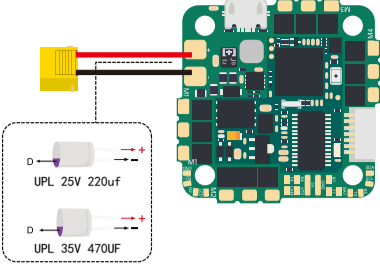
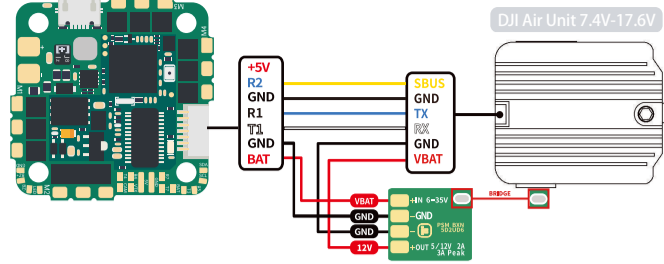


# iFlight BLITZ Whoop F7 55A AIO Diagram

## Caution

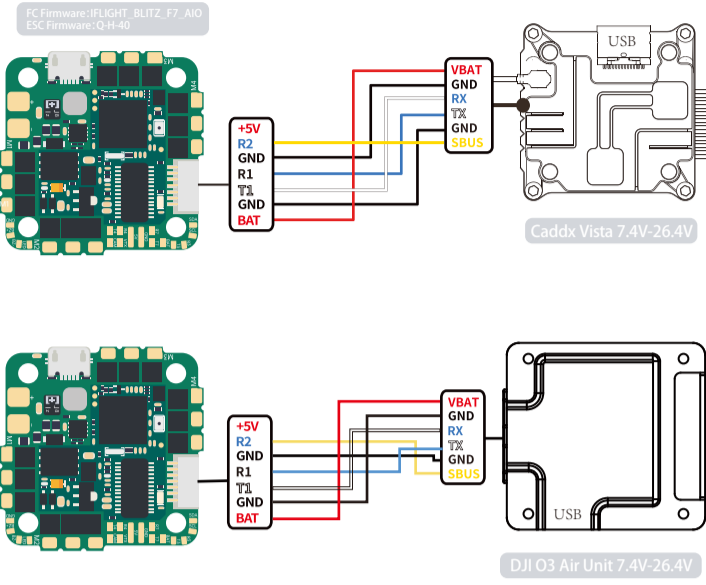


- This is a tiny high power AIO board! It's necessary to add a low ESR capacitor on your battery pads or battery lead! There's a choice of capacitors already in the package.
- 4s motors usually need 25v/220uF and up, for bigger and more aggressive 6s motors use at least 35v/470uF. It's necessary to protect the hardware from motor generated back emf and voltage spikes.



- The DJI Plug&Play connector has a VBAT passthrough! Please remember, the DJI Air Unit can just handle voltage up to 4S! To fly up to 6S batteries, please use an additional BEC (Voltage regulator).

## DJI Digital transmitters



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 type="checkbox"/>
UART3	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>

