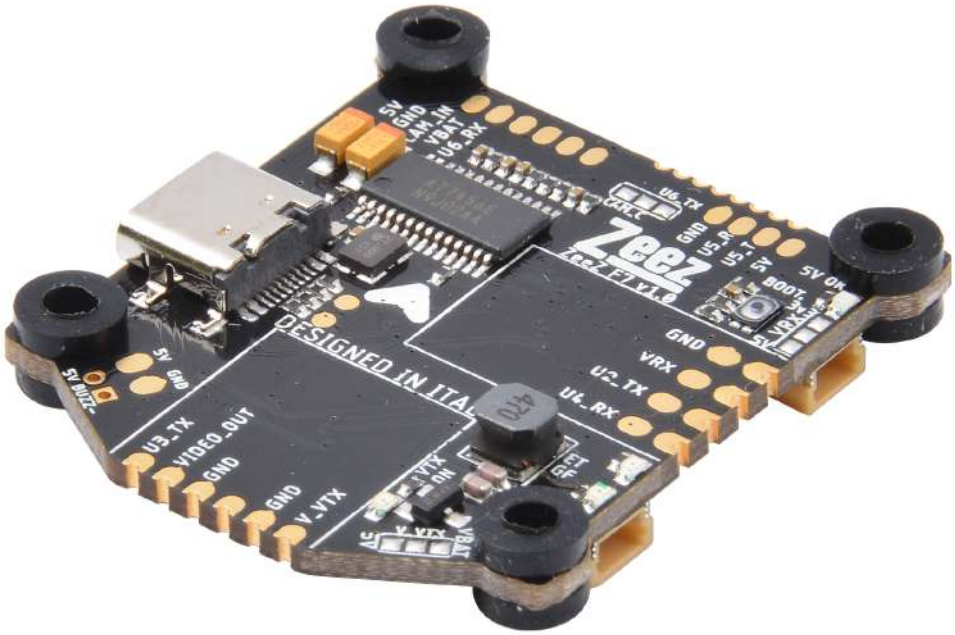
ZEEZ F7

USER MANUAL



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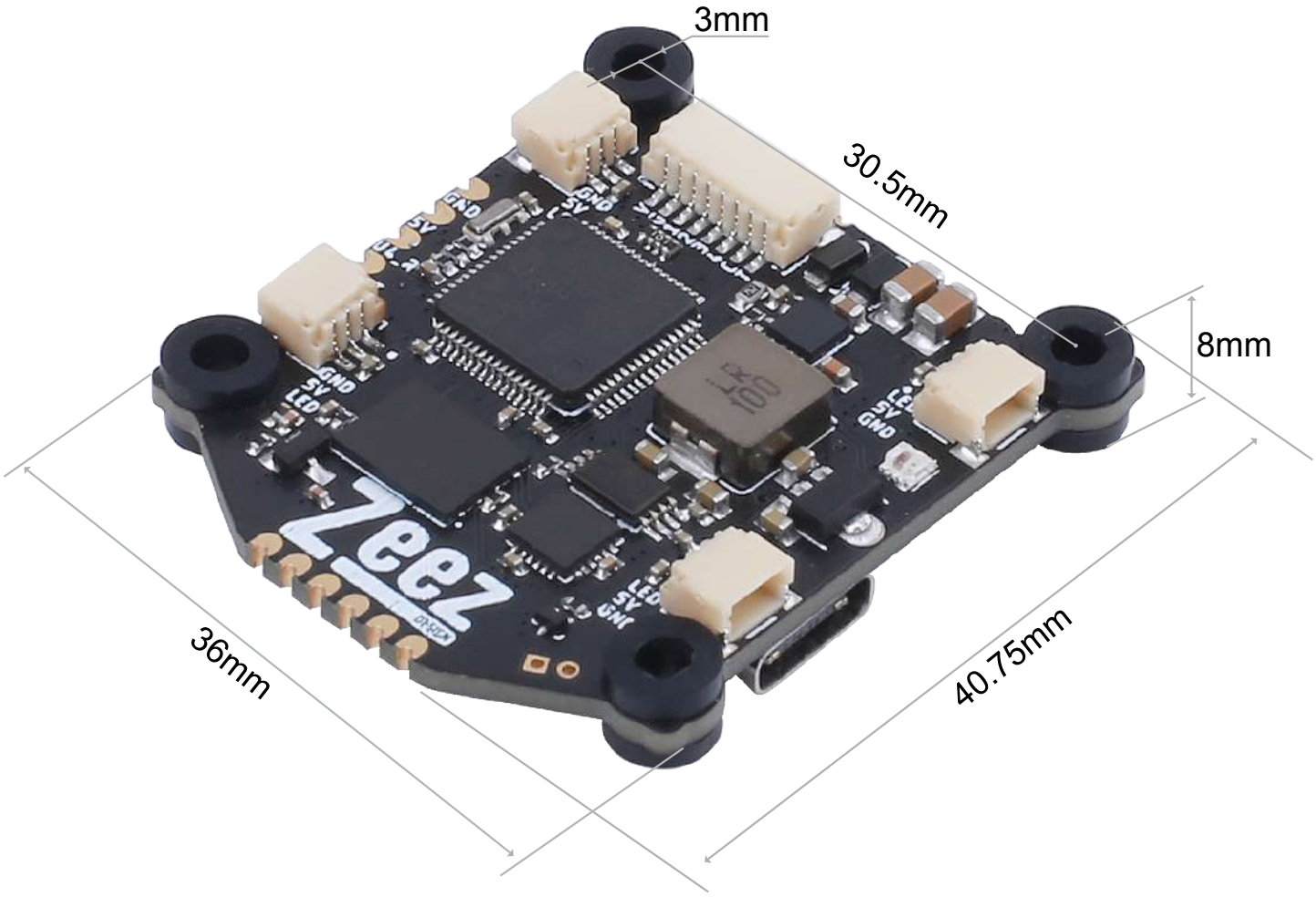
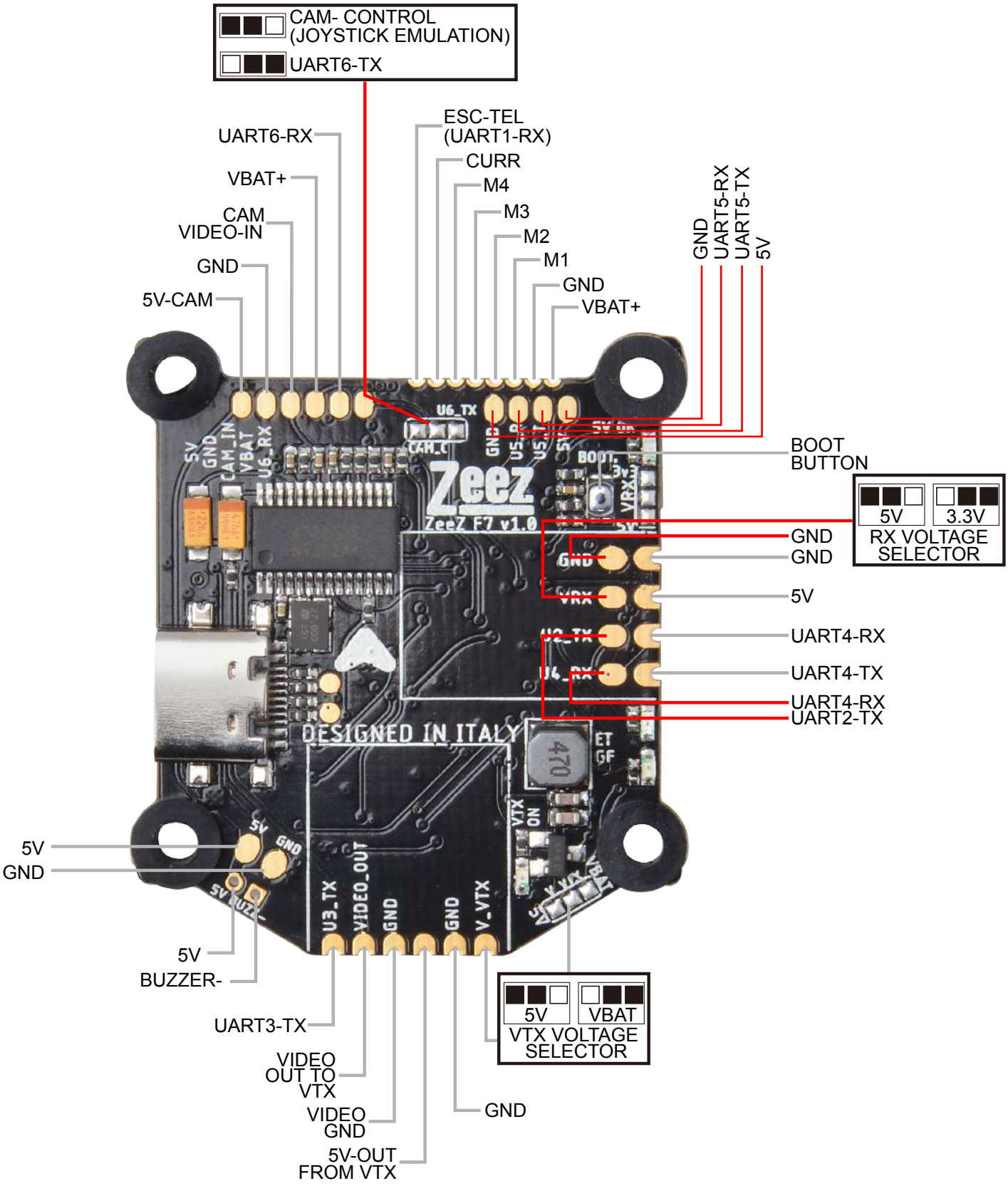

3mm
30.5mm
8mm
36mm
40.75mm

Thanks for purchasing the Zeez F7 flight controller.
This board is being designed and developed by pilots for pilots.
Zeez Design project was born in Italy in early 2016 from FPV racing pilots and students of the Engineer University of Bologna that wanted to develop their own gear for racing drones.
The ZeeZ F7 flight controller is our first product. In this project we thought about the most common drama that happen in FPV quad...wires break and big difficulties to stack all electronics in our quad.
Here we have really easy assembly (and if you are using some VTX or RX you just have the wires from the FC to the FPV Cam) that will result in clean and low profile stack.

