

## F4 Flight Controller

### F405 / 5VBEC / Camera control / VTX Power Control / 6x UART

MCU: F405  
 IMU: ICM20602  
 OSD: AB7456  
 UARTs: 6  
 PWM output: 4  
 I2C: 1

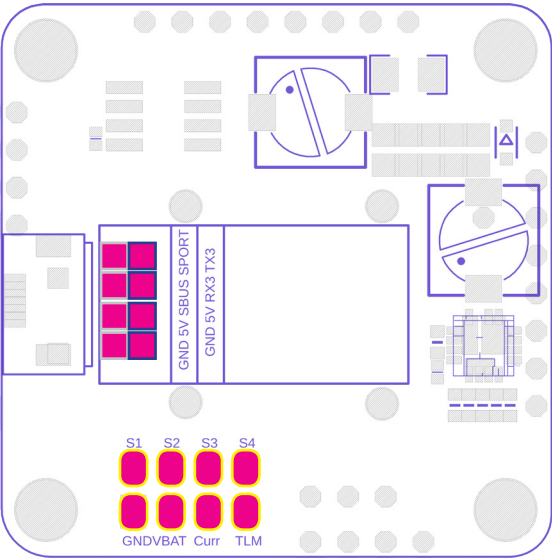
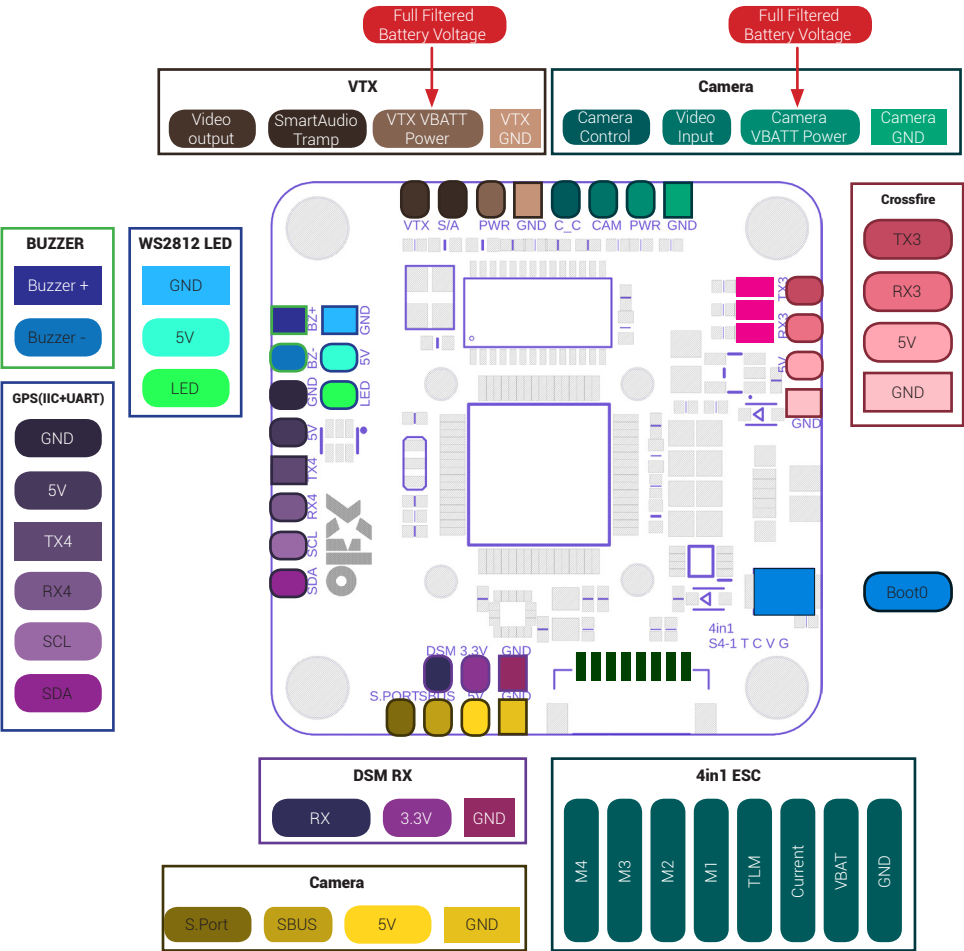
VBAT input: 8-30V  
 BEC: 5V 2A

