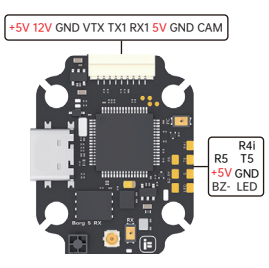
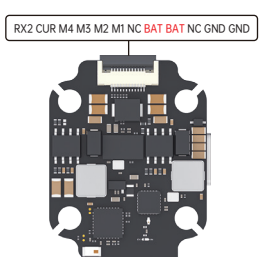
iFlight Borg 5S RX FC Wiring diagram

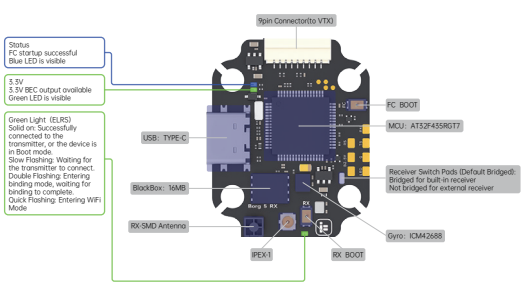
Parameters:

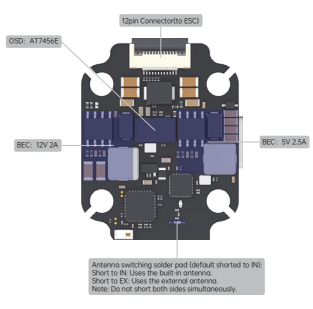
MCU: AT32F435RGT7
Gyro: ICM42688
Baro: No
OSD: AT7456E
①BEC: 5V 2.5A
②BEC: 12V 2A
BlackBox: 16MB
Uart: 4*UART(UART1、UART2、UART4、UART5)
UART1 for VTX HD/Analog
UART2 for ESC Telemetry
UART4 for Receiver
UART5 for GPS
4×Dshot/PWM outputs
1xAFC01 12pin connector for ESC（RX2/CUR/M4/M3/M2/M1/NC/BAT/BAT/NC/GND/GND)
1xSH1.0 9pin connector for VTX HD/Aanlog（5V/12V/GND/VTX/TX1/RX1/5V/GND/CAM)
WS2812 ledStrip: Yes
Beeper: Yes
Dimensions: 34*28.5mm
Mount pattern: 20*20mm/φ4
Weight: 6.8g

Firmware:
Betaflight: IFLIGHT_BORG_F435
Note: If using BF4.5.1 or earlier firmware, you can flash: IFLIGHT_BLITZ_ATF435.