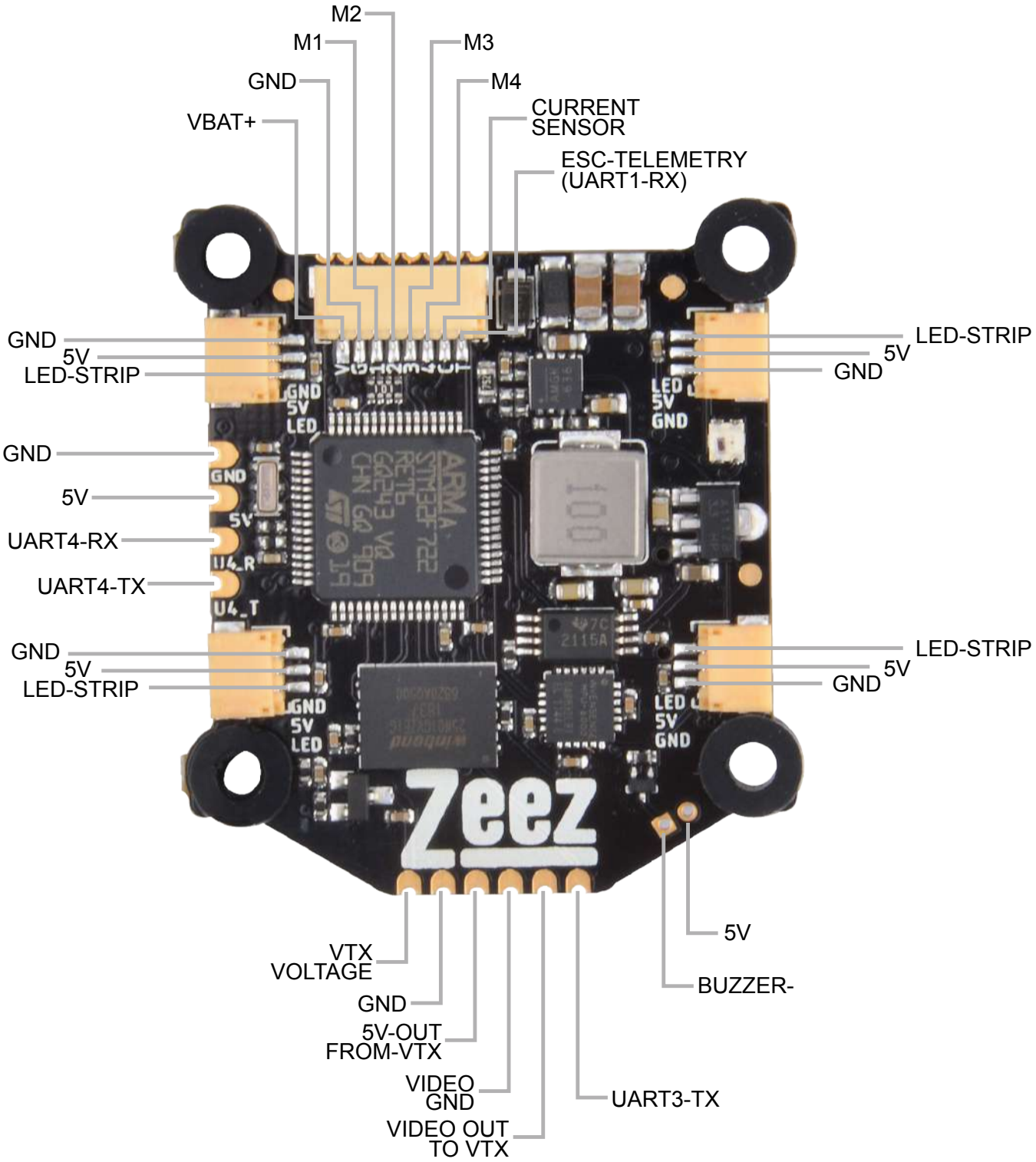
Specification:

- Up to 8S input (max 36V)
- 5V BEC up to 3A continuous
- STM32F722 MCU
- MPU6000 Gyro/ACC for smooth performace
- 128MB OnBoard flash
- OSD chip Onboard
- 6 available UARTS
- VTX switch to control the ON/OFF of the VTX directly from your transmitter
- LC Filter for 5V VTX
- USB Type C connector
- Onboard RGB LED distribution for clean wiring to the LED on the arm of the quad.
- Onboard RBG LED
- Notch desing on sides and in the front of the FC for better fitting on the frame.

TOP connection:

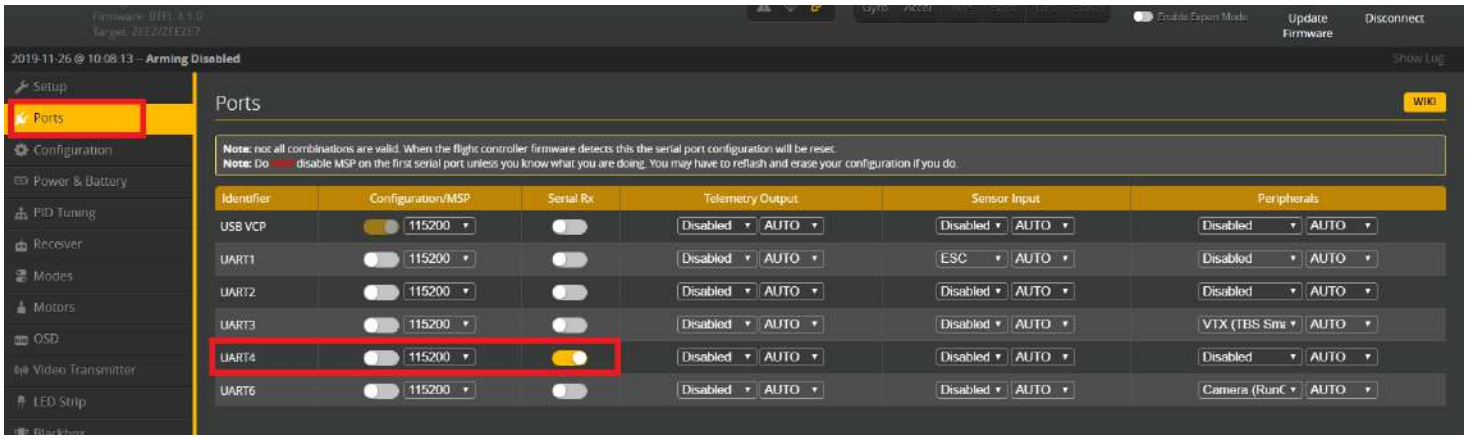


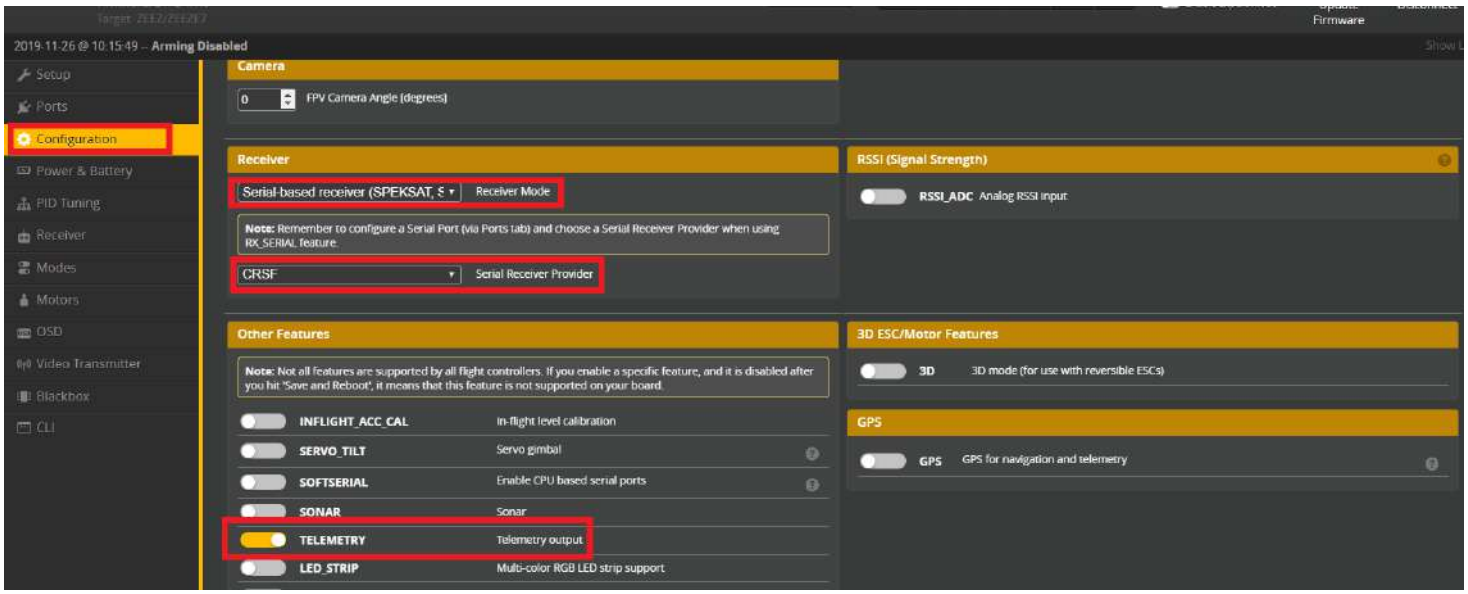
BOTTOM connection:

