

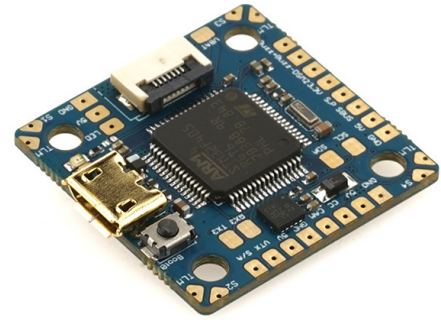
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OMNIBUS F4 Nano V7

F405 / 5VBEC / Camera control / 6x UART / Flash

The Omnibus F4 Nano V7 flight controller uses the ICM20602 over SPI for the stable flight performance. Also onboard are a barometer and AB7456 OSD chip for the BetaFlight integrated OSD.

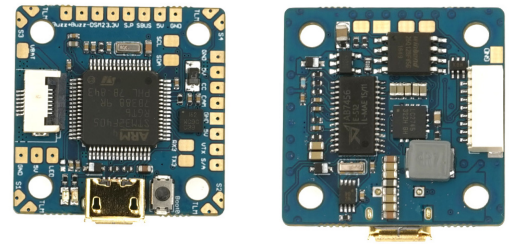
Omnibus F4 Nano V7 using new target, supports 3-6s LIPO direct input, has 6x Hardware UARTs + 1x I2C



- Firmware, please use Fireworks v2, but set gyro to use as 1(second)
- In order to use ext. ICM gyro, please set gyro to use as 0(first)

Modifications on v7:

- Tantalum Capacitors added for noiseless gyro reading
- Solder pads added for SmartAudio and Camera Control (next to Video pads)
- FPC port for Frsky RX
- This board now has 6 UART ports
- PWM pads on corner
- Upgraded BEC, 3A output



Features:

- STM32 F405 MCU, Runs Betaflight firmware(supported from v3.2)
- ICM Gyro Over SPI Bus in damping box.
- 20 x 20 mm Mounting holes
- Supports Lipo direct plugin (3-6S)
- Supports 5V 3A BEC output (Buck)
- STM32 controls OSD chip over SPI in DMA mode (Betaflight OSD)
- More UARTs

Resources:

Function	Solder Pad Silk screen	Resources	MCU Pin	Notes
SBUS	SBUS	RX 1	PA10	Build-in inverter
DSM2	TX1	TX 1	PA9	CLI serialrx_halfduplex set to ON
Smart Audio VTX	S/A	TX 5	PC12	
Smartport	S.P	UART 6	PC6/7	Build-in inverters
ESC Telemetry	TLM	RX 2	PA3	
Camera Control	CC		PA8	
SDA	SDA	I2C1_SDA	PB9	
SCL	SCL	I2C1_SCL	PB8	
GPS	RX4/TX4	UART 4	PA0/1	
WS2812B LED	LED		PA15	
Buzzer	Bz-/Bz+		PC5	

Pinmap