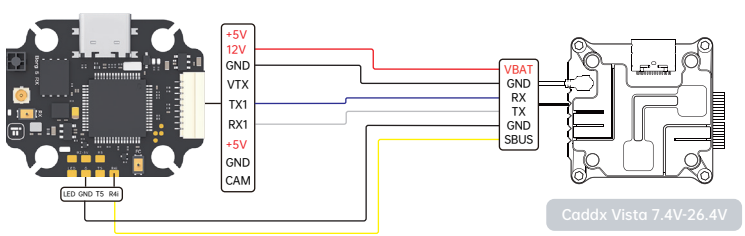




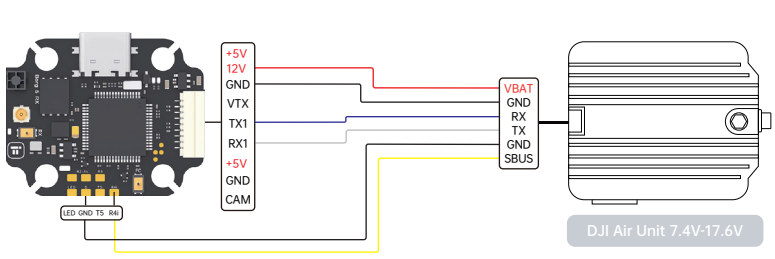


DJI Digital Transmiters

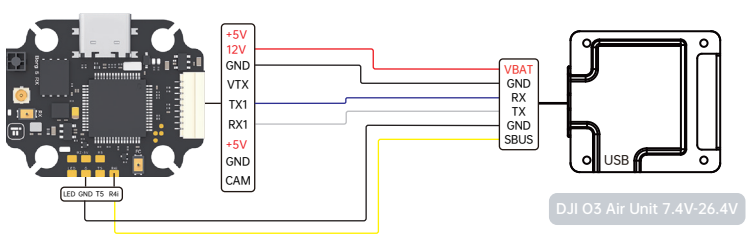
Firmware Target: IFLIGHT_BORG_F435



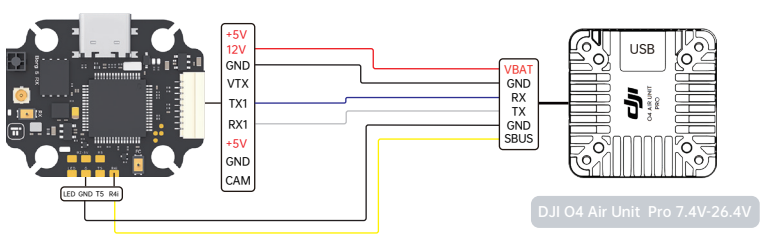
Caddx Vista 7.4V-26.4V



DJI Air Unit 7.4V-17.6V

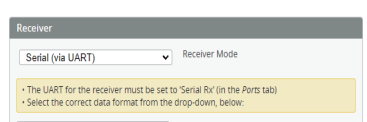


DJI O3 Air Unit 7.4V-26.4V



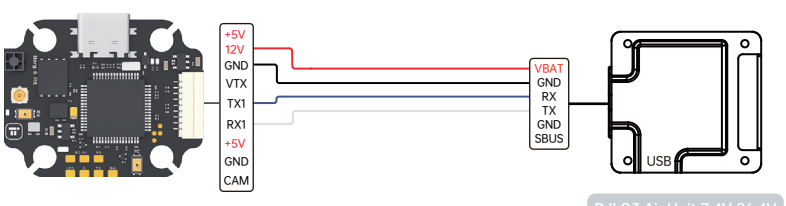
DJI O4 Air Unit Pro 7.4V-26.4V

- To enable the air unit OSD under Betaflight 4.4 version, you need to select VTX (MSP+Displayport) in the peripheral port where the air unit signal is connected to the port interface.
- note: DJI FPV Remote Controller2 is for DJI O3 Air Unit
  DJI FPV Remote Controller is for DJI Air Unit and Vista
- Please check your protocols, otherwise your DJI Radio won't input signals!
  DJI Goggle protocol and Betaflight protocol has to match!
  For lower signallatency use the SBUS BAUD_FAST protocol option on both ends.
- For Betafllght Copy Paste"set sbus_baud_fast=on"into your Beataflight Configurator CLI then hit enter.
  Use"save"and hit enter to save the changes.
  Default: sbus_baud_fast=off, Goggle protocol set to NORMAL

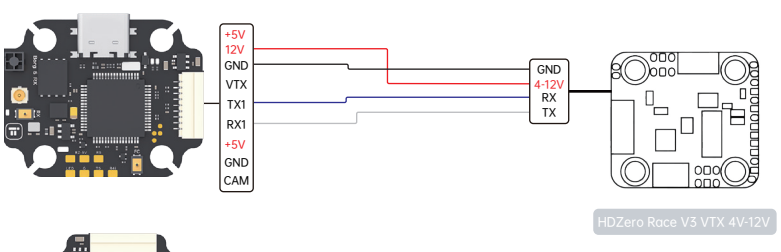


Any other Receiver

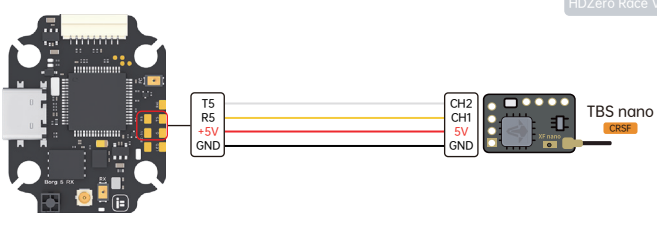
Firmware Target: IFLIGHT_BORG_F435

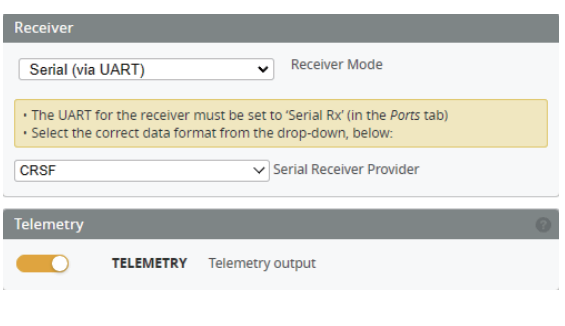


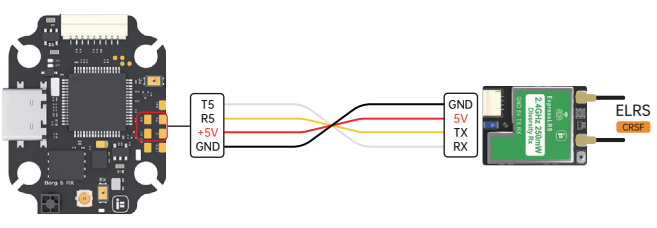
DJI O3 Air Unit 7.4V-26.4V



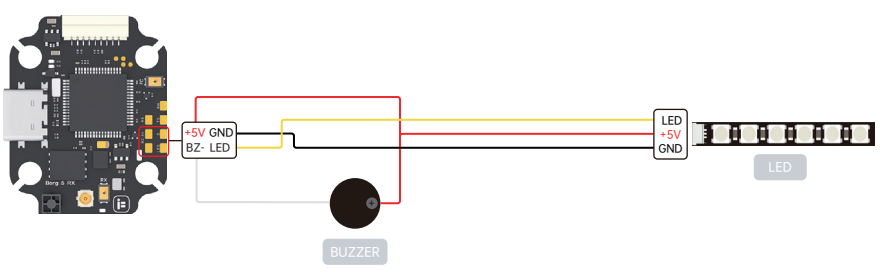
HDZero Race V3 VTX 4V-12V



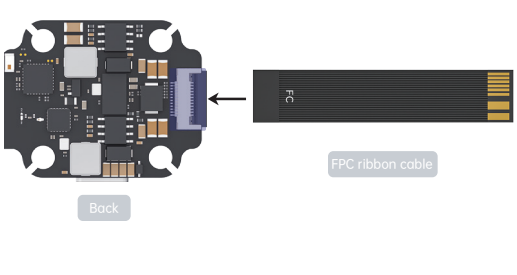


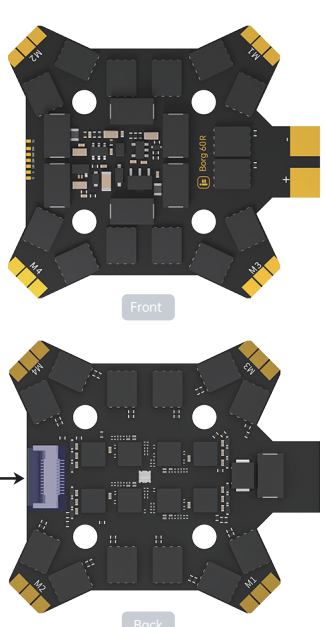


LED/BUZZER

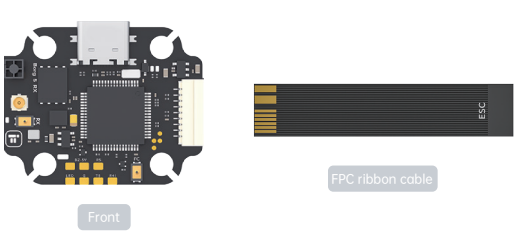


ESC



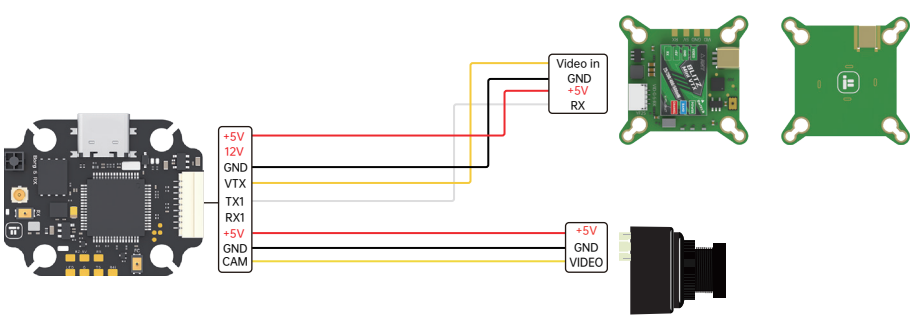


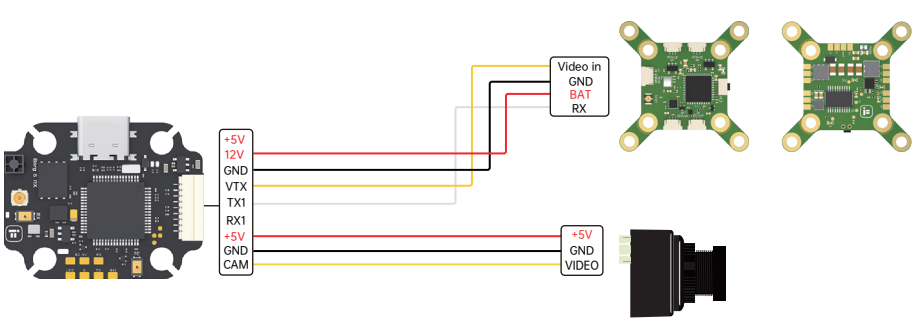
Front



Note: If using an ESC from another brand, please ensure the wiring is connected correctly.

