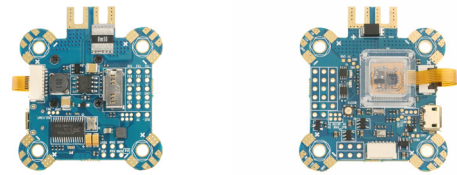


# OMNIBUS F4 Pro Corner

For the best possible flight performance, the Omnibus F4 Pro Corner flight controller utilizes a newer and more efficient ICM20608 gyro. The Omnibus F4 Pro Corner is also designed with an onboard dampening box to allow it to run flawlessly under a 32k Gyro loop. Other important features include BetaFlight configurable OSD, barometer, built in current sensor, and power filter.

The features of the Omnibus F4 Pro Corner also allow it to support 3-6s LIPO direct input.

Finally, the onboard PDB is perfected by using 12-Layer PCB design, meaning that the internal resistance from input to each output pads is limited to 0.2-0.5 mohm.

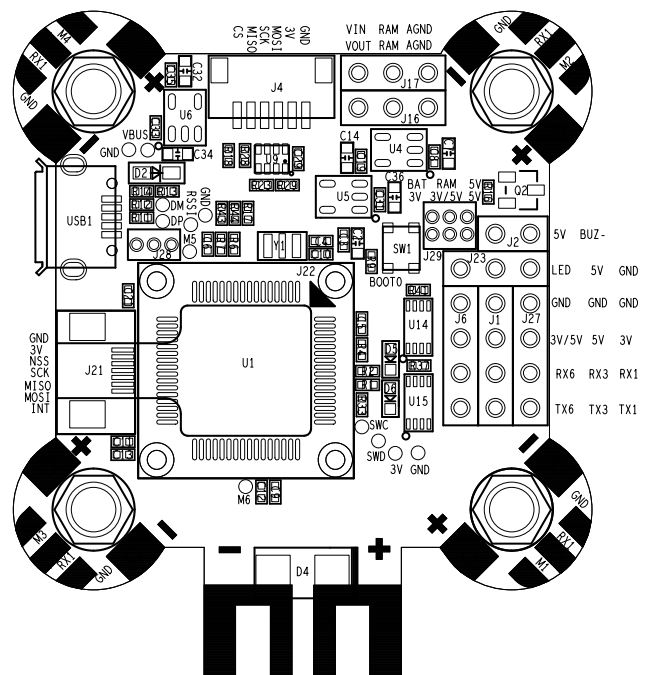
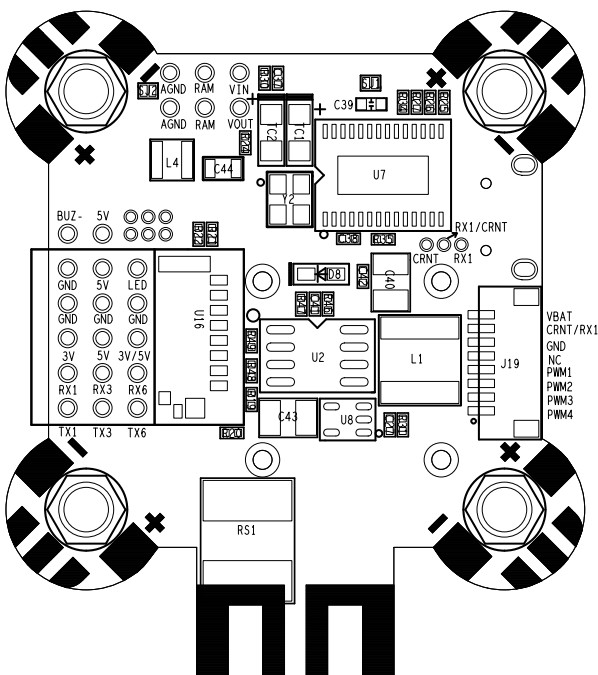


- STM32 F405 MCU, Runs Betaflight firmware(supported from v3.2)
- ICM20608 Over SPI Bus in damping box. (optional MPU6000)
- 30.5x30.5mm Mounting holes
- Supports Lipo direct plug in (3-6S)
- Supports 5V 1A BEC output(Buck)
- STM32 controls OSD chip over SPI in DMA mode(Betaflight OSD)
- Build in Current sensor
- Build in Professional level PDB
- Build in LC filter for Camera power(max 800ma)

