



HappyModel Crazy F411 ELRS AIO 4in1 F411 Flight  
Controller Built-in UART 2.4G ELRS RX 20A ESC 2-4S  
for RC FPV Drone

Price: **CNY 456.22** / piece  
Seller Guarantees: Ships within 7 business days  
Buyer protection 75 days  
Commit Delivery 75 days

[View snapshot of order in English](#) | [View snapshot of order in Russian](#)

This is a snapshot of the product taken when the order was placed. [View current product](#)

Product Details

Item specifics

Brand Name:Mitoot	Hign-concerned Chemical:None
Is Electric:No battery	Origin:Mainland China
Material:Metal	Recommend Age:14+y
RC Parts & Accs:Radio Systems	For Vehicle Type:Airplanes
Use:Vehicles & Remote Control Toys	Upgrade Parts/Accessories:Lithium Battery
Remote Control Peripherals/Devices:ESC	Tool Supplies:Battery
Quantity:1 pcs	Model Number:F411
Four-wheel Drive Attributes:Assemblage	Wheelbase:Screws

Product Description

Description

**\*\*“ET”**  
**and “ER” pads are used for communication with ESP8285, you can connect “TX” of FTDI tool to “ET” pad and connect “RX” of FTDI tool to “ER” pad for upgrade onboard UART ELRS receiver firmware. Need to short connect “+5V” and “E5” pads before that.**

The CrazyF411 ELRS flight controller comes with integrated UART 2.4GHz ExpressLRS receiver and 20A Blheli\_s ESC(Bluejay firmware pre-installed) which could support 2-4s. Bigger Mosfet could support high to 20A currents would be better for 2-4S toothpick drone or long range FPV drone. And because the 2.4GHz ExpressLRS receiver is equipped with the SX1280 radio frequency chip with high sensitivity, high packet rate and low latency, this flight controller is the one that all Race/Freestyle pilots needed. The built-in ELRS receiver is UART communication with MCU, it's the same like Happymodel EP1 which you can update firmware by betafight pass-through or WIFI, very simple. The default firmware is ELRS V3.0.1. This flight controller would be used for Crux35 to instead ELRS X1 flight controller.

Specifications:

Flight controller	MCU:STM32F411CEU6 (100MHZ, 512K FLASH)
	Sensor: ICM42688P or BMI270 (SPI Control)
	Mount pattern: 25.5×25.5 M2
	Size:32*28*9mm
	Power supply: 2-4S Lipo battery
	Built-in 20A Blheli_s ESC each
	Built-in Betaflight OSD(SPI Control)

Built-in UART ExpressLRS 2.4GHz receiver  
 Built-in 5V 1.5A BEC  
 Flight controller firmware target: CRAZYBEEF4DX

MCU upgraded to EFM8BB21  
 Power supply: 2-4S LiPo/LiPo HV (7v/17v)  
 Currents: 20A continuous peak 25A (5 seconds)  
 Support BLHeliSuite programmable  
 Factory firmware: Bluejay 0.18.1Firmware target: F\_H\_40\_48\_v0.18.1  
 Default protocol: DSHOT150/DSHOT300/DSHOT600

**Onboard 4in1 ESC****Onboard UART  
ExpressLRS 2.4GHz  
Receiver**

Packet Rate option: 25Hz/50Hz/150Hz/250Hz/500Hz  
 RF Frequency: 2.4GHzAntenna plug: IPEX  
 Telemetry output Power: <12dBm  
 Receiver protocol: CRSF  
 Default firmware version: ExpressLRS V3.0.1  
 Firmware target:HappyModel EP1/2 2400 RX

**Onboard voltage and  
Amperage meters  
settings**

Voltage meter scale setting 110  
 Amperage meter scale setting 470

**Binding procedure:****1. Supply**

power to the flight controller by plug USB, wait until the green LED on the FC is off, immediately turn off the power, and then repeat again the above steps. When the FC is powered on for the third time, the green LED light will start to double-flash, which means that the RX enters the binding mode

