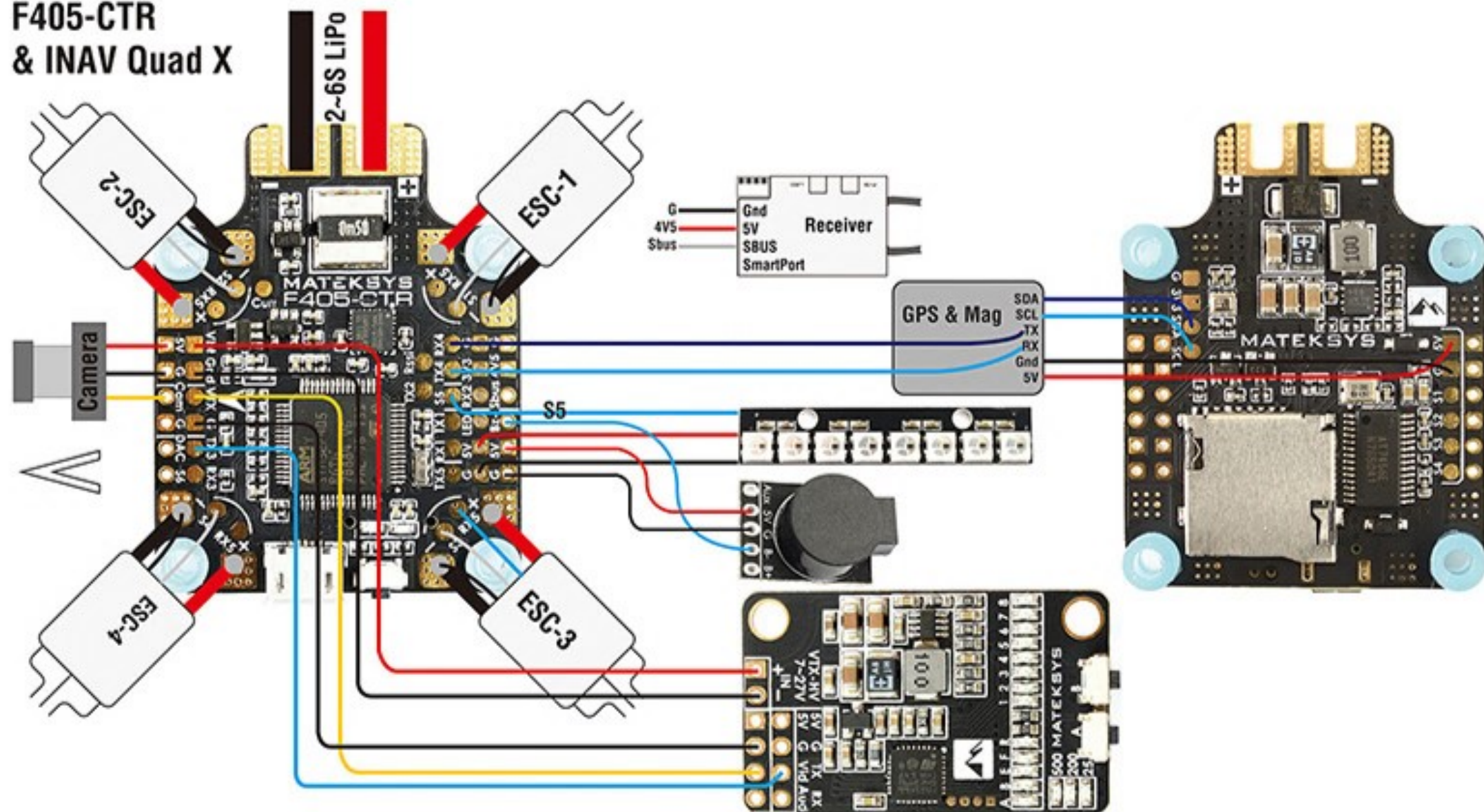


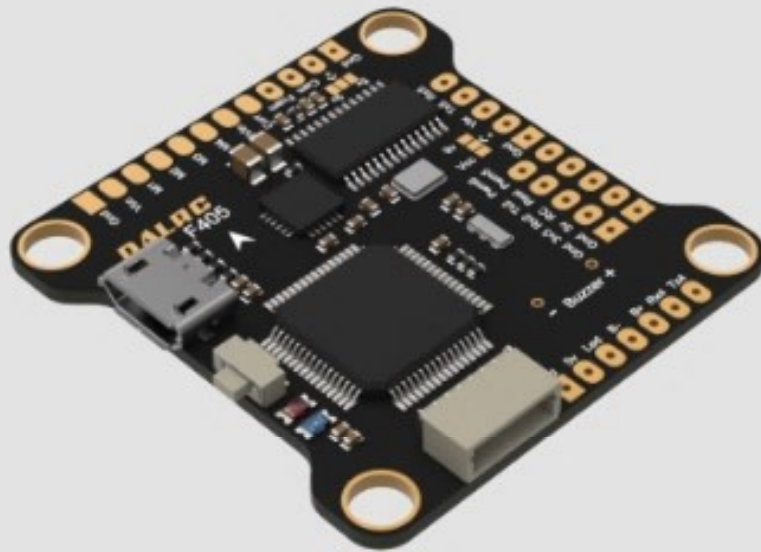
**F405-CTR  
& INAV Quad X**





# DALRC

DALRC F405 flight controller adopted STM32F405 high quality MCU, MPU6000 gyroscope , built in OSD ,9V/3A BEC . Excellent hardware designing match up high quality components ensured the FC with powerful performance , less jitter , less image ripple , humanized connecting interface design , all these big dedication just for providing you a great flying experience.