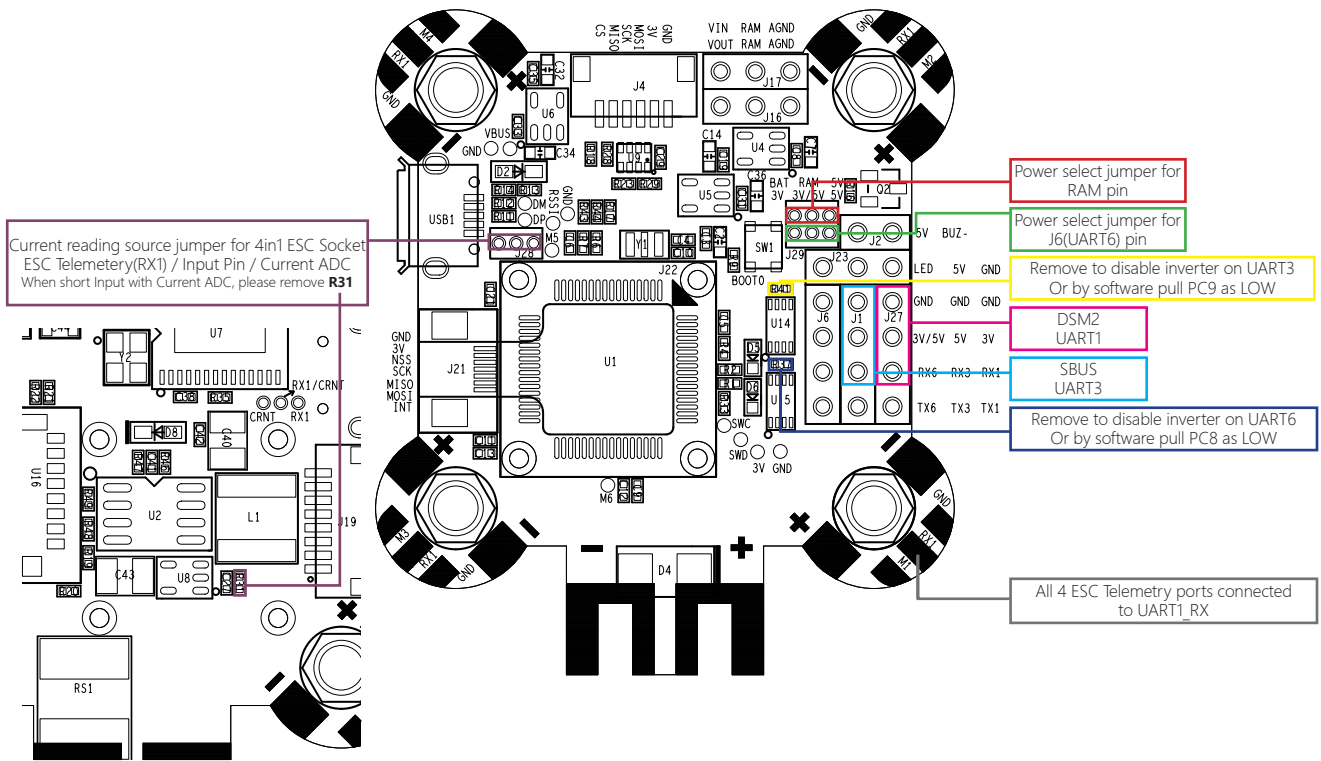
## Firmware update

OMNIBUS has been supported by Betaflight v3.2, you can use Target "OMNIBUSF4SD" to update the firmware.

## Pin map

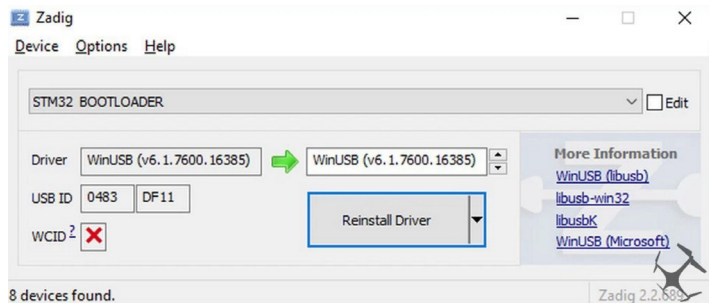
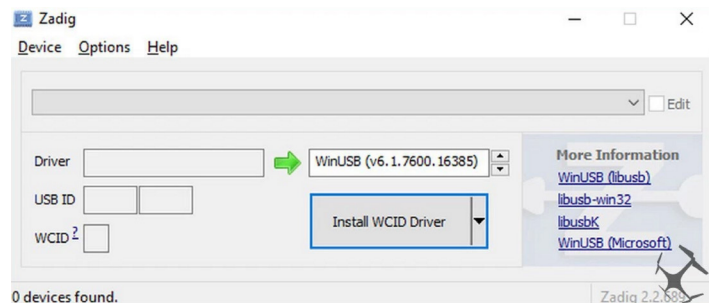


# Connection example



## How to use the onboard USB port updated firmware in GUI on windows

To Flash the Firmware you have to enter the so called DFU mode. On Windows 10 I had to use a tool called Zadig (download and start it) to be able to switch drivers for DFU mode to work. In order to switch drivers you have to take the following steps.



- Push BOOT button on the Flight controller.
- Plug-in the USB cable (the red LED should not be as bright as normally).
- Fire up Zadig and hit "Options" and then "List All Devices".
- From the list choose "STM32 BOOTLOADER".
- Under "Driver" choose "WinUSB" on the right and hit "Reinstall Driver".
- Close Zadig, disconnect the Flight controller, close all Google Chrome instances.

\* Pictures and text made by : Aerosufer

<http://www.aerosufer.ch/2016/07/25/omnibus-f3-flight-controller/>