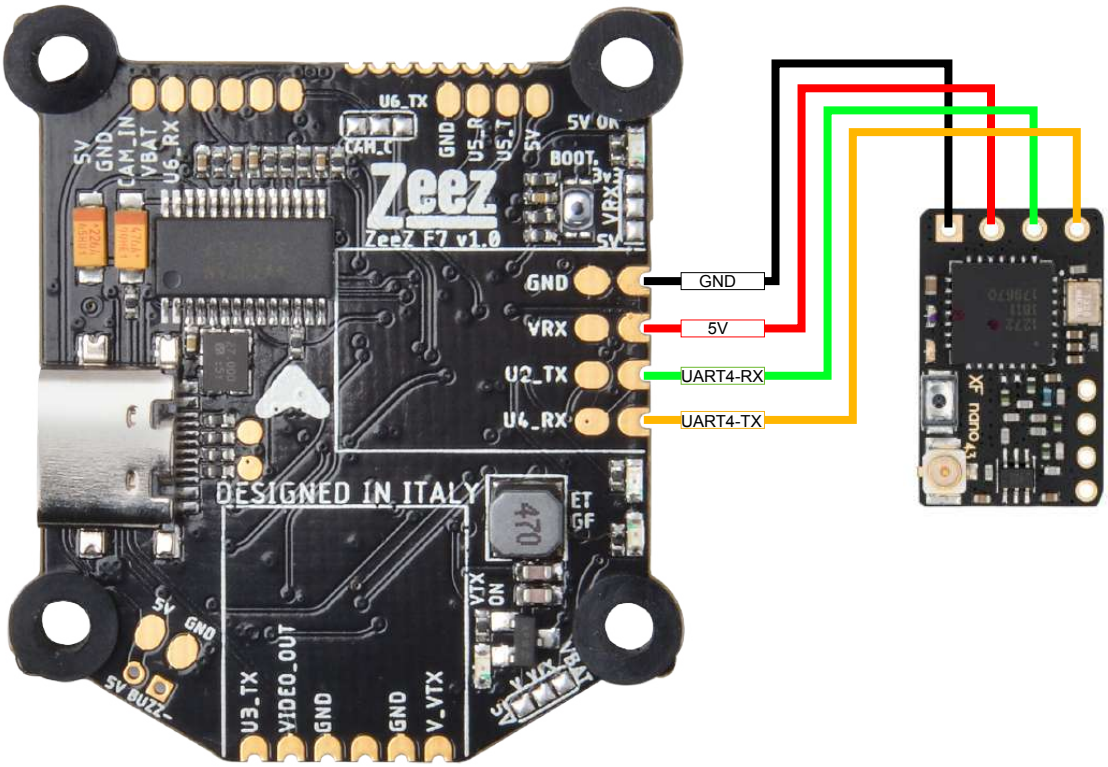


Receiver chapter:

TBS Crossfire:

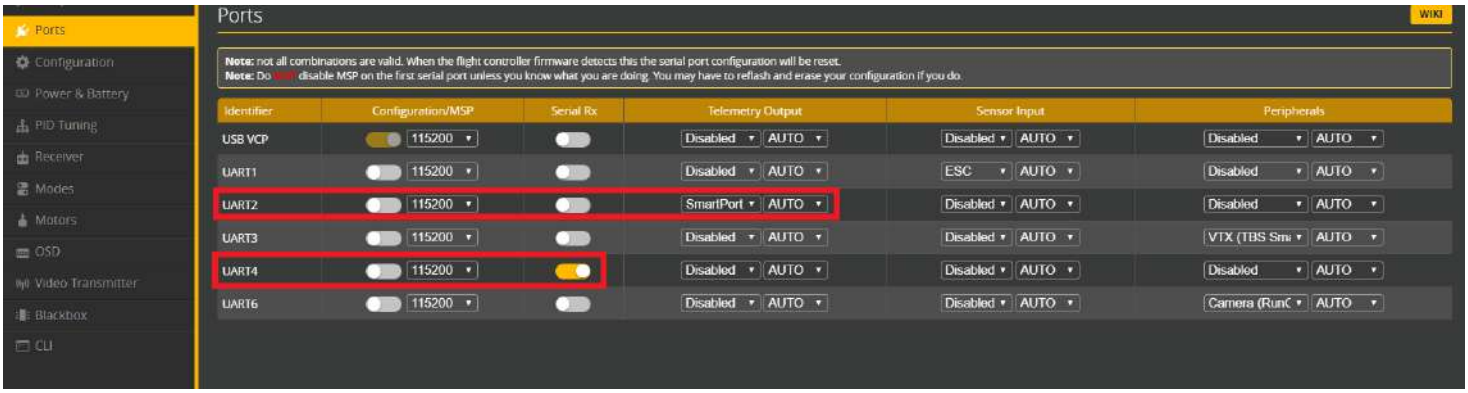


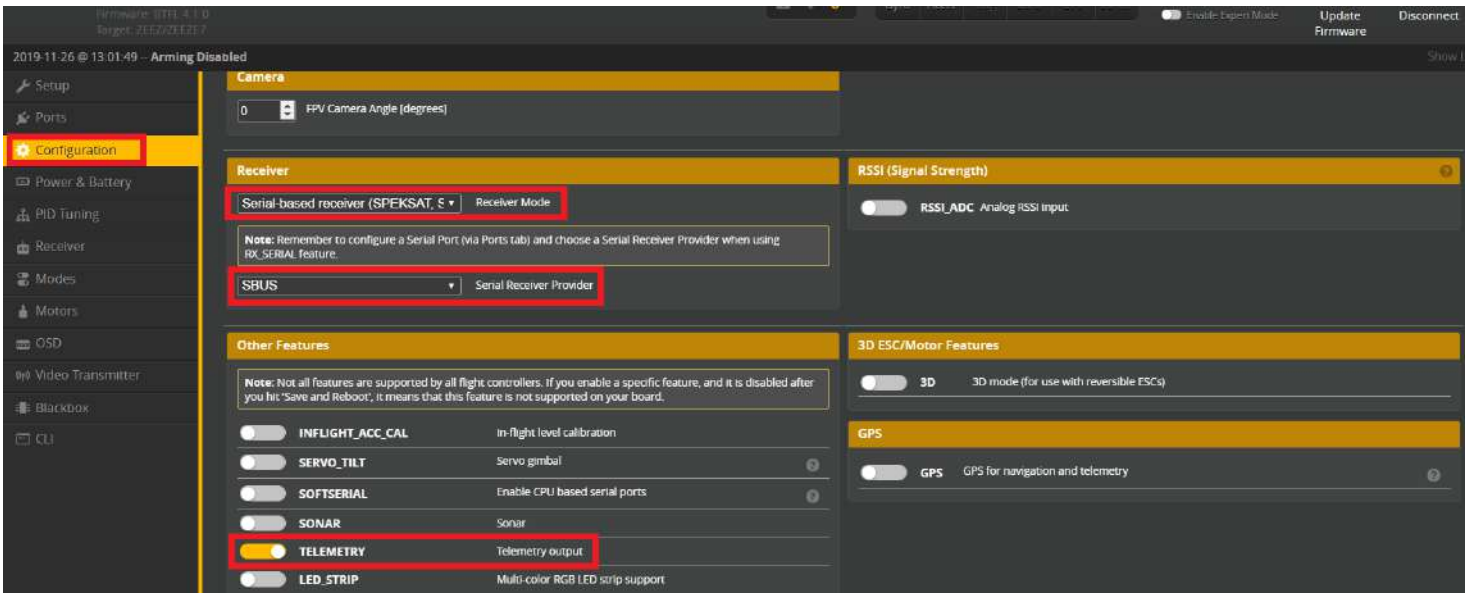


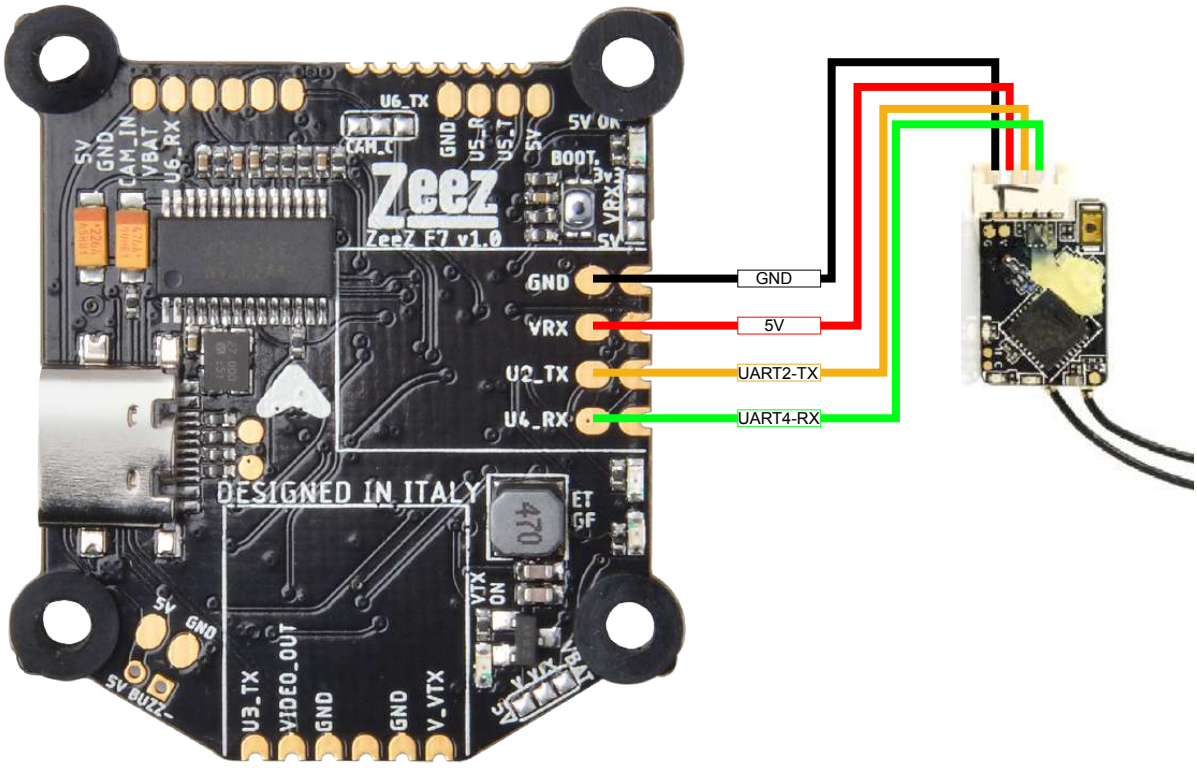


FrSky RXSR:

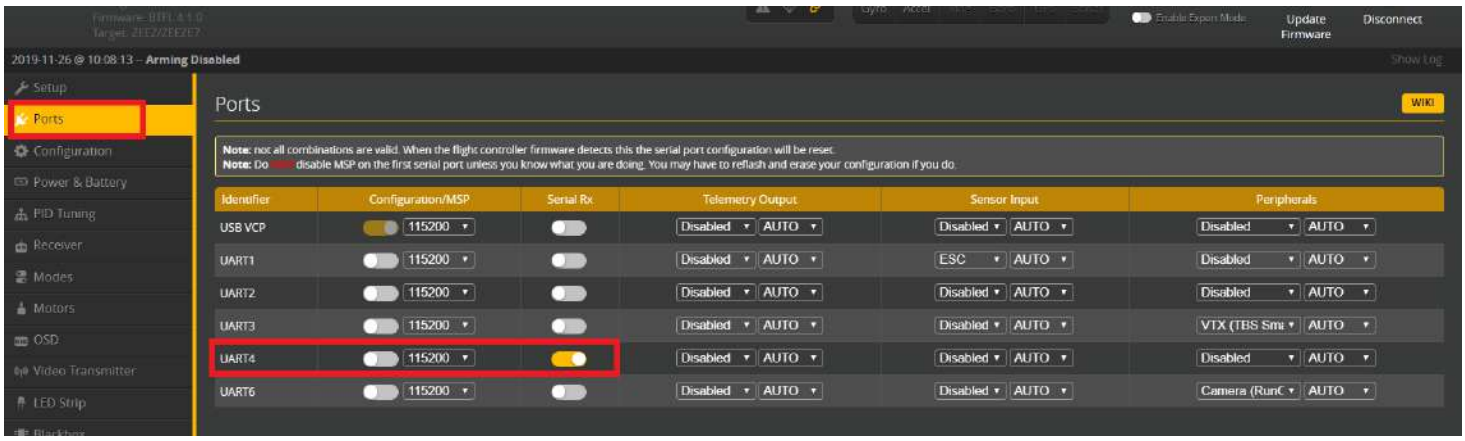
⚠ Don’t forget to make the solder bridge in the left side of the Solder jumper near the RX pad to select 5V as voltage for the RX