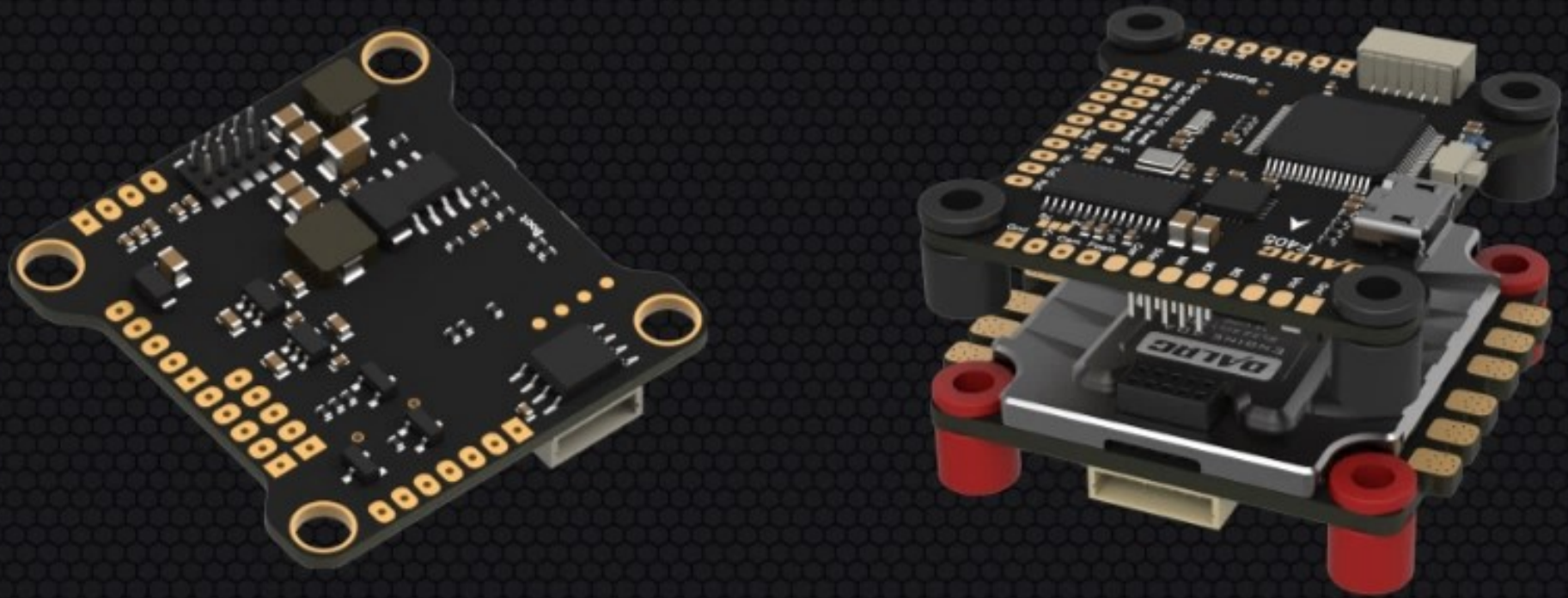


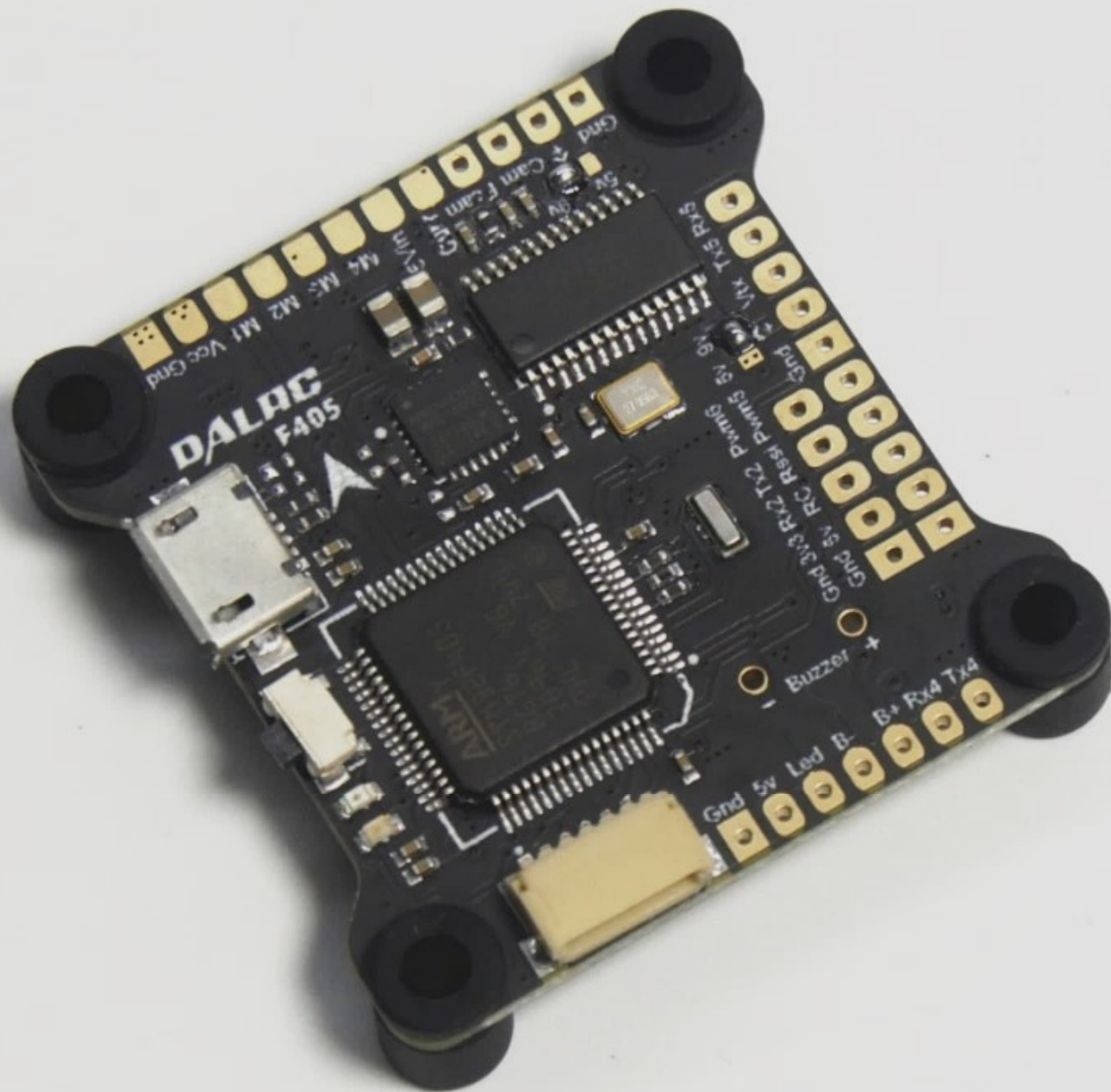
## Rational layout

Rational layout , according to the majority pilot's requests on building quadcopter we put every functional pad together to avoid wire jumper . making quadcopter building easier and faster , also more convenient to mend.



Dedicate designed for DALRC ENGINE 40A 4IN1 ESC, accept both wire solder connection and push-in connection (the other brands ESC need solder wire to connect)