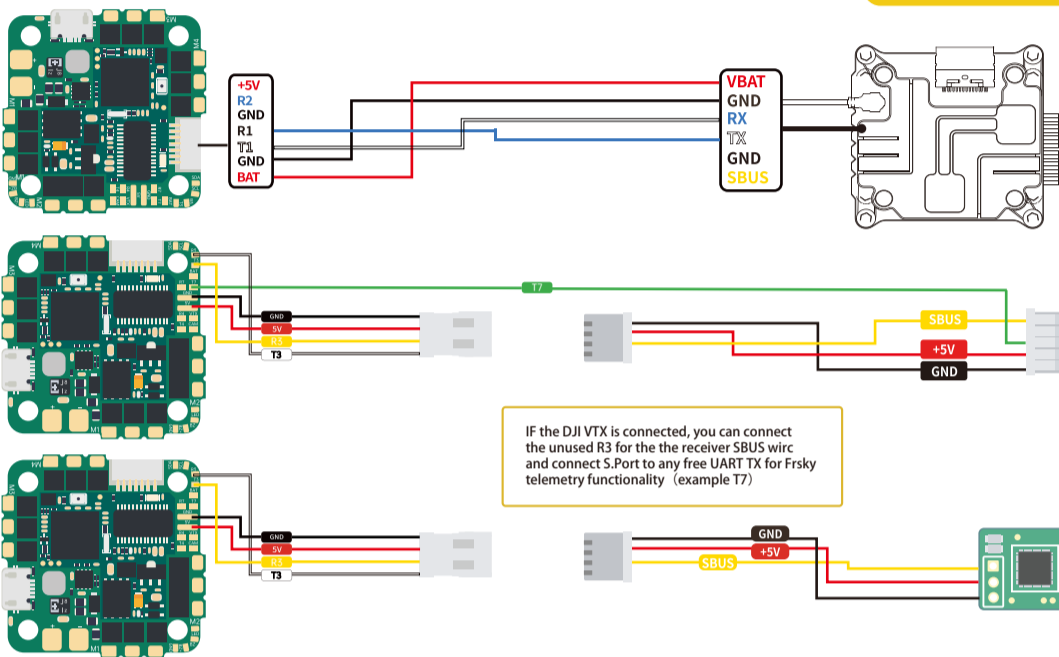
  

Receiver	Receiver Mode
Serial (via UART)	Serial Receiver Provider

- Please check your protocols, otherwise your DJI Radio won't input signals! DJI Goggle protocol and Betaflight protocol has to match! For lower signal latency use the SBUS\_BAUD\_FAST protocol option on both ends. For Betaflight Copy/Paste "set sbus\_baud\_fast=on" into your Betaflight Configurator CLI then hit enter. Use "save" and hit enter to save the changes. Default: sbus\_baud\_fast=off, Goggle protocol set to NORMAL

- For DJI O3 Air Unit, In to the Betaflight Configurator Cli, Set osd device to MSP: "set osd\_displayport\_device = MSP" Specify the serial port of msp\_displayport as 0 (the number in this place should be the serial port number minus 1): "set displayport\_msp\_serial = 0" then type "save" and exit

## Another Transmitters



When not using the DJI remote controller, don't connect the SBUS and GND.

If the DJI VTX is connected, you can connect the unused R3 for the receiver SBUS wire and connect S.Port to any free UART TX for frsky telemetry functionality (example T7)

FrSKY R-XSR (R9Mini, R9MM)

SBUS XM+

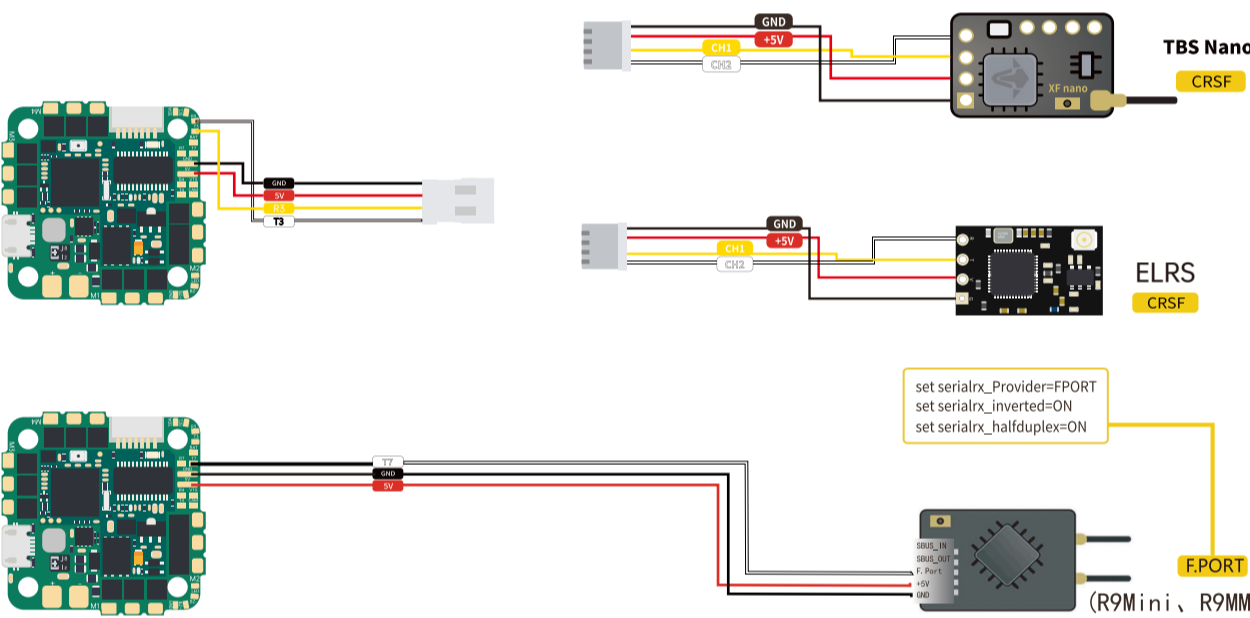
Identifier	Configuration/MSP	Serial Rx
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART1	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART2	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART3	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>

Receiver	Receiver Mode
Serial (via UART)	Serial Receiver Provider

Telemetry	Telemetry output
TELEMETRY	SmartPort / AUTO



set serialx\_provider=FPORT  
set serialx\_inverted=ON  
set serialx\_halfduplex=ON

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 type="checkbox"/>
UART3	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>

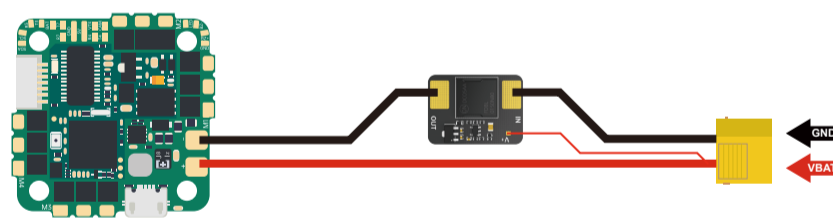
  

Receiver	Receiver Mode
Serial (via UART)	Serial Receiver Provider

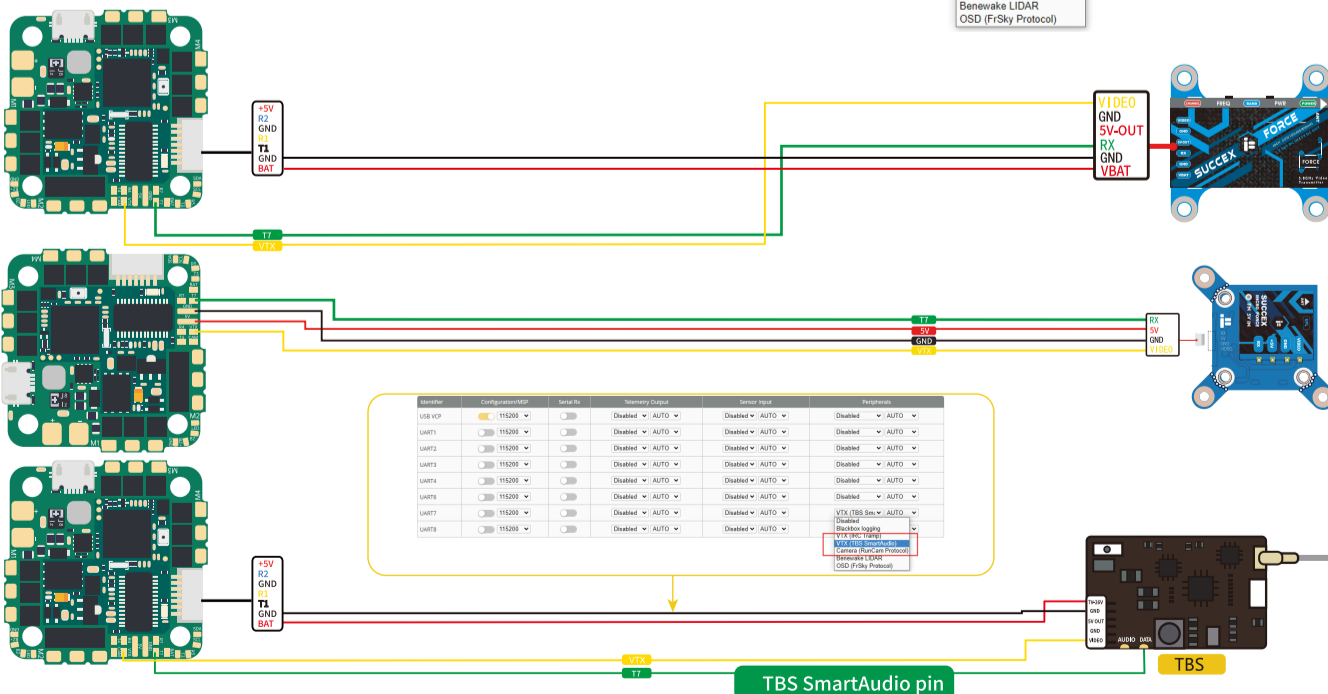
Telemetry	Telemetry output
TELEMETRY	SmartPort / AUTO

## Anti-Spark filter

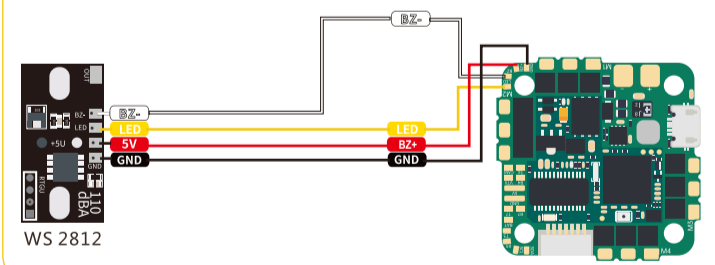


## Analog VTX

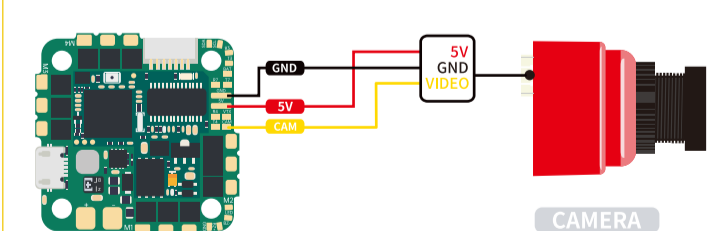
Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART3	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO



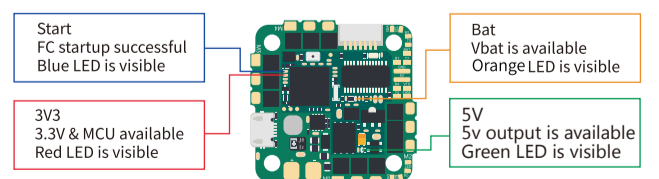
## LED&Buzzer



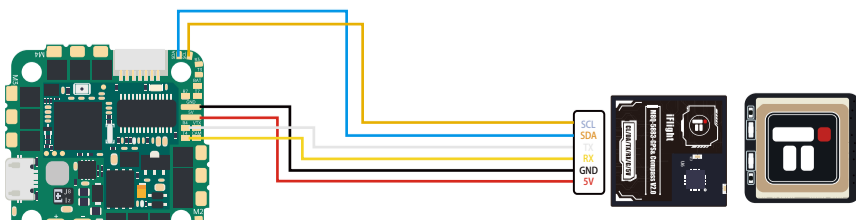
## CAM



## Status indicator



## GPS



Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART3	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO

Setup	Ports	Configuration
Power & Battery	GPS	GPS for navigation and telemetry
PD Tuning	UBLOX	Protocol
Receiver	Auto Baud	<input type="checkbox"/>
Modes	Auto Config	<input type="checkbox"/>
Motors	Live Gallery	<input type="checkbox"/>
OSD	Set Home Point Once	<input type="checkbox"/>
Beacons	Auto-detect	Ground Assistance Type