VTX Power Control  
 Smartaudio / Tramp VTX Control  
 Camera Control  
 LC Power Filter  
 Beeper Solder Pads  
 WS2812b LED Strip Support  
 3x Receiver direct mount

### Resources:

Function	Solder Pad Silk screen	Resources	MCU Pin	Notes
SBUS	SBUS	RX 1	PA10	Build-in inverter
DSM2	DSM	TX 1	PA9	CLI serialrx_halfduplex set to ON
Smart Audio VTX	S/A	TX 5	PC12	
Smartport/F.port	S.PORT	UART 6	PC6/7	Built-in inverters
ESC Telemetry	TLM	RX 2	PA3	
Camera Control	C_C		PA8	
SDA	SDA	I2C1_SDA	PB9	Pull-up needed
SCL	SCL	I2C1_SCL	PB8	Pull-up needed
GPS	RX4/TX4	UART 4	PA0/1	
WS2812B LED	LED		PA15	
Buzzer	Bz-/Bz+		PC5	
VTX Switch			PB1	

# Layout / Pinmap



# Wiring - Receiver

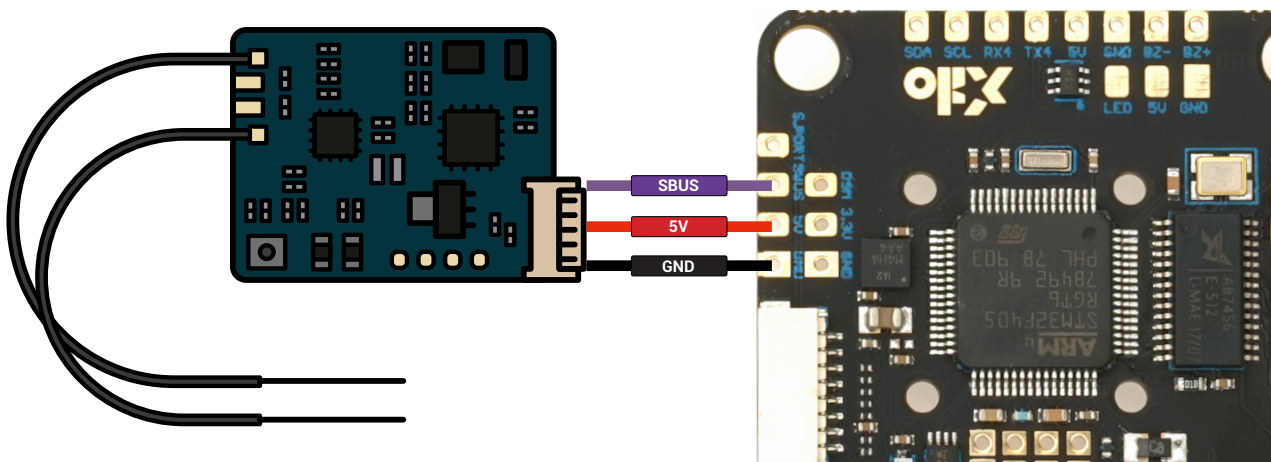
The XILO FC supports these Receivers:

- SBUS
- SBUS+S.port
- F.port
- DSM2 Receiver
- Crossfire

These receivers are not supported any more, if you need, with patched firmware, it could be used:

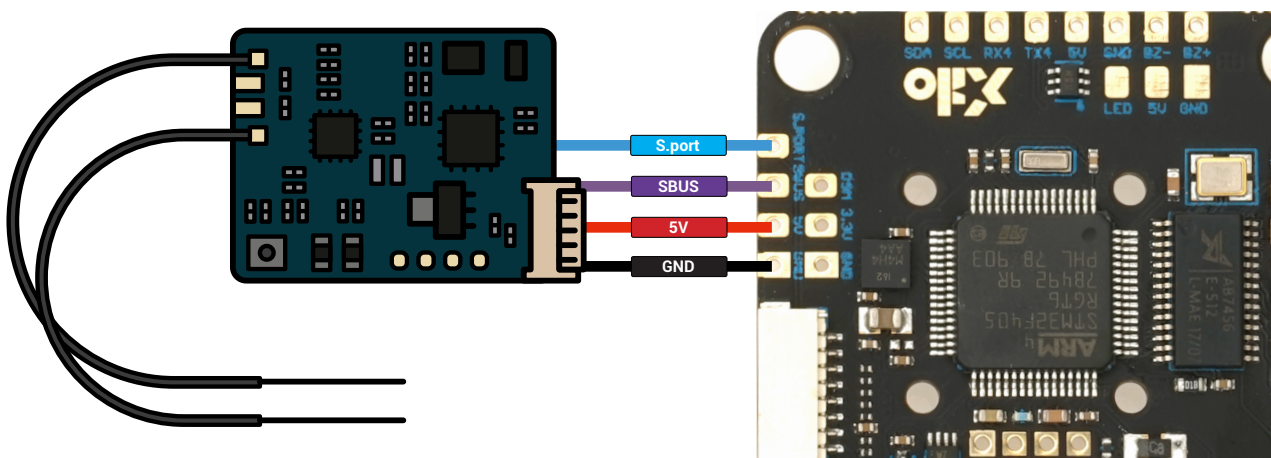
- Stand PWM receiver
- PPM receiver

## SBUS Receiver wiring:



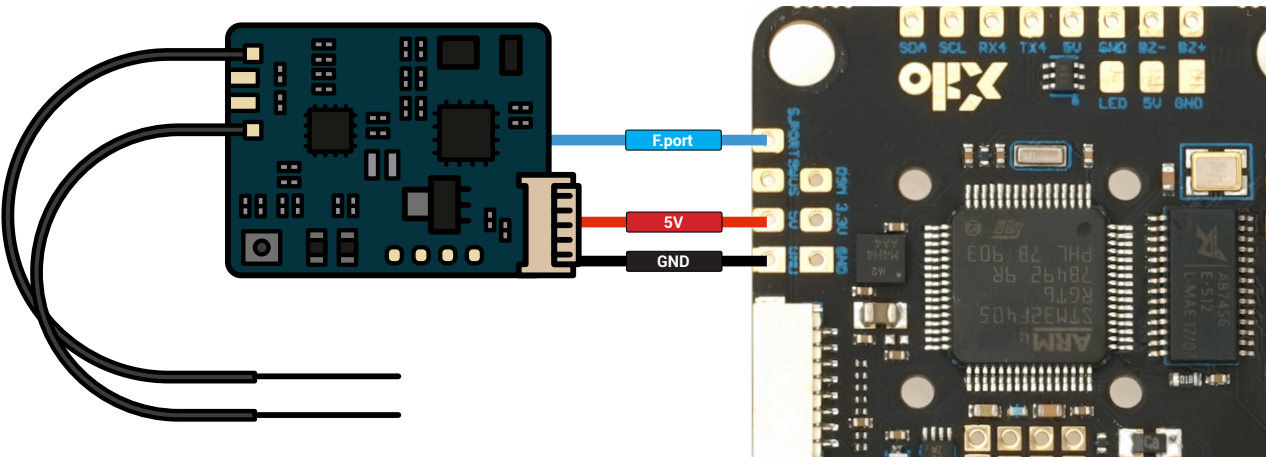
Initialize CLI:

## SBUS + S.Port Receiver wiring:

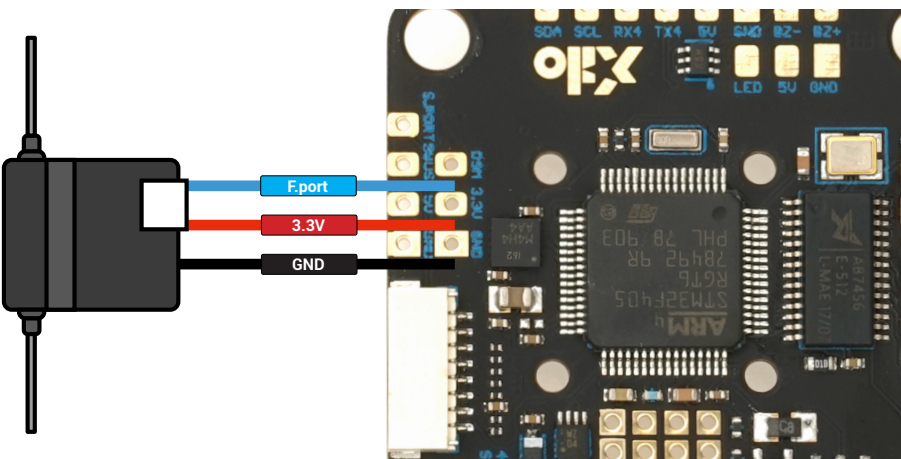


# Wiring - Receiver

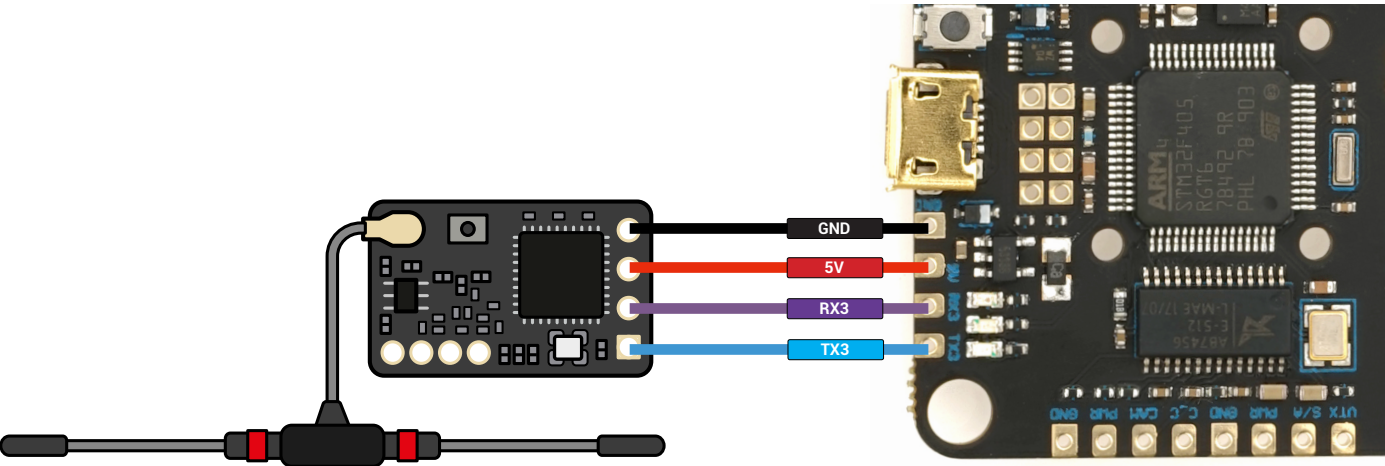
F.Port Receiver wiring:



DSM2

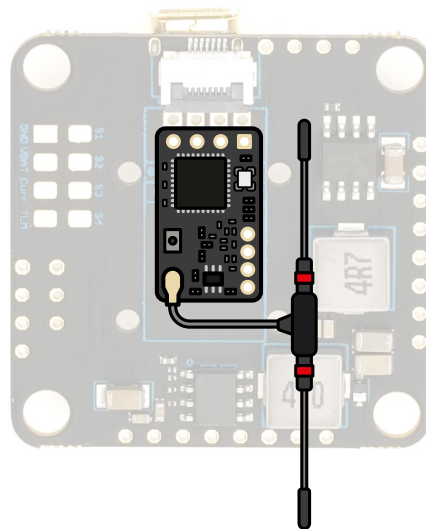
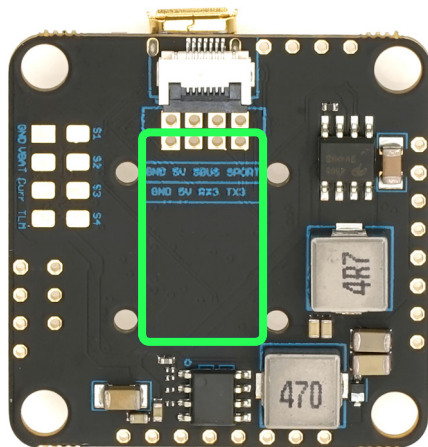


Crossfire

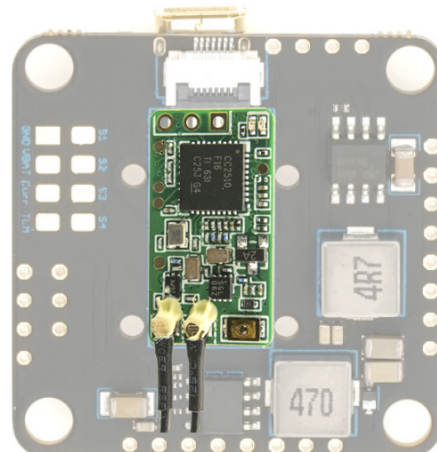
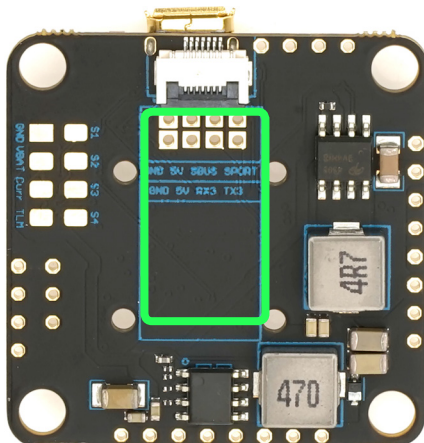