### BetaFlight firmware

Dedicate developed flight controller program for racing quadcopter , powerful performance .

### Parameters

Size : 36\*36mm

Hole to hole distance : 30.5\*30.5  $\Phi$ 4mm

Weight : 6g

MCU : STM32F405RG T6

Gyroscope : MPU6000 or ICM20689

Storage : 16M

BEC: 9V/3A

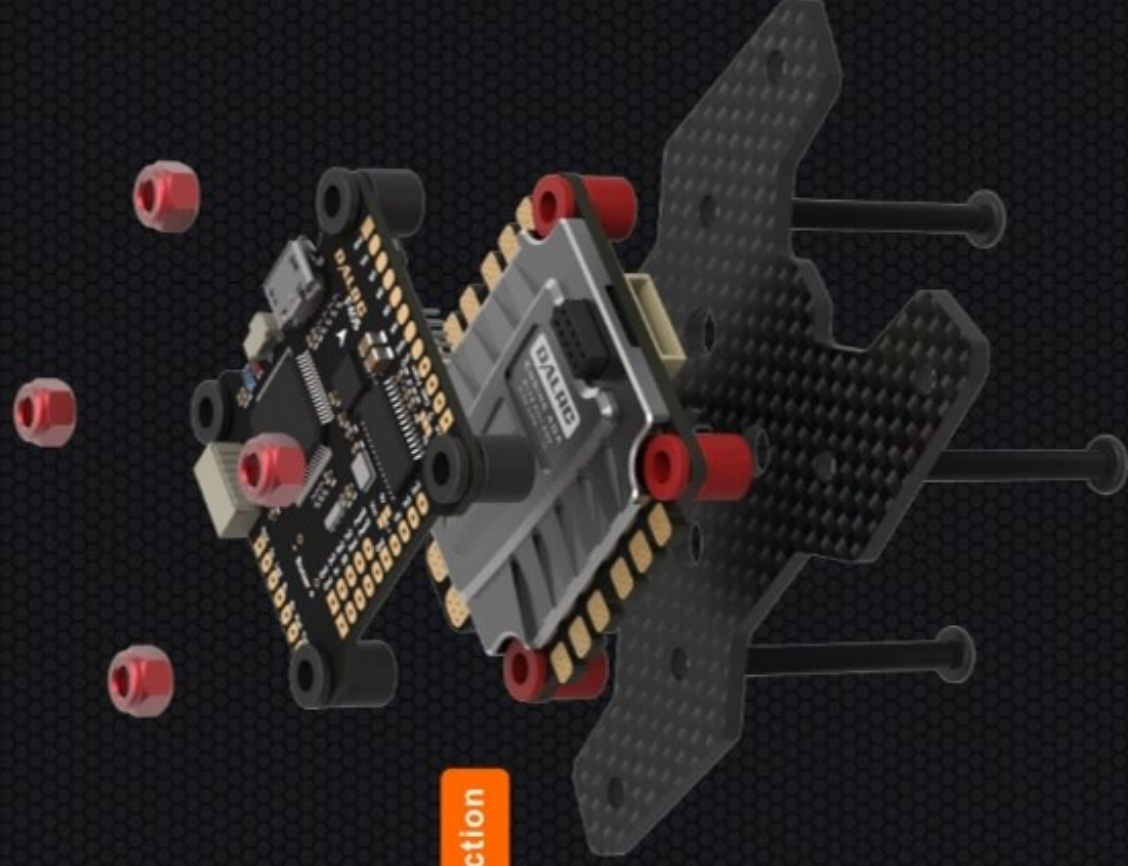
OSD: support

Input voltage: 5V and Batt (2-6S)