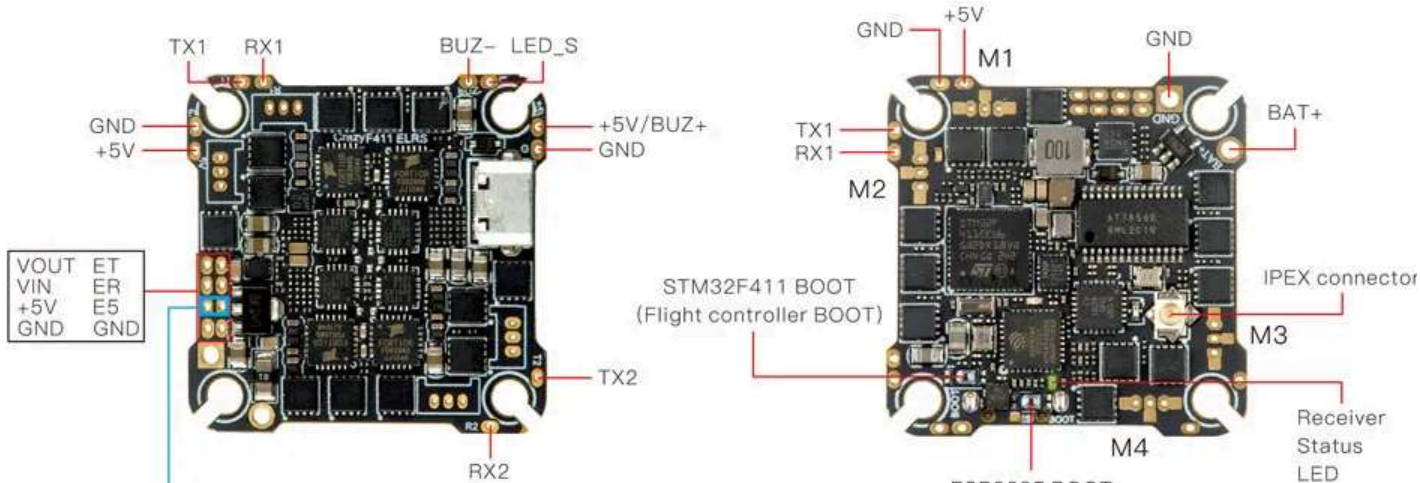
**2. Please**

make sure your ExpressLRS tx module firmware is v3.x.x. And go to ExpressLRS.lua from "TOOLS" menu of your radio transmitter. Then hit [Bind] to binding with the onboard ExpressLRS receiver. The green LED should blinking slowly first then turn to solid, that means binding was successfully. If the green led still keep double flash after binding ,please change Model Match tab value from "off" to "on" or from "on" to "off"

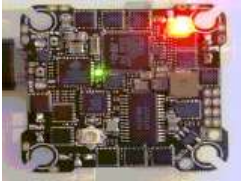
**Receiver LED status meanings:**

Green

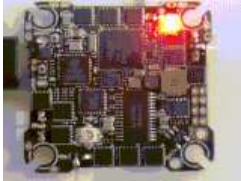
LED solid means bind successful or RC link established; Green LED double-flash means get into bind mode; Green LED flash slowly means no RC signal input from TX module; Green LED continuous flash fast means ExpressLRS wifi enabled.