# Wiring - Receiver Flat on the Back

## Crossfire - Nano RX



## Frsky XM+

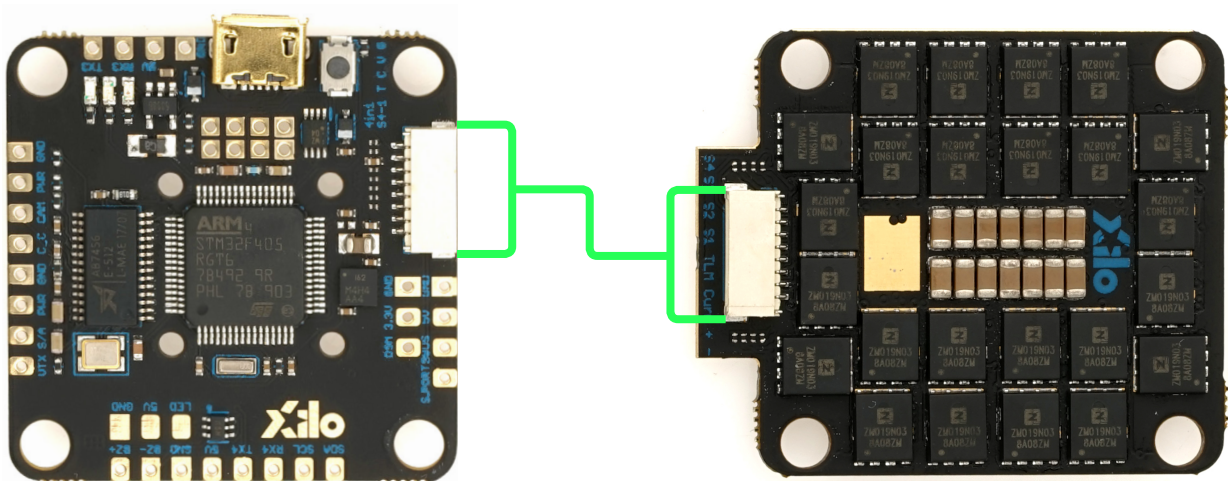




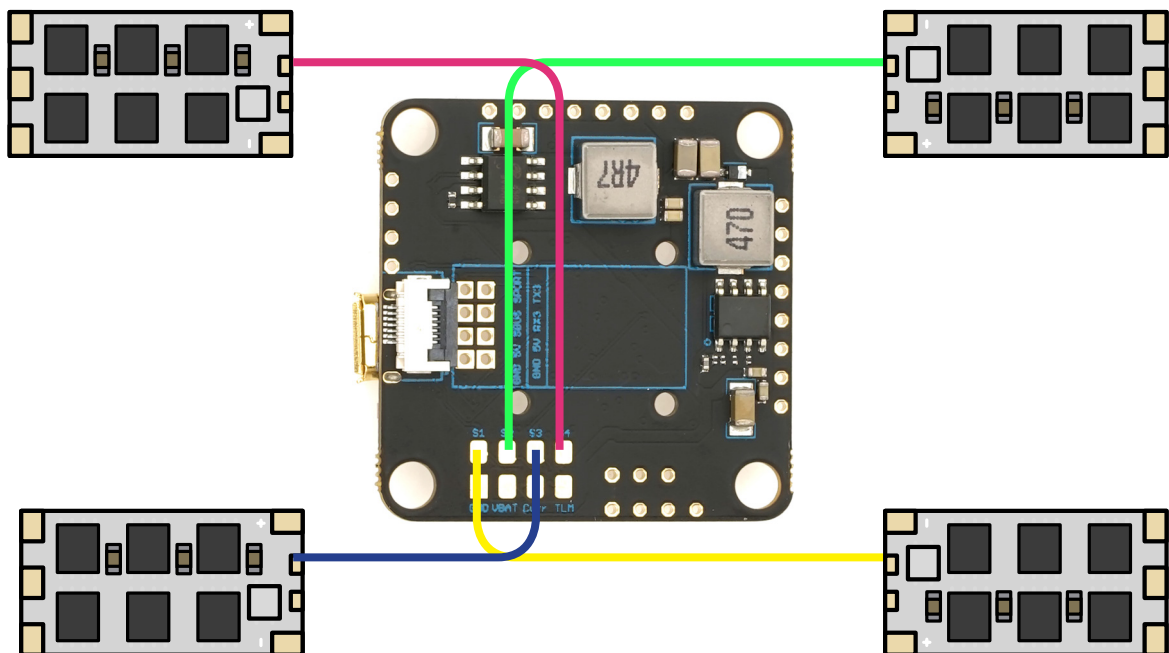
# Wiring - ESC

## 4in1 ESC

- The XILO 4in1 designed to support TLM(RPM/Voltage) and Current ADC, the Current Scale should be set to 118



## Single ESC



- If the ESC supports TLM function, please connect all 4 ESC TLM wires together, solder on the TLM pads
- If you are using PDB with current sensor(analog ADC), connect to the Curr pad

# VTX Power Switch Setup

- The XILO Stax flight controller features a power pad for your video transmitter that can be remotely controlled via a switch setup in Betaflight. This allows you to remotely turn your VTX on or off from your radio! Simply solder your VTX to the corresponding pads on the Stax FC, (VTX, S/A, PWR, GND), the PWR pad will provide your VTX with filtered VBATT power. By default, the pad will be powered on. Go into Beta to set up a switch if you want to control power on/off remotely. You will find it under the "Modes" tab and "USER1" switch. Assign this to the AUX switch of your choice to turn the power on/off for that PWR pad. Easy!

**VTX Power OFF**

**VTX Power ON**