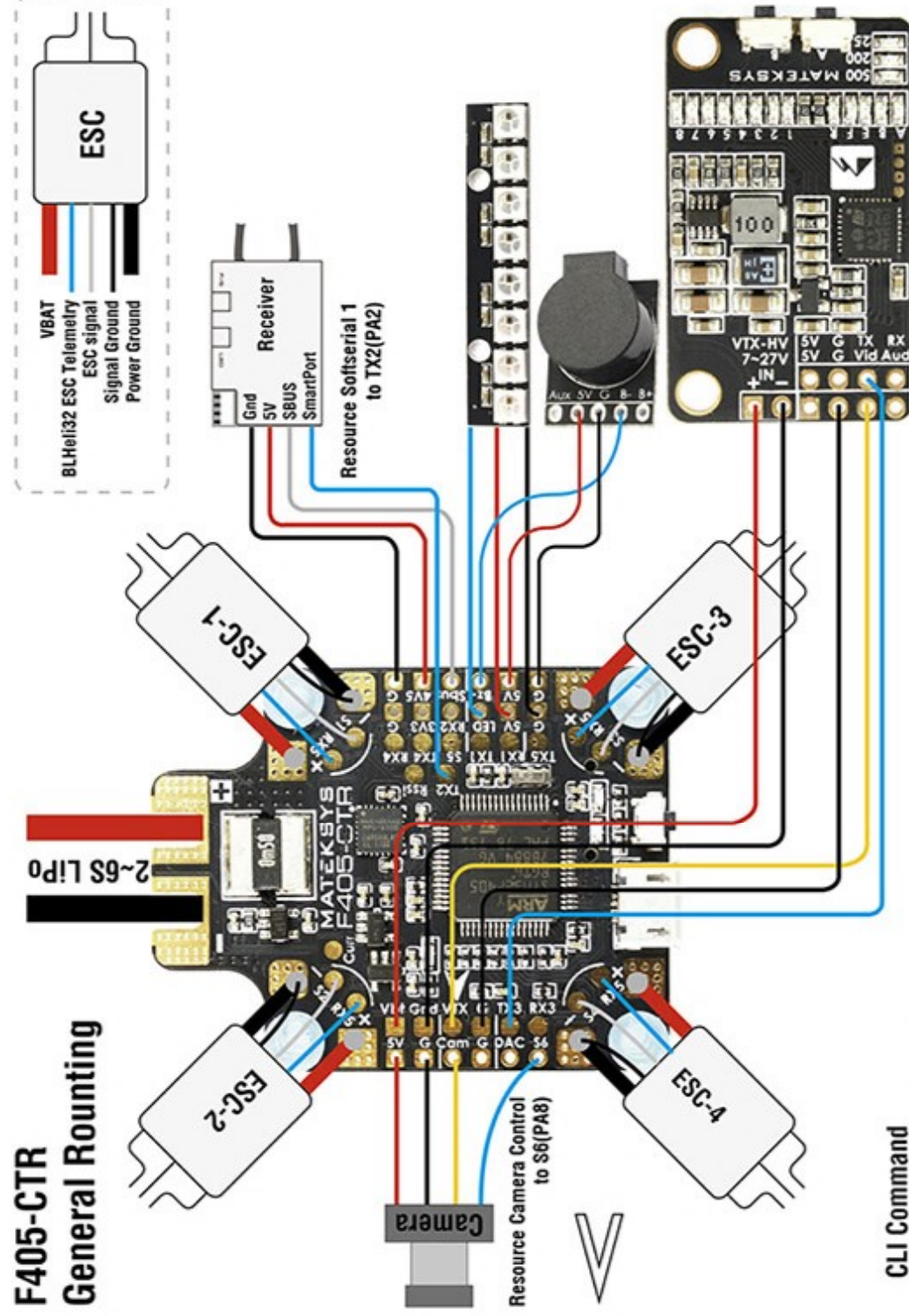
Firmware: Betaflight DALRC F405

### Components bom , installation instruction

1. DALRC F405 FC board\*1
2. Silicon damper ball\*4



# F405-CTR General Rounting



**CLI Command**  
 resource motor 6 none  
 resource camera\_control A08  
 resource serial\_tx 11 A02  
 save

**Board and Sensor Alignment**

|   |               |                 |         |
|---|---------------|-----------------|---------|
| 0 | Roll Degrees  | GYRO Alignment  | Default |
| 0 | Pitch Degrees | ACCEL Alignment | Default |
| 0 | Yaw Degrees   | MAG Alignment   | Default |