VTX/CAM

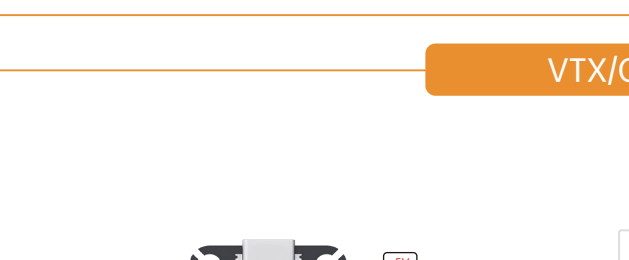




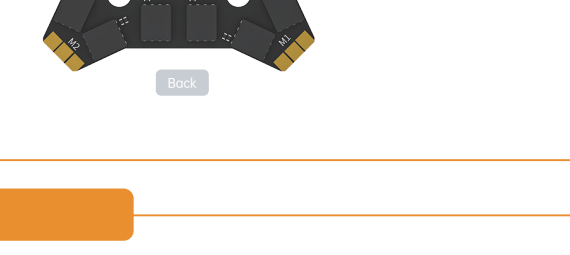
Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200	✓	Disabled AUTO	Disabled AUTO	
UART3	115200		Disabled AUTO	Disabled AUTO	
UART4	115200		Disabled AUTO	Disabled AUTO	
UART6	115200		Disabled AUTO	Disabled AUTO	
UART7	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART8	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO

Disabled
Benewake LIDAR
Blackbox logging
Camera (RunCam Protocol)
OSD (FrSky Protocol)
VTX (IRC Tramp)
VTX (MSP + Displayport)
VTX (TBS SmartAudio)

GPS



SDA/SCL pads can not be remapped to UARTs



Dimensions/Mounting pattern