### **OMNIBUS F4 Pro(v3)**

Pro version of OMNIBUS F4 flight controller, using F405 with SPI Gyro MPU6000, SD Card as the black box on SPI bus too.

Classic OMNIBUS design, OSD rusn over SPI bus in DMA mode, OSD Configuration has been included. in Betaflight GUI. Build-in BEC and Current sensor. Supported by BETAFLIGHT and iNAV

- STM32 F405 MCU, Runs Betaflight 3.1 firmware
- SBUS/PPM input (Pinheader)
- 6PWM output (1-4Pinheaders AND Sh1.0 Plug, 5-6 as Pinheader)
- Only 36x36mm, mount holes 30.5x30.5mm
- with BARO (BMP280)
- SPI Sensor MPU6000
- Build-in Current sensor



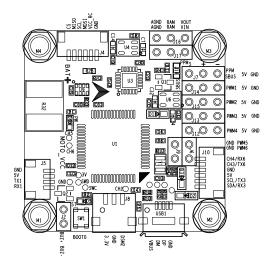


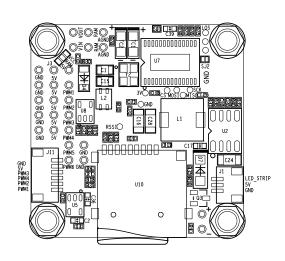


## Firmware update

OMNIBUS F4 Pro has been supported by Betaflight v3.1, you can use Target "OMNIBUS F4SD" to update the firmware.

### Pin map



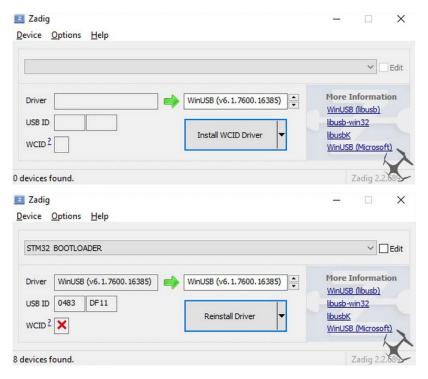


#### Notice:

- 1. PWM5 could be used to drive WS2812B LED (Only works from Betaflight v3.1)
- 2. Buzzer works from Betaflight v3.1 too
- 3. for OMNIBus F4 pro, no resistor need to be changed

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

To Bash the Prmware 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 ßight 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 Bight controller, close all Google Chrome instances.
- \* Pictures and text made by : Aerosufer http://www.aerosurfer.ch/2016/07/25/omnibus-f3-ßight-controller/