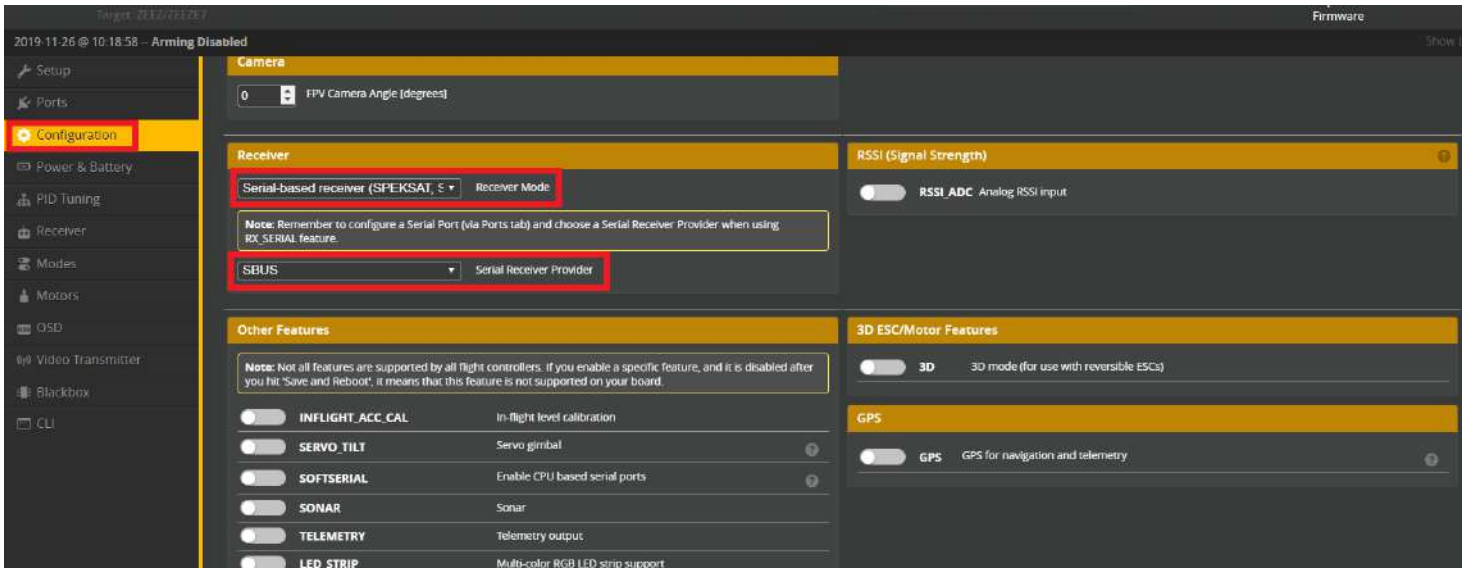


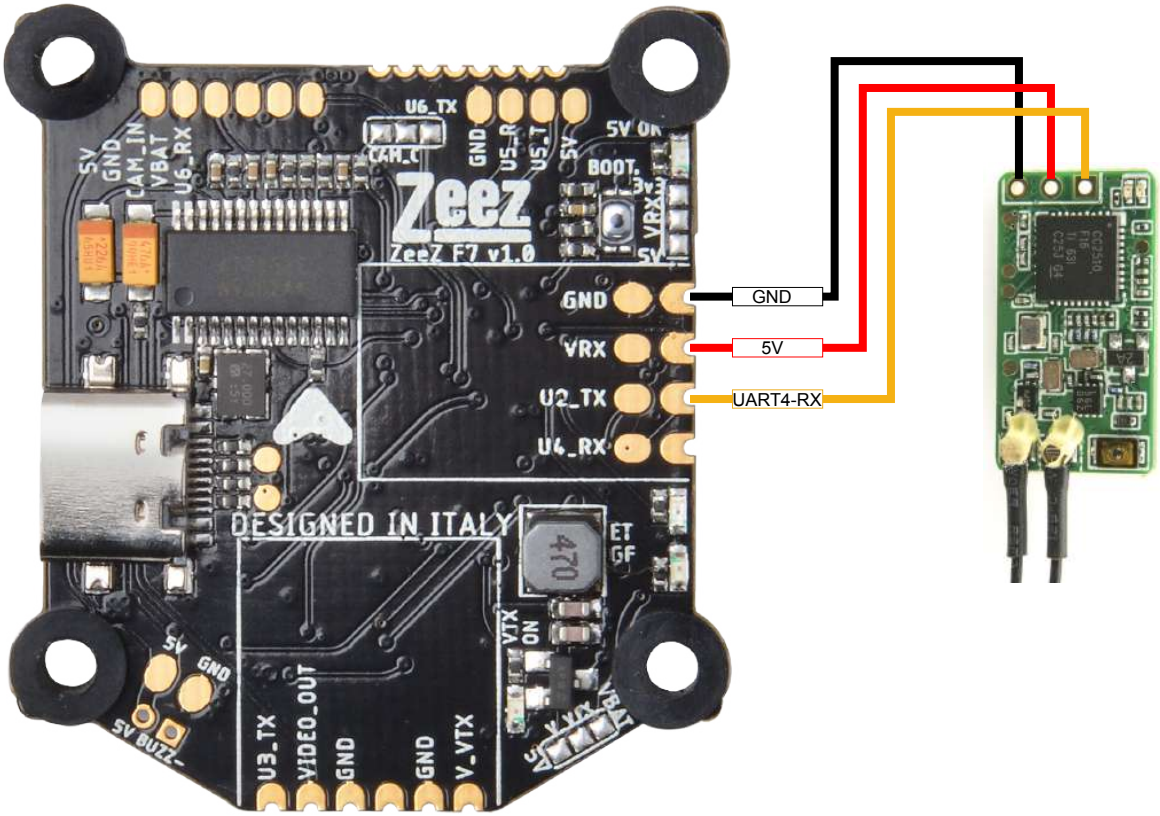




FrSky XM+:

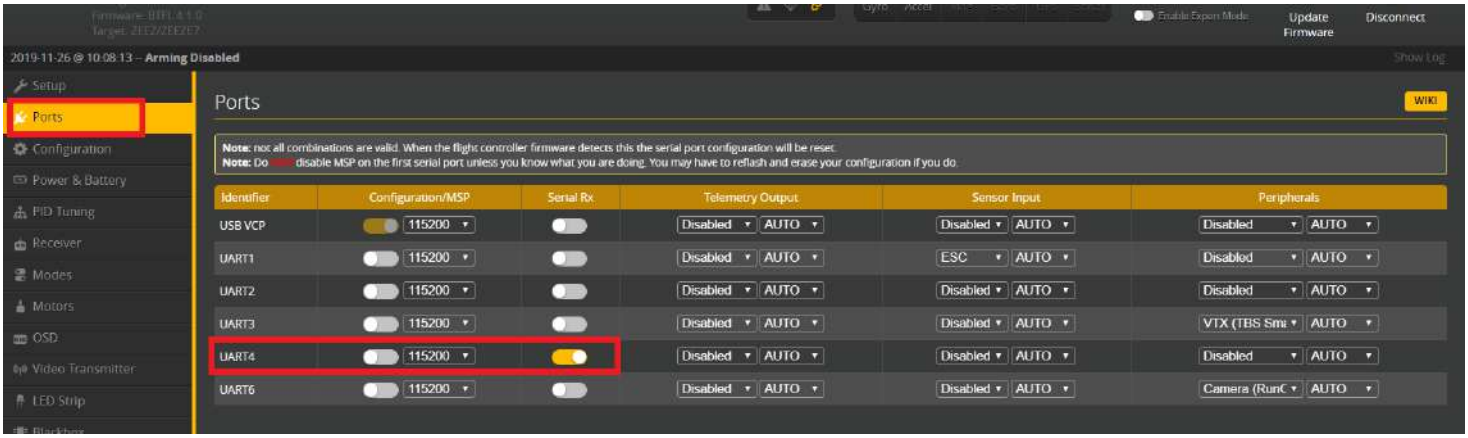

Update Firmware
Disconnect
2019-11-26 @ 10:08:13 -- Arming Disabled
Setup
Ports
Configuration
Power & Battery
PID Tuning
Receiver
Modes
Motors
OSD
Video Transmitter
LED Strip
Ports
WIKI
Identifier
Configuration/MSP
Serial Rx
Telemetry Output
Sensor Input
Peripherals
USB VCP
UART1
UART2
UART3
UART4
UART6
115200
Disabled
AUTO
ESC
VTX (TBS Sma
Camera (RunC

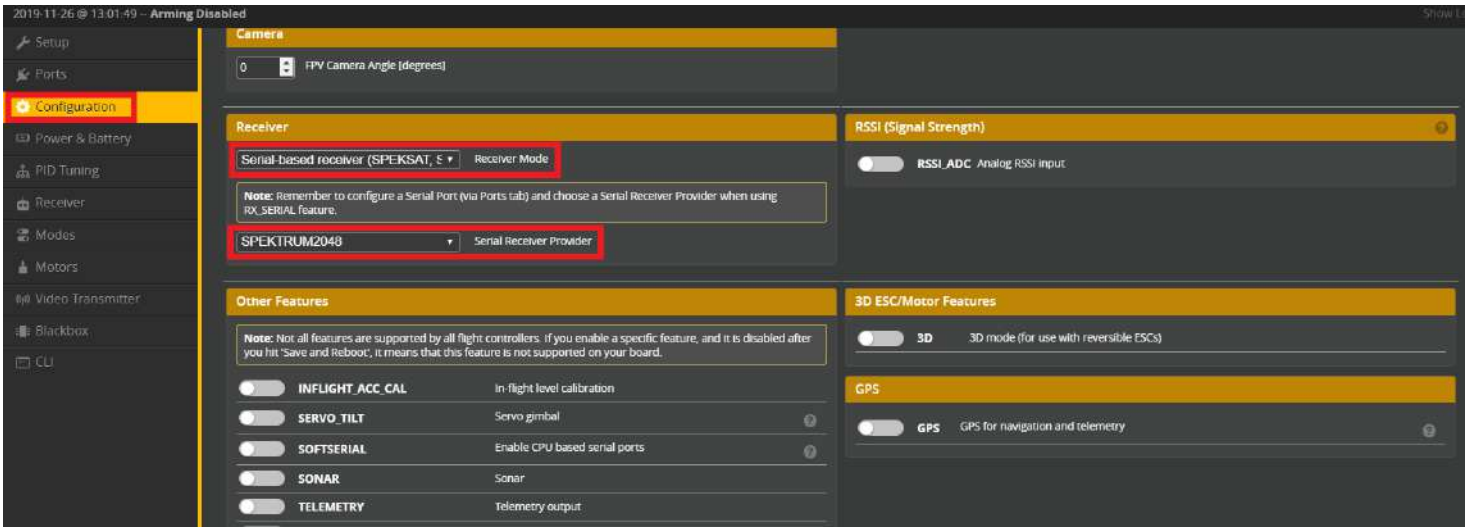

Firmware
2019-11-26 @ 10:18:58 -- Arming Disabled
Setup
Ports
Configuration
Power & Battery
PID Tuning
Receiver
Modes
Motors
OSD
Video Transmitter
Blackbox
CLI
Camera
FPV Camera Angle [degrees]
Receiver
Serial-based receiver (SPEKSAT, S
Receiver Mode
Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.
SBUS
Serial Receiver Provider
RSSI (Signal Strength)
RSSI_ADC Analog RSSI input
Other Features
Note: Not all features are supported by all flight controllers. If you enable a specific feature, and it is disabled after you hit 'Save and Reboot', it means that this feature is not supported on your board.
INFLIGHT_ACC_CAL In-flight level calibration
SERVO_TILT Servo gimbal
SOFTSERIAL Enable CPU based serial ports
SONAR Sonar
TELEMETRY Telemetry output
LED_STRIP Multi-color RGB LED strip support
3D ESC/Motor Features
3D 3D mode (for use with reversible ESCs)
GPS
GPS GPS for navigation and telemetry