**Voltage Meter**

Battery: 0 V

Scale: 110

Divider Value: 10

Multiplier Value: 1

**Amperage Meter**

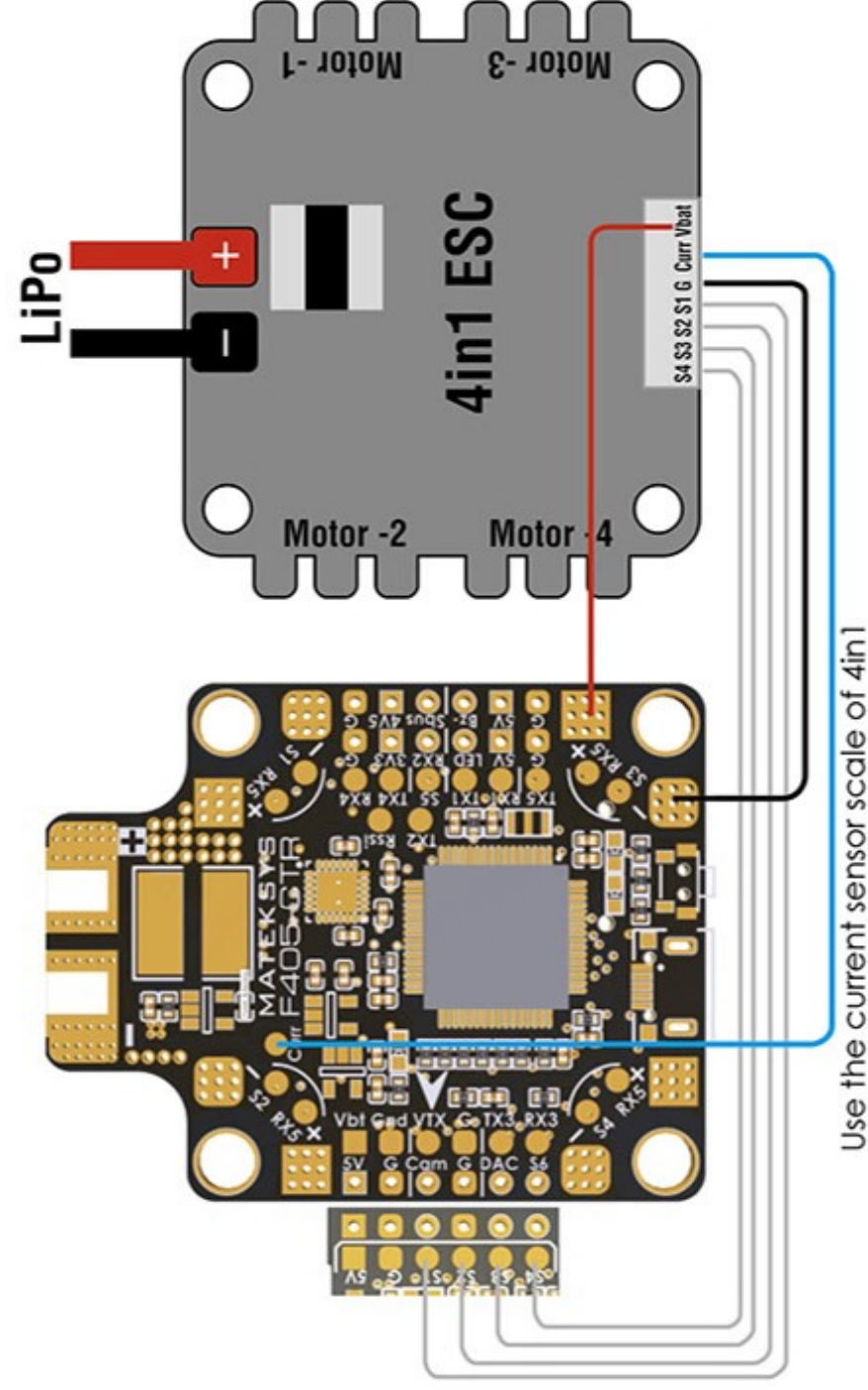
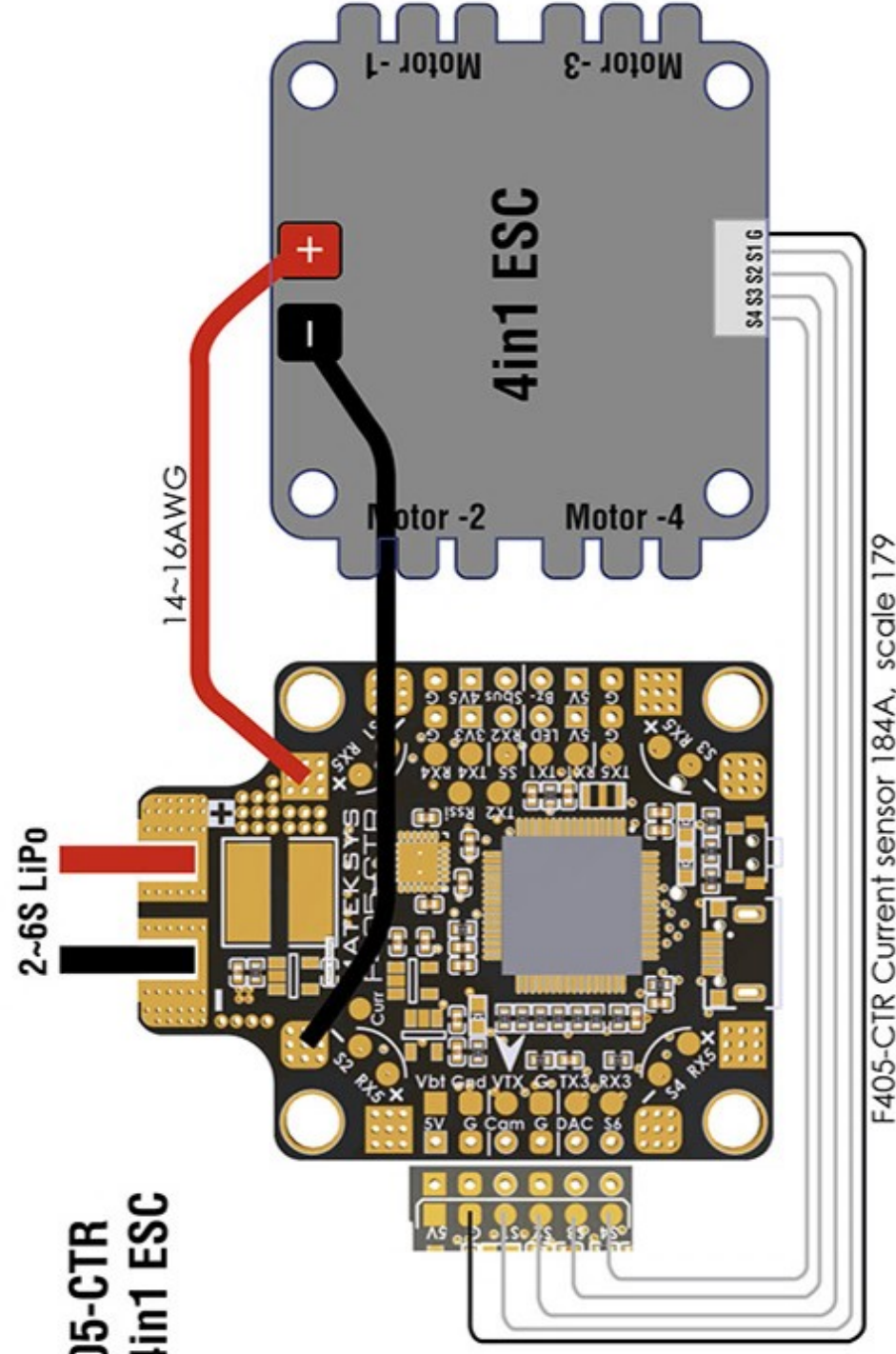
Battery: 0.00 A

