Link do produktu: https://www.nobshop.pl/kontroler-lotu-iflight-beast-fc-f7-esc-55a-v2-aio-255x255-p-2984.html

Kontroler lotu iFlight Beast FC F7 ESC 55A V2 AIO 25.5x25.5

Cena brutto	**499,99 zł**
Cena netto	**406,50 zł**
Dostępność	**Aktualnie niedostępny**
Czas wysyłki	**1 - 3 dni**
Kod producenta	**B011053**
Producent	**iFlight**

Opis produktu

Kontroler lotu iFlight Beast FC F7 ESC 55A V2 AIO 25.5x25.5

Product Description

What if you could get the combined MCU speed and ESC power of a big stack, but carefully arranged on a 25x25 whoop size board? That would be crazy right? Well, we just did it...

This is our new iFlight BEAST series AIO FCs for your ultimate build. A future proof all-in-one FC to step up the game and make some more room for future flight firmware development like Betaflight, Emuflight etc. Lightweight, minimum size, minimum work.This could only be achieved by using BGA chipsets instead of ordinary QFP (big size) MCUs and ultra powerful Mosfets for almost any build. Solder your motor wires on and let's go! DJI Plug&Play plug and so many UARTs most people wouldn't even use em' all. Compatible to digital and analog FPV, onboard Barometer for possible long range flights and much more. Unleash the beast!

Top Features:

- Vista digital system Plug-and-Play (VBAT passthrough)
- MCU: BGA-STM32F745, 216MHz
- OSD: AT7456E
- Gyro: BMI270
- Blackbox: 16MB Onboard Flash
- BEC output: 5V 2.5A
- Barometer: DPS310

*Barometer can only be used with Betaflight 4.3.0 and above!

Changelog:

V1.2-V2: Updated some circuit improvements implemented.

Safety reminder:

The DJI plug&play port has no voltage regulator (BEC) and is passing through VBAT. The Caddx Vista goes up to 26.4V (6S), the DJI Air Unit goes up to 17.6V (4S). Make sure not to plug-in your DJI Air Unit directly when you're flying 6S, because this would fry it! BEC to add for your 6S build can be found here: https://shop.iflight-rc.com/index.php?route=product/product&product_id=747

Small motor 4S builds should usually need an additional capacitor of at least 16V/220uF, for 6S go up to 35V or even 50V. Bigger motors have a bigger current draw, higher voltage spikes and more serious back EMF (motor braking, works like a generator). Make sure to add big enough or even bigger low ESR capacitors on the AIO battery pad or on your battery lead the more aggressive motors you fly. There's a choice of capacitors in the package, but it's never a bad idea to make sure to protect your board. Smaller boards have less capacitance which has to be covered with external capacitors, there's no way around.

FC // Beast F7 AIO

Specification:

- MCU: BGA-STM32F745
- Gyro: BMI270
- Blackbox: 16MB Onboard Flash
- BEC output: 5V 2.5A
- Barometer: DPS310
- Connector: Micro-USB
- OSD: IFLIGHT OSD (AT745E?
- FC Firmware?IFLIGHT_F745_AIO_V2
- Mounting pattern: 25.5*25.5mm ?3mm
- Dimensions: 32.5*32.5mm
- Weight: 8.5g

ESC // 55A 2-6S

Specification:

- Uarts: 5
- Current Sensor: Yes
- Input: 2-6S LIPO
- Current scale: 100
- Constant: 55A / Burst: 60A
- BLHeli: BLHeli-S
- Telemetry: no
- ESC Firmware: G-H-30 BLS
- Mounting pattern: 25.5*25.5mm/?3mm
- Dimensions:?32.5*32.5mm

Package Includes:

- Beast F7 AIO x 1

- Capacitor 470uF/16V x 1

- Capacitor 470uF/35V x 1

- XT60 16AWG cable 100mm x 1

- XT30U 18AWG cable 70mm x 1

- 14AWG Silicone Cable Red 100mm x 1

- 14AWG Silicone Cable Black 100mm x 1

-1.0-7P cable 50mm-28mm x 1

-1.0-7P cable 50mm x 1
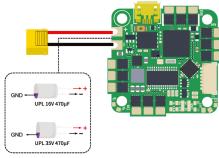
- M2 silicon grommets x 4

- M2*12mm screws x 8

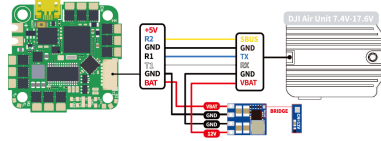- M2 Transparent Nylon Nut x 8

- 0.8mm black Heat shrink tube 10mm x 8

SCHEMAT POŁĄCZEŃ

Link do schematu na stronie producenta
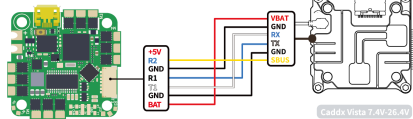
IFLIGHT Beasst F7 55A AIO V2 Wiring Diagram

- This is a tiny high power AIO board! It's neccesary to add a low ESR capacitor on your battery pads or battery lead! There's a choice of capacitors already in the package.

- Small 4S motors usually need 16V/220µF and up, for bigger and more aggressive 6S motors use at least 35V/470µF. It's necessary to protect the hardware from motor generated back EMF and voltage spikes.

GND — UPL 16V 470µF
GND — UPL 35V 470µF

DJI Air Unit 7.4V-17.6V

- The DJI Plug&Play connector has a VBAT passthrough! Please remember, the DJI Air Unit can just handle voltage up to 4S! To fly up to 6S batteries, please use an additional BEC (Voltage regulator).

DJI Digital Transmitters

Firmware Target:IFLIGHT_F745_AIO
ESC Firmware:G-H-30 BLS
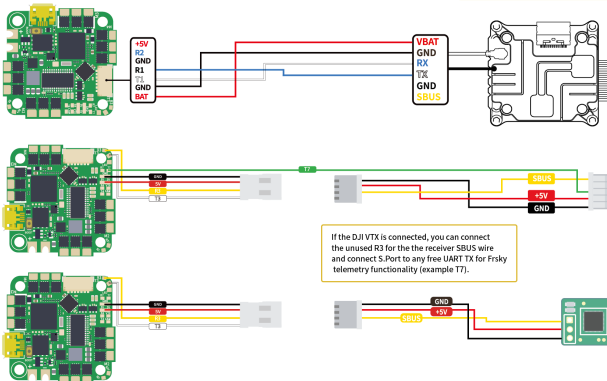
Caddx Vista 7.4V-26.4V

- Please check your protocols, otherwise your DJI Radio won't input signals!
DJI Goggle protocol and Betaflight protocol has to match!
For lower signal latency use the SBUS_BAUD_FAST protocol option on both ends.
For Betaflight 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

Receiver
Serial-based receiver (SPEKSAT, S ▾)   Receiver Mode
Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.
SBUS ▾   Serial Receiver Provider

Use another transmitter(HD)

When not using the DJI remote controller, don't connect the SBUS and GND.

FrSKY R-XSR   SBUS +S.port   (R9Mini、R9MM)

SBUS IN
SBUS OUT
S.Port
+5V
GND

XM+   SBUS
GND +5V

Receiver
Serial-based receiver (SPEKSAT, S ▾)   Receiver Mode
Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.
SBUS ▾   Serial Receiver Provider
UART7   115200 ▾   SerialPort ▾ AUTO ▾
TELEMETRY

Receiver
Serial-based receiver (SPEKSAT, S ▾)   Receiver Mode
Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.
SBUS ▾   Serial Receiver Provider

If the DJI VTX is connected, you can connect the unused R3 for the the receiver SBUS wire and connect S.Port to any free UART TX for Frsky telemetry functionality (example T7).

TBS Nano   CRSF   XF nano
GND +5V CH1 CH2

Receiver
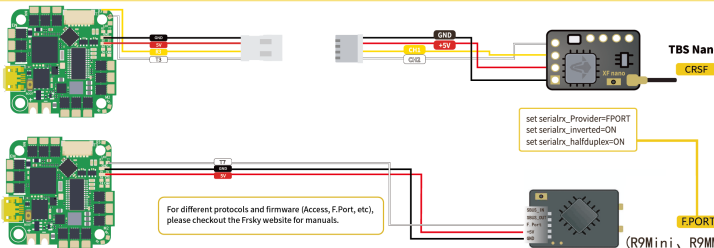Serial-based receiver (SPEKSAT, S ▾)   Receiver Mode
Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.
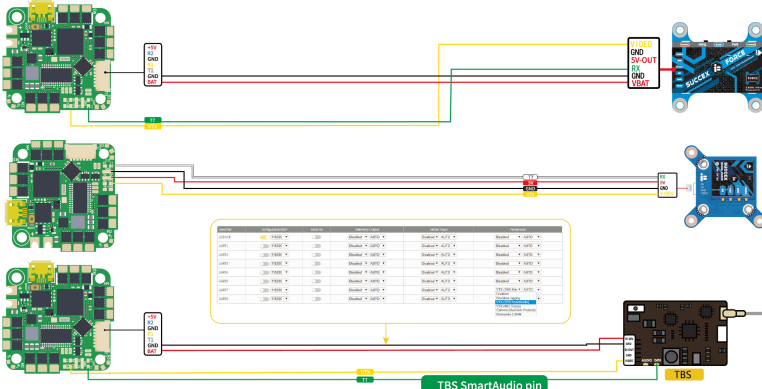CRSF ▾   Serial Receiver Provider
TELEMETRY

set serialrx_Provider=FPORT
set serialrx_inverted=ON
set serialrx_halfduplex=ON

F.PORT   (R9Mini、R9MM)

For different protocols and firmware (Access, F.Port, etc), please checkout the Frsky website for manuals.

Receiver
Serial-based receiver (SPEKSAT, S ▾)   Receiver Mode
Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.
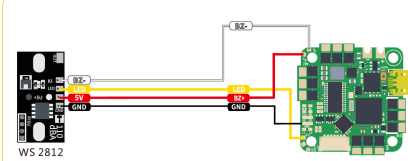FrSky FPort ▾   Serial Receiver Provider
TELEMETRY
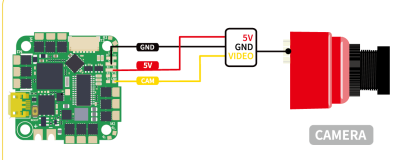
Analog

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 ▾	Disabled ▾	AUTO ▾
UART3	115200 ▾		Disabled ▾	AUTO ▾	Disabled ▾	AUTO ▾	Disabled ▾	AUTO ▾
UART4	115200 ▾		Disabled ▾	AUTO ▾	Disabled ▾	AUTO ▾	Disabled ▾	AUTO ▾
UART6	115200 ▾		Disabled ▾	AUTO ▾	Disabled ▾	AUTO ▾	Disabled ▾	AUTO ▾
UART7	115200 ▾		Disabled ▾	AUTO ▾	Disabled ▾	AUTO ▾	VTX (IRC Tran ▾	AUTO ▾
UART8	115200 ▾		Disabled ▾	AUTO ▾	Disabled ▾	AUTO ▾	Disabled ▾	AUTO ▾

LED/BUZZER

BZ-
BZ+
5V
GND
WS 2812

CAM

GND
5V
CAM
5V GND VIDEO
CAMERA

GND
5V-OUT
RX
GND
VBAT

TBS SmartAudio pin   TBS

Status indicator

3V3
3.3V & MCU available
Red LED is visible

Bat
Vbat is available
Orange LED is visible

Start
FC startup successful
Blue LED is visible