Bind successful



Bind mode



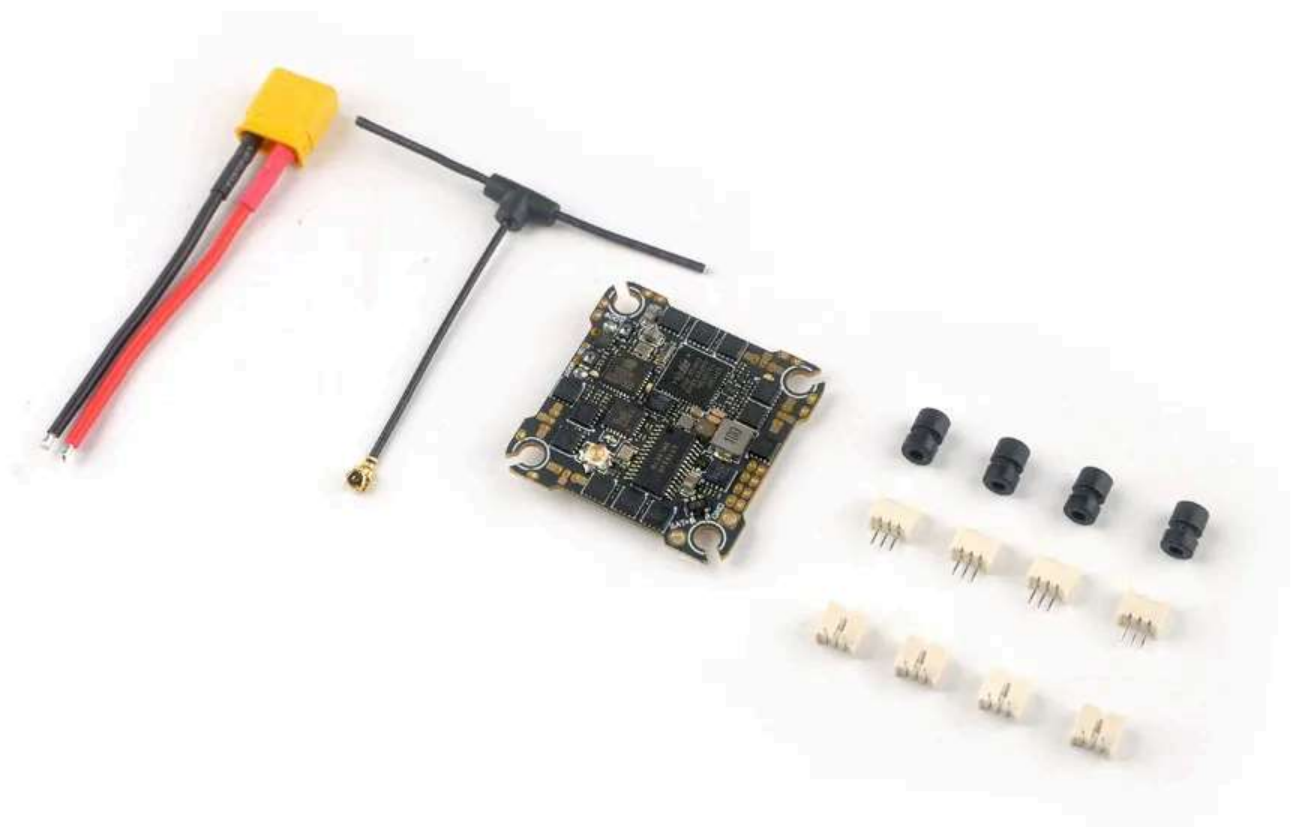
No RC Input