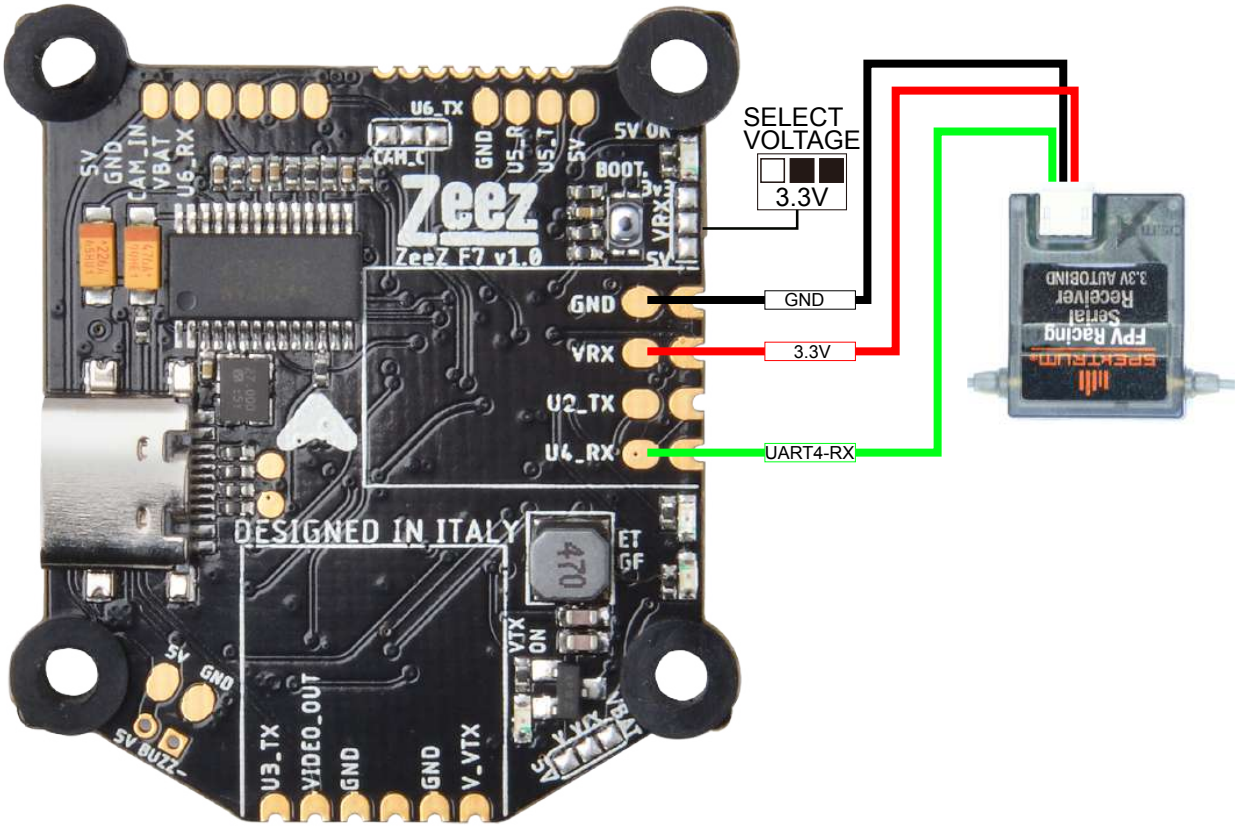

U6_TX
5V
GND
CAM_IN
VBAT
U6_RX
BOOT
Zeez
ZeeZ F7 v1.0
GND
VRX
U2_TX
U6_RX
DESIGNED IN ITALY
5V
GND
5V BUZZ
U3_TX
VIDEO_OUT
GND
GND
V_VTX
VTX ON
GND
5V
UART4-RX

Spektrum DMSX FPV:

⚠ Don’t forget to make the solder bridge in the right side of the Solder jumper near the RX pad to select 3.3V as voltage for the RX

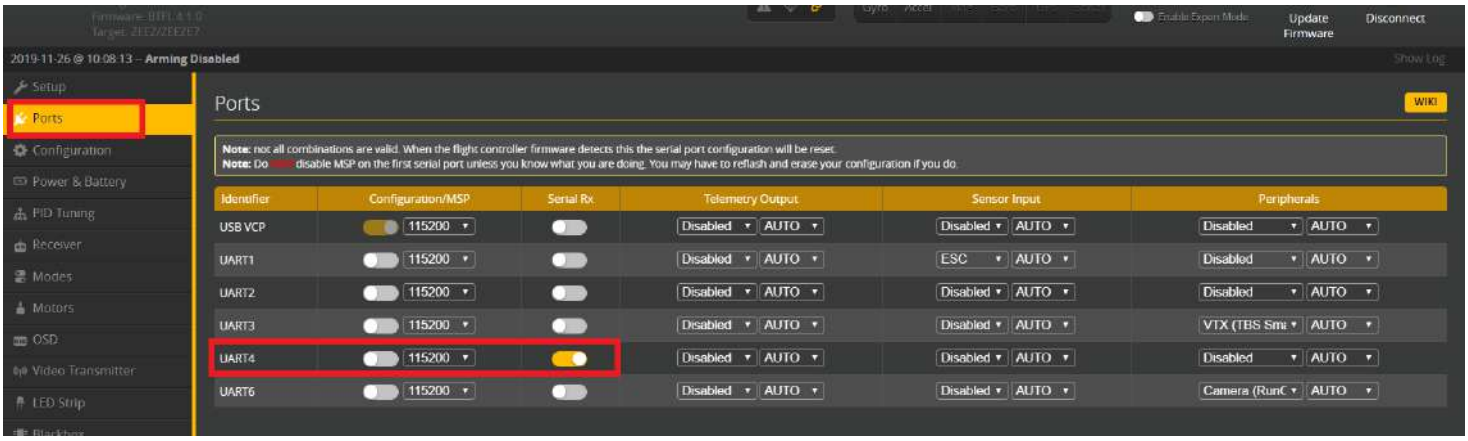


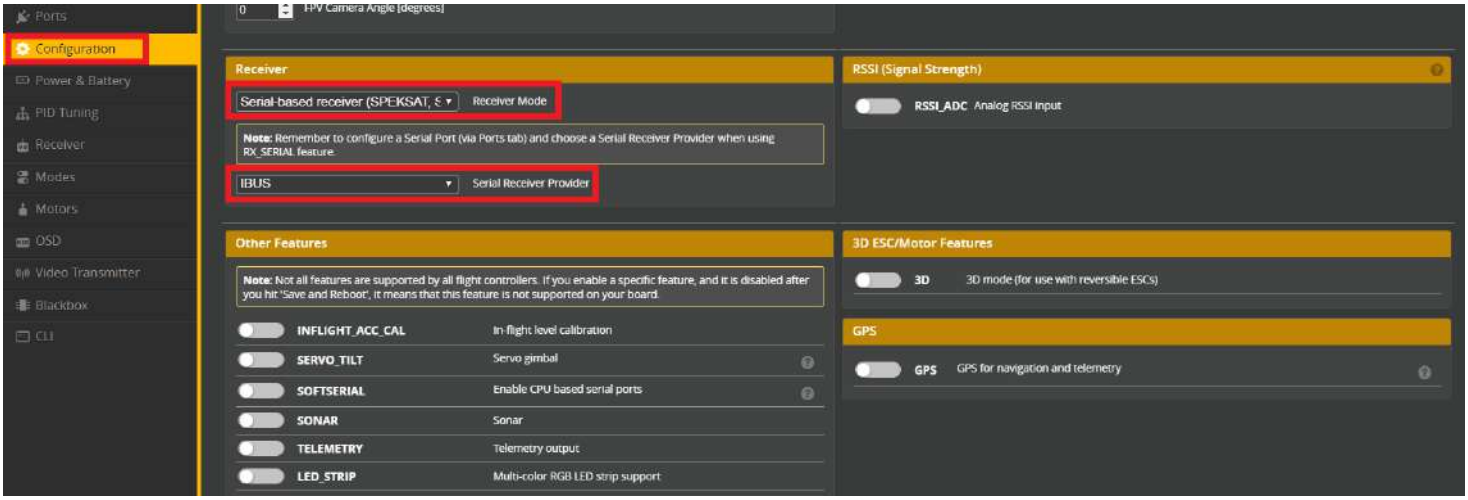


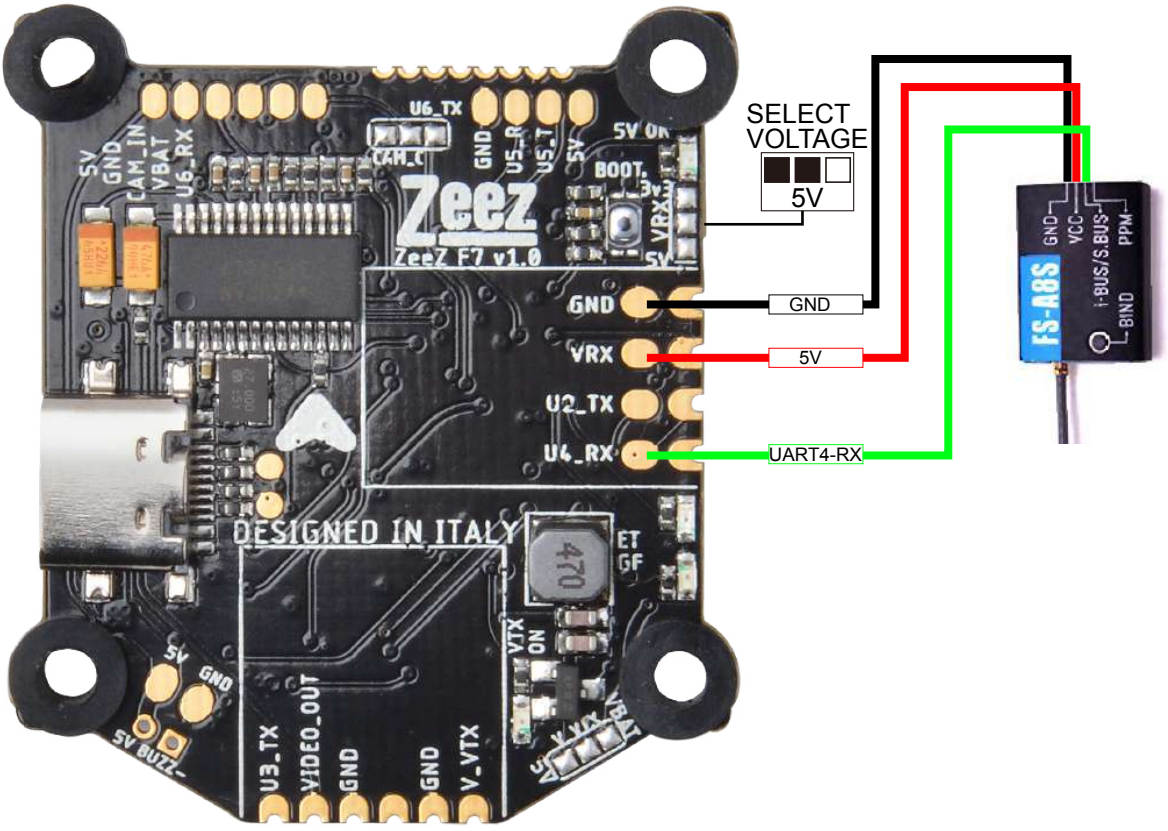


FlySky A8S:

Don’t forget to make the solder bridge in the left side of the Solder jumper near the RX pad to select 5V as voltage for the RX





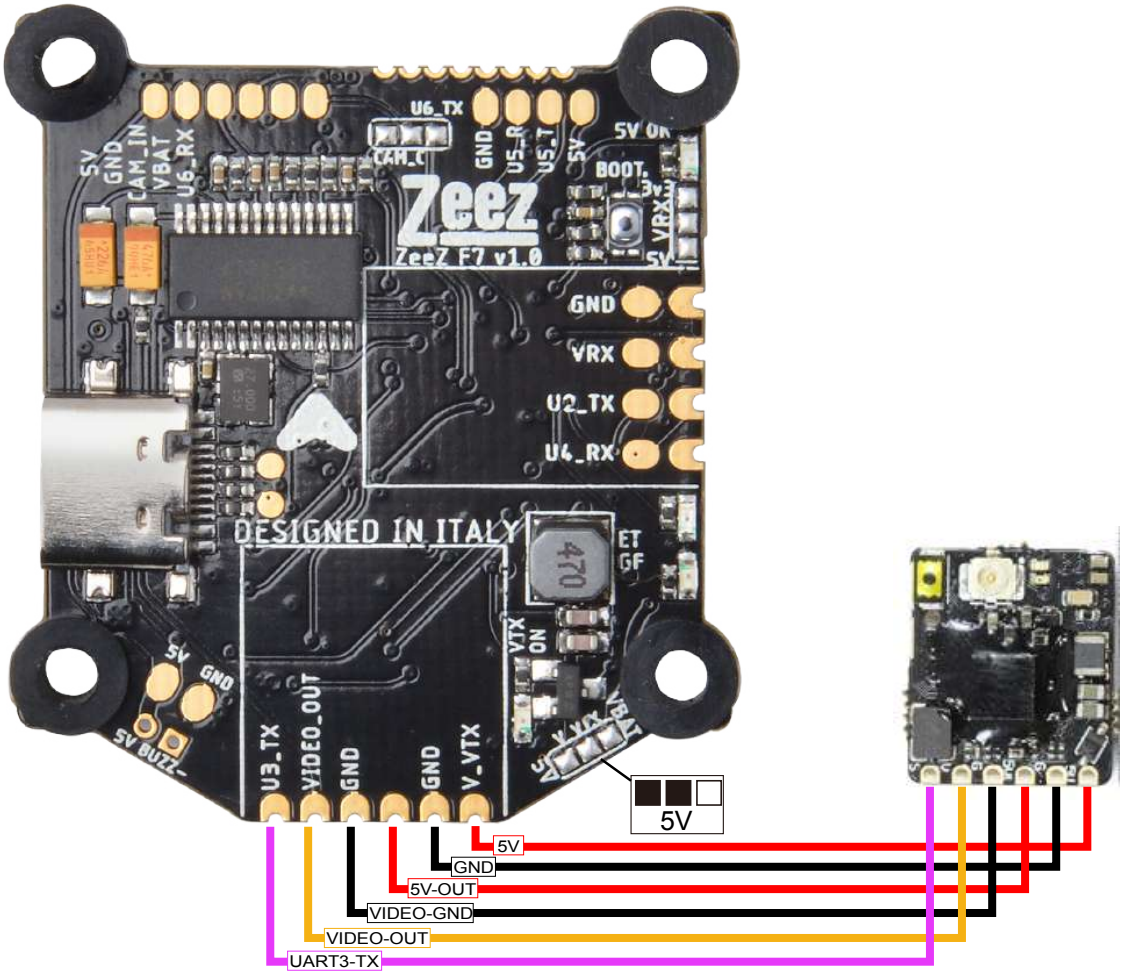


VTX chapter:

5V VTX:

Assign the AUX you prefer from your radio to turn ON and OFF the VTX from the transmitter from USER1 mode in BetaFlight. If USER1 is not active the VTX will remain OFF.

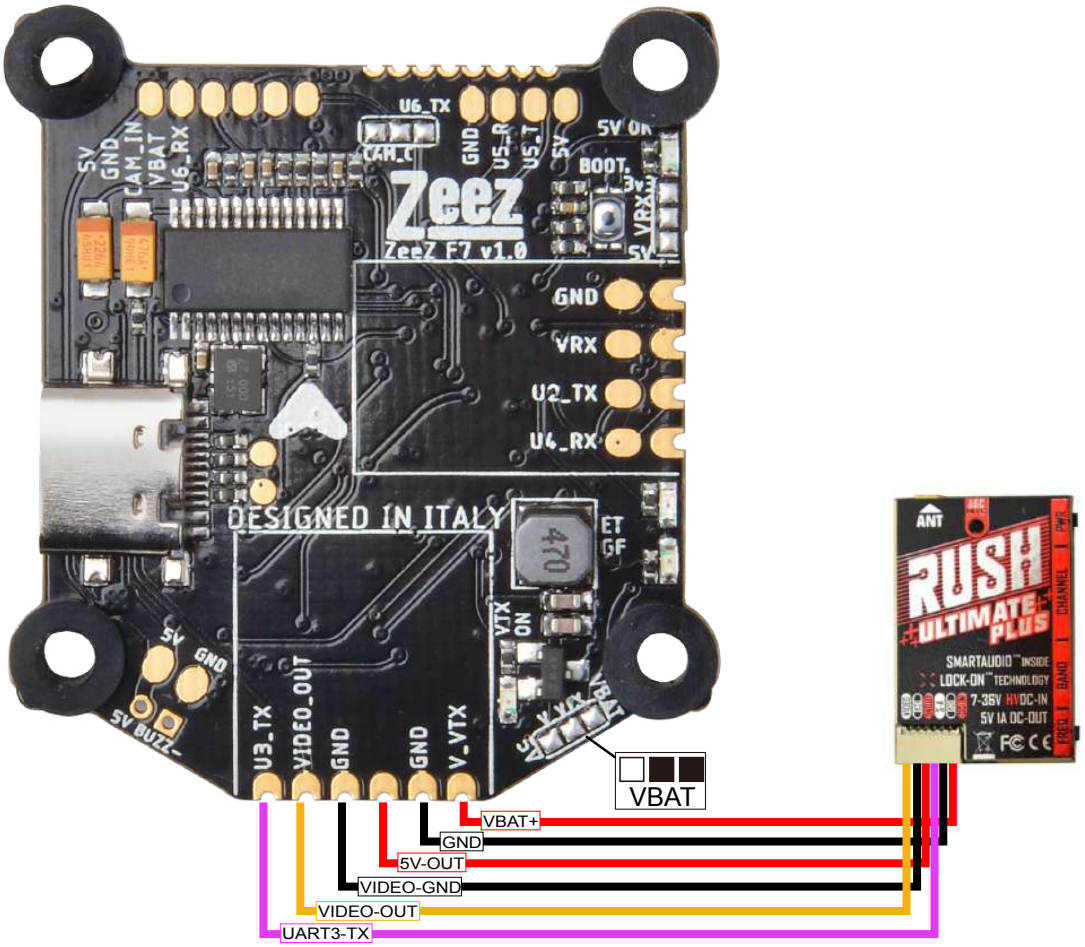
Don't forget to make the solder bridge in the left side of the Solder jumper near the VTX pad to select 5V as voltage for the VTX



HV VTX:

Assign the AUX you prefer from your radio to turn ON and OFF the VTX from the transmitter from USER1 mode in BetaFlight. If USER1 is not active the VTX will remain OFF.

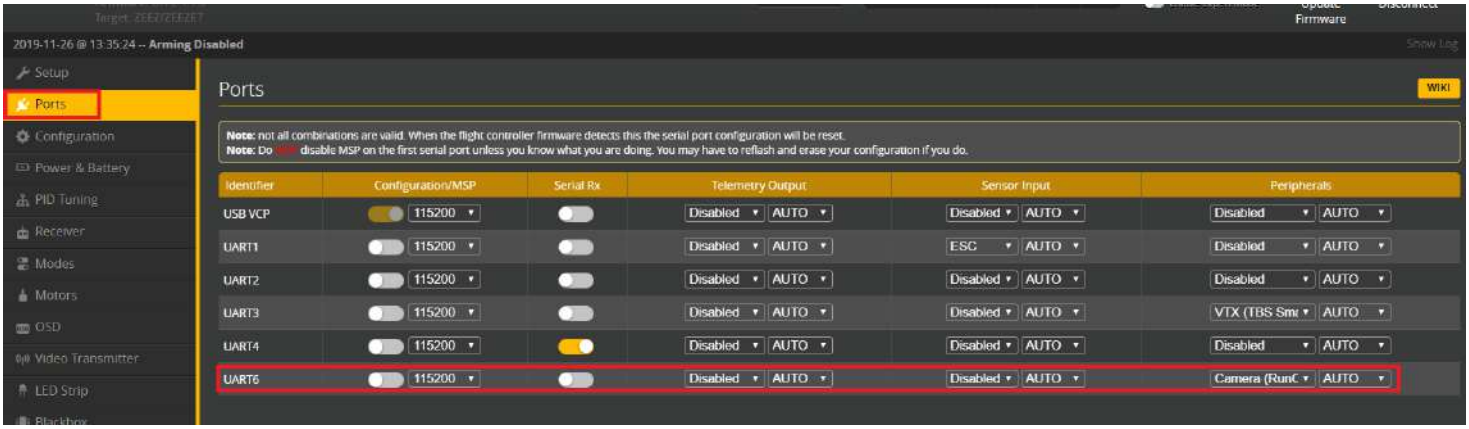
Don’t forget to make the solder bridge in the right side of the Solder jumper near the VTX pad to select VBAT as voltage for the VTX

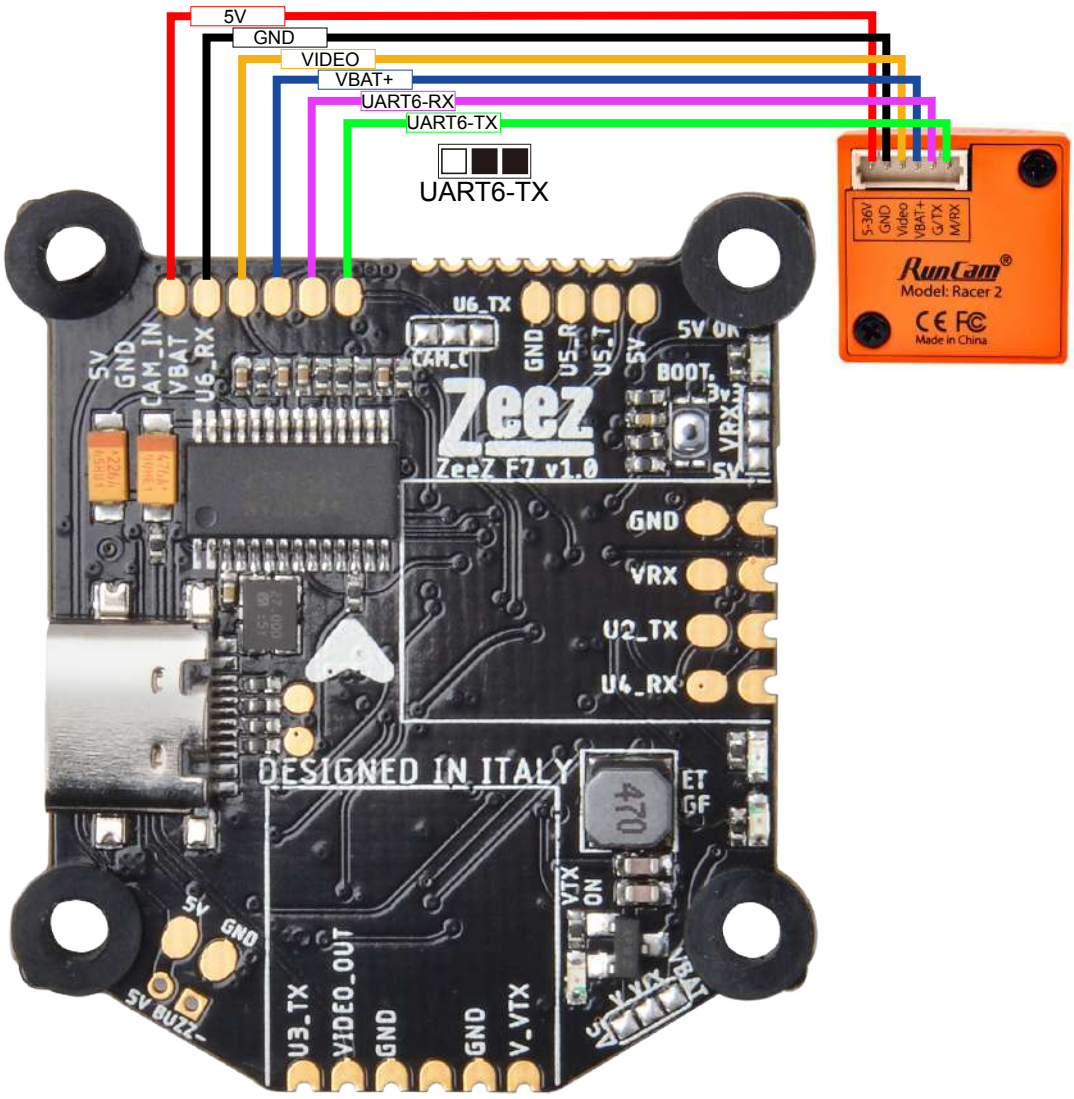


Camera chapter:

UART control Camera:

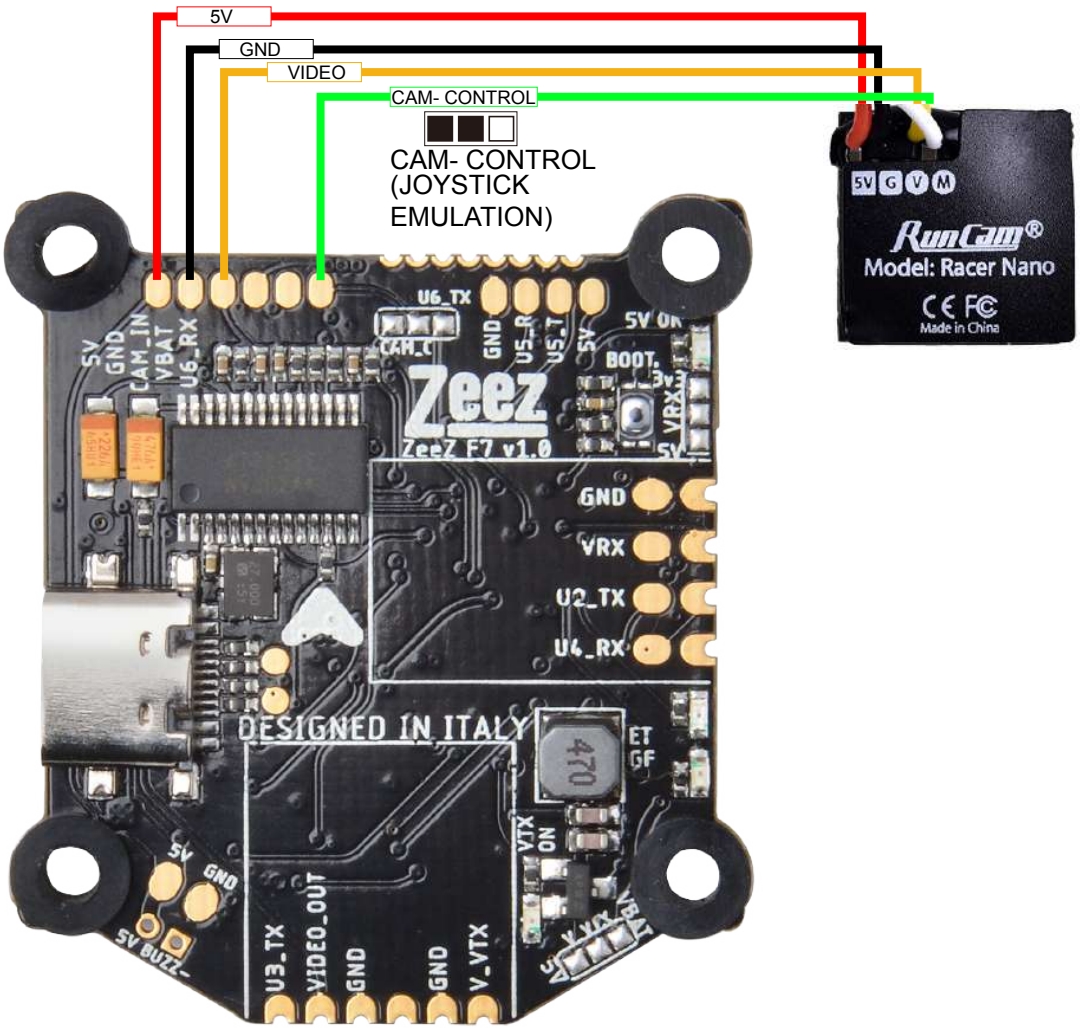
⚠ Don’t forget to make the solder bridge in the right side of the Solder jumper near the camera pad to select UART6-TX





Joystick Emulation Camera Control:

For Joystick emulation everything is already set up in the firmware, you just need to wire your camera as shown below and don't forget to make the solder bridge in the left side of the solder jumper.



LED Betaflight setup and connection: