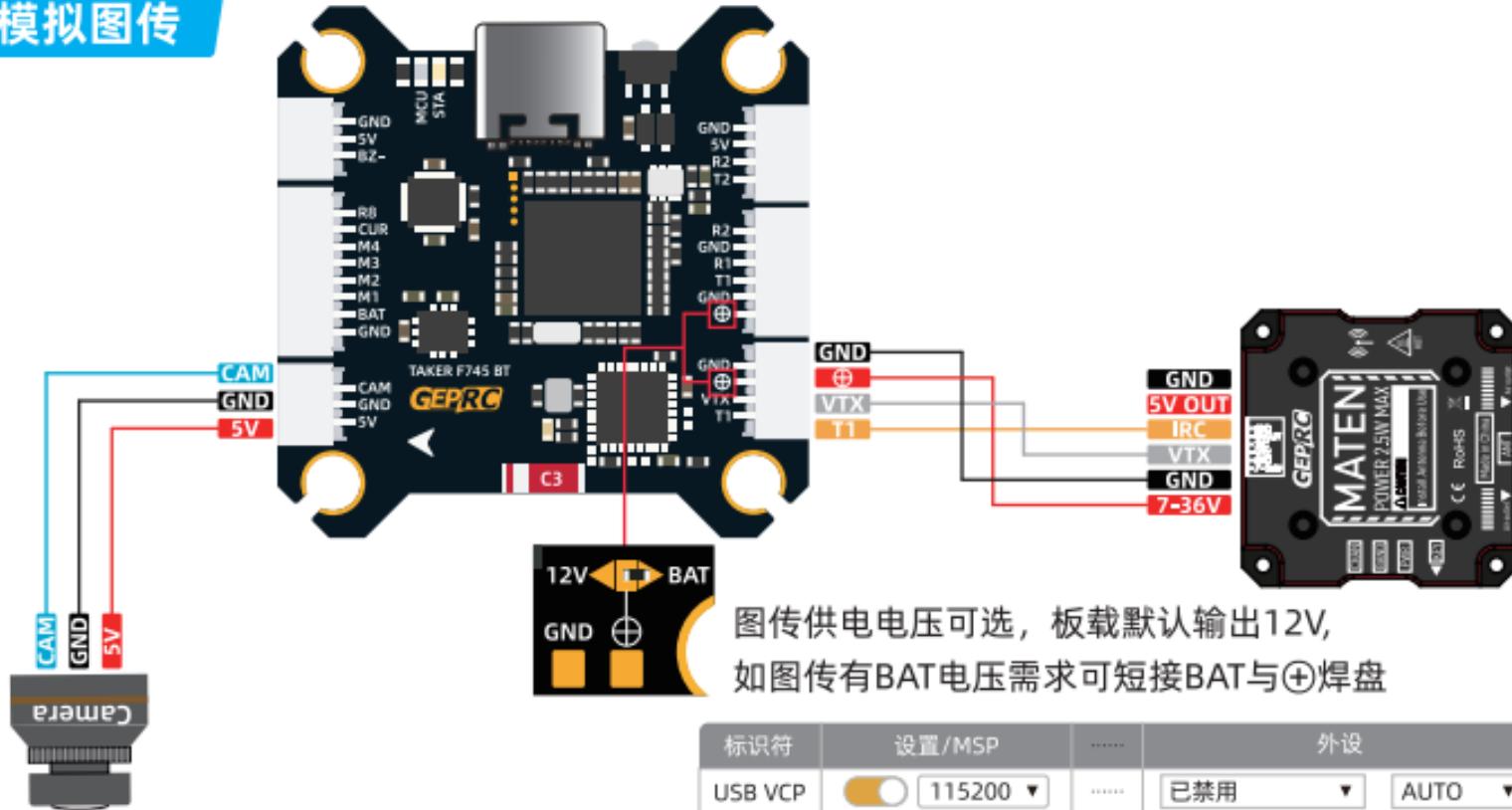


如果使用外置接收机, 请断开此线



CLI命令行输入:
set osd_displayport_device = MSP
set vcd_video_system = HD
SAVE
以开启高清图传OSD回传

模拟图传



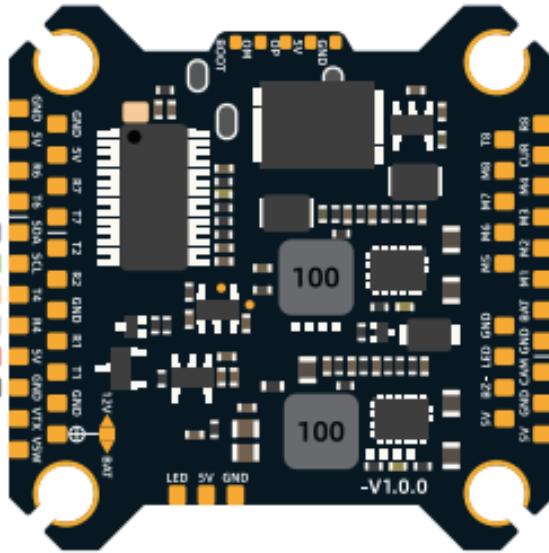
标识符	设置/MSP	外设
USB VCP	<input type="checkbox"/> 115200	已禁用 AUTO
UART1	<input type="checkbox"/> 115200	VTX,IRC Tamp AUTO
UART2	<input type="checkbox"/> 115200	已禁用 AUTO

GPS

GPS



SDA SCL用于罗盘和外接气压计使用



GPS

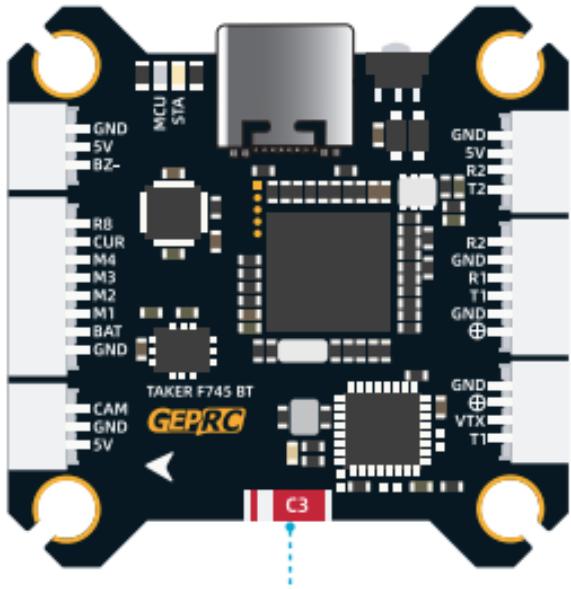
GPS 启用GPS导航

注意：使用GPS之前需要先在串口页面设置一个串口。

UBLOX 协议
自动波特率
自动设置
使用Galileo系统
设置单次返航点
自动检测 地面辅助类型

标识符	设置/MSP	传感器输入
UART3	<input type="checkbox"/> 115200	已禁用 AUTO
UART4	<input type="checkbox"/> 115200	GPS 115200

蓝牙



The screenshot shows the SpeedyBee mobile application interface. At the top, it says '我的设备 (1)' and shows a card for 'GEPRC'. Below this is a '发现GEPRC' (Discover GEPRC) dialog box with the 'GEPRC' logo, two buttons ('可识别的设备' and '立即连接'), and an 'X' button. The main screen on the right displays various flight parameters and a battery status bar. A table at the bottom lists serial port settings for USB VCP, UART1, UART2, and UART3, with 'UART3' highlighted by a red border.

标识符	设置/MSP	串行数字接收机
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART1	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART2	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>
UART3	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>

注意事项：

- 1 焊接的电线尽量避开陀螺仪，以免影响陀螺仪正常工作
 - 2 装机后请仔细检查连线是否正确，保持飞控整体干净 无多余焊锡残留
-

格普官方QQ群：499699918

格普官方微信：



wechat

格普淘宝：



geprc.taobao.com

格普官网：



www.geprc.com