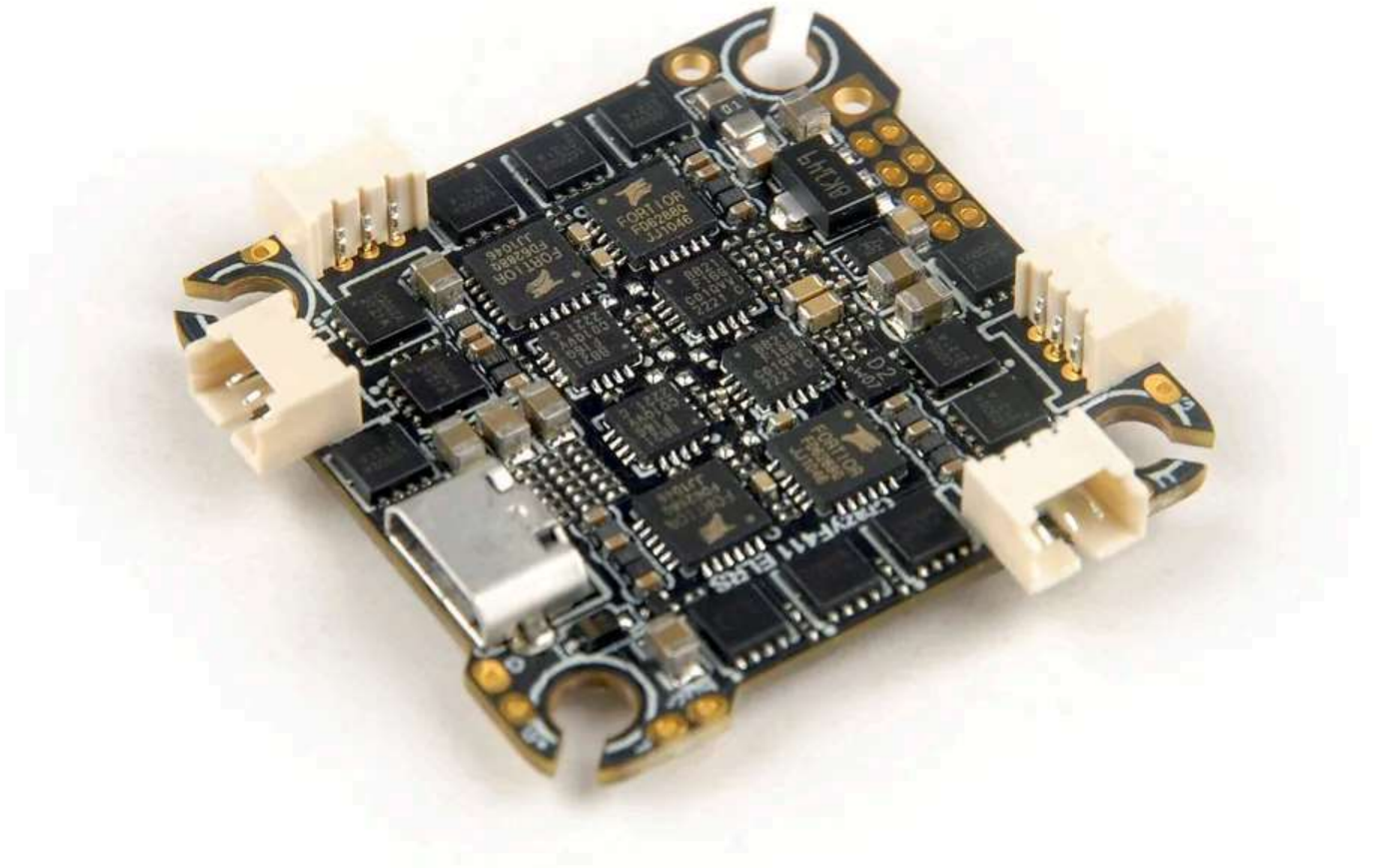
Wifi mode

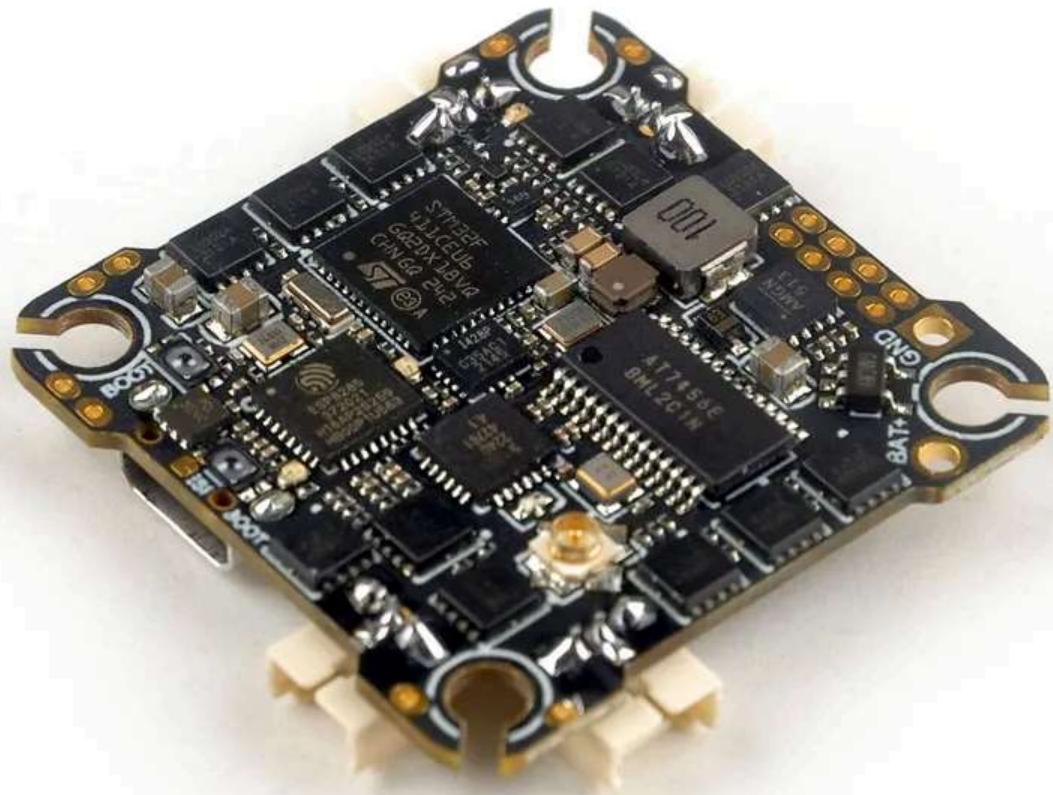
Item Picture