Scale: 179

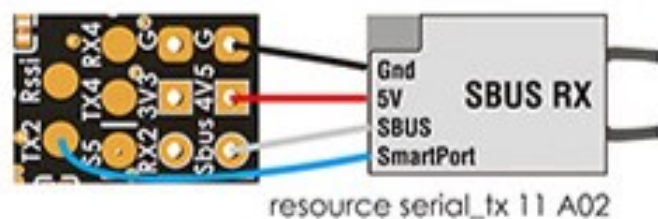
Offset in milliamperes steps: 0

| Identifier  | Configuration/MSP                          | Serial Rx                           | Telemetry Output | Sensor Input | Peripherals |
|-------------|--------------------------------------------|-------------------------------------|------------------|--------------|-------------|
| USB VCP     | <input checked="" type="checkbox"/> 115200 | <input type="checkbox"/>            | Disabled         | AUTO         | Disabled    |
| UART1       | <input type="checkbox"/> 115200            | <input type="checkbox"/>            | Disabled         | AUTO         | Disabled    |
| UART2       | <input type="checkbox"/> 115200            | <input checked="" type="checkbox"/> | Disabled         | AUTO         | Disabled    |
| UART3       | <input type="checkbox"/> 115200            | <input type="checkbox"/>            | Disabled         | AUTO         | IRC Tramp   |
| UART4       | <input type="checkbox"/> 115200            | <input type="checkbox"/>            | Disabled         | AUTO         | Disabled    |
| UART5       | <input type="checkbox"/> 115200            | <input type="checkbox"/>            | Disabled         | AUTO         | Disabled    |
| SOFTSERIAL1 | <input type="checkbox"/> 115200            | <input type="checkbox"/>            | SmartPort        | AUTO         | Disabled    |

## F405-CTR & 4in1 ESC



# F405-CTR & Receivers



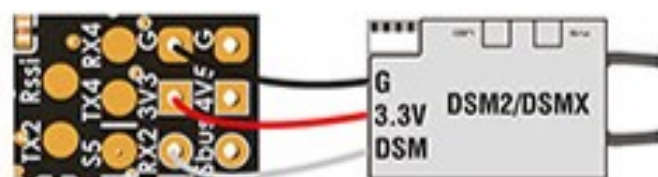
| Identifier | Configuration/MSP                            | Serial Rx                           |
|------------|----------------------------------------------|-------------------------------------|
| USB VCP    | <input checked="" type="checkbox"/> 115200 ▼ | <input type="checkbox"/>            |
| UART1      | <input type="checkbox"/> 115200 ▼            | <input type="checkbox"/>            |
| UART2      | <input type="checkbox"/> 115200 ▼            | <input checked="" type="checkbox"/> |

## Receiver

Serial-based receiver (SPEKSAT, \$ ▼) 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



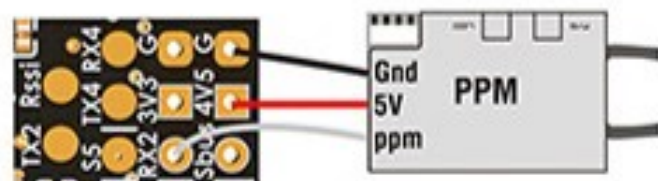
| Identifier | Configuration/MSP                            | Serial Rx                           |
|------------|----------------------------------------------|-------------------------------------|
| USB VCP    | <input checked="" type="checkbox"/> 115200 ▼ | <input type="checkbox"/>            |
| UART1      | <input type="checkbox"/> 115200 ▼            | <input type="checkbox"/>            |
| UART2      | <input type="checkbox"/> 115200 ▼            | <input checked="" type="checkbox"/> |

## Receiver

Serial-based receiver (SPEKSAT, \$ ▼) Receiver Mode

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

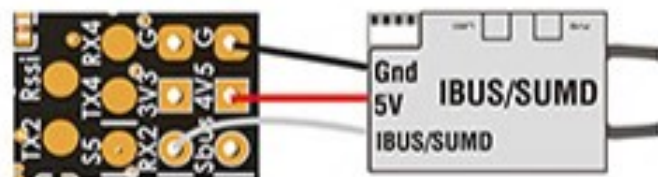
SPEKTRUM1024 ▼ Serial Receiver Provider  
SPEKTRUM2048



| 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 type="checkbox"/> |

## Receiver

PPM RX input ▼ Receiver Mode



| 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"/> |

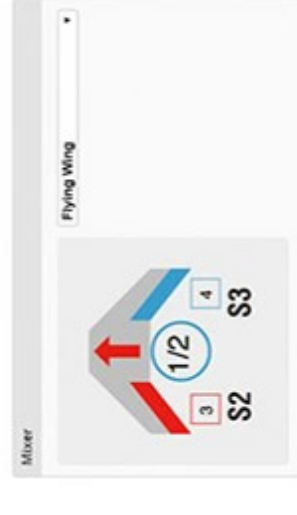
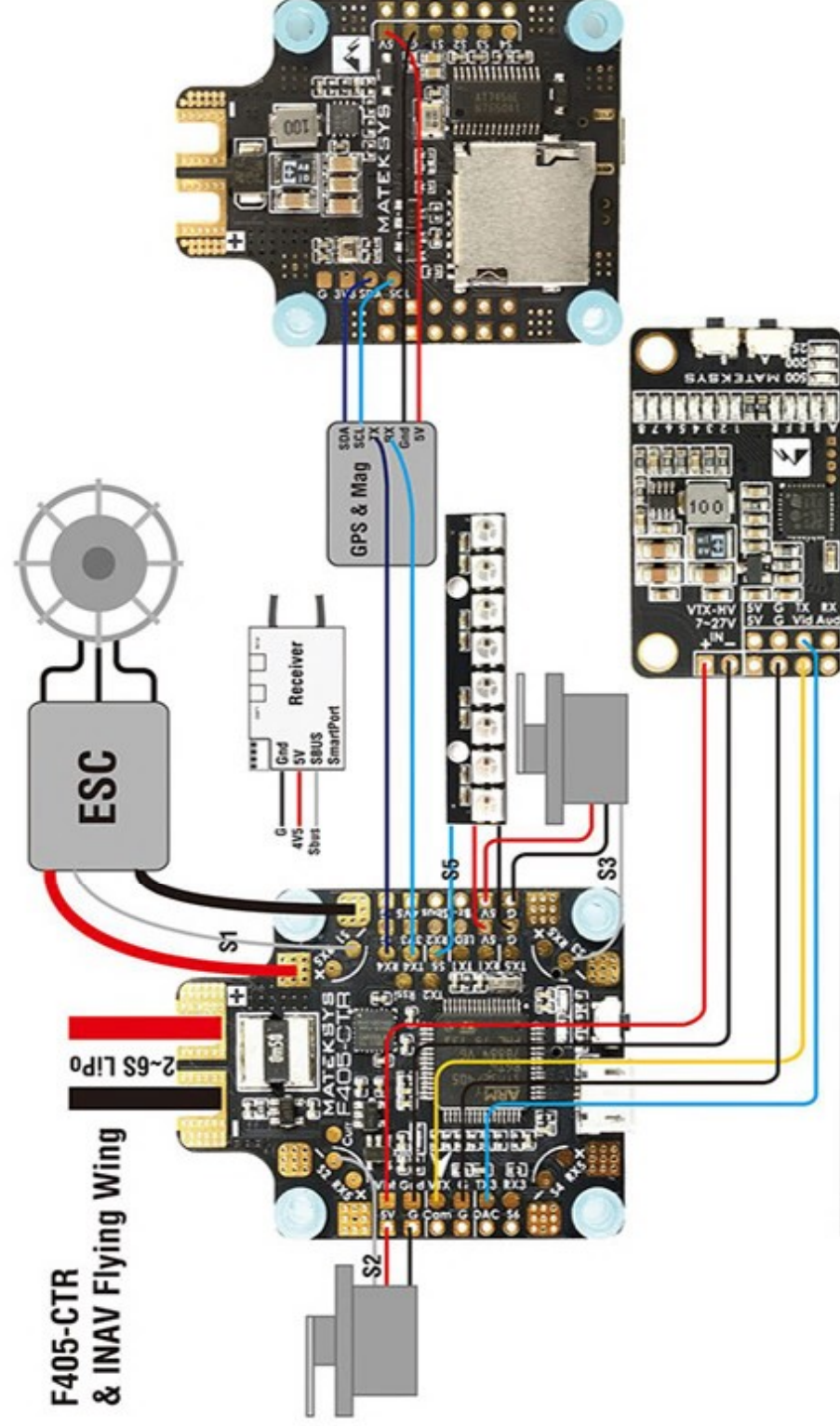
## Receiver

Serial-based receiver (SPEKSAT, \$ ▼) Receiver Mode

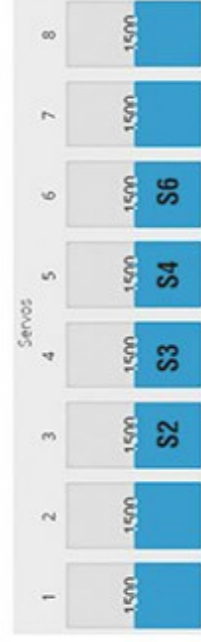
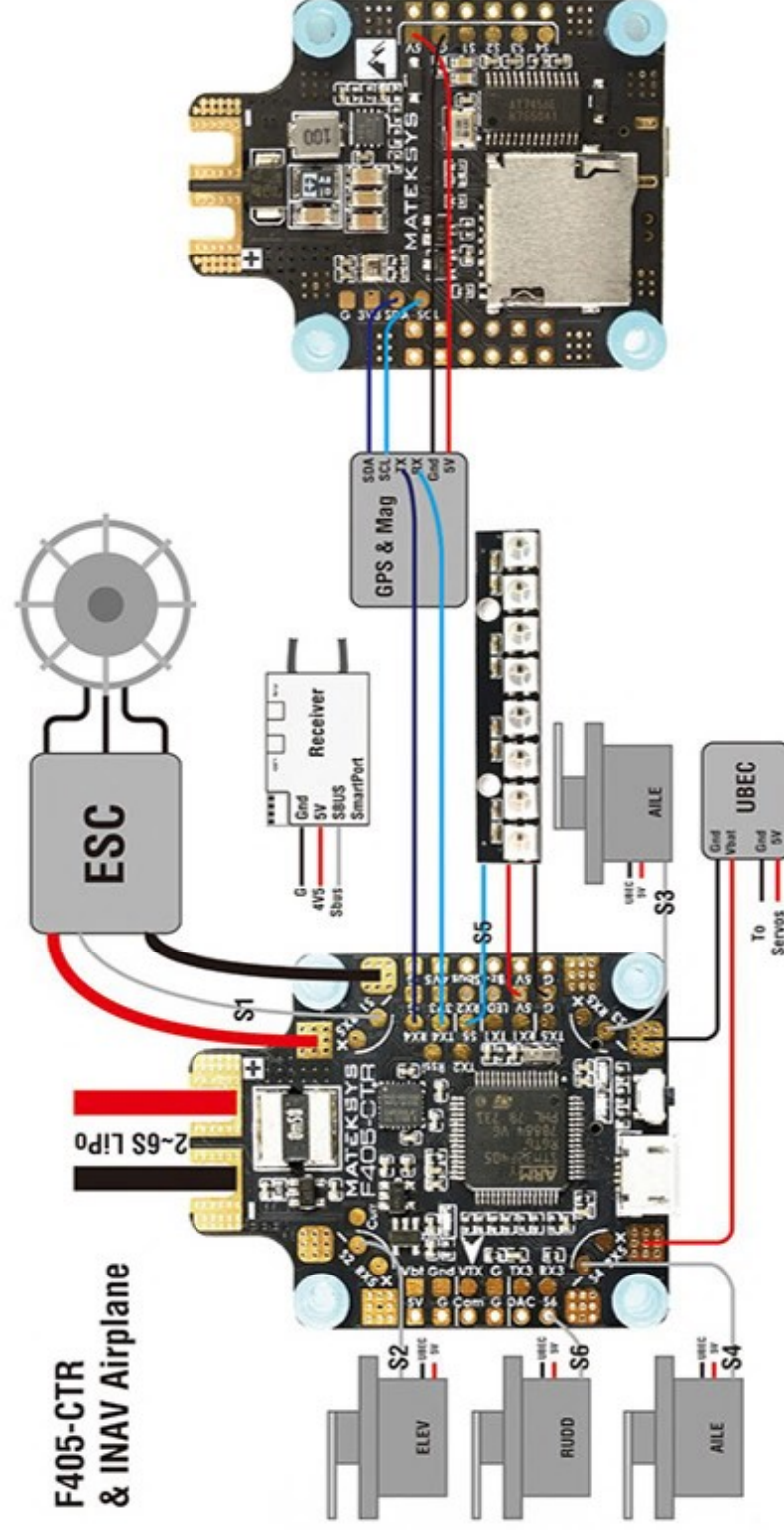
**Note:** Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX\_SERIAL feature.

IBUS ▼ Serial Receiver Provider

## F405-CTR & INAV Flying Wing

[illegible]

## F405-CTR & INAV Airplane

Sēnos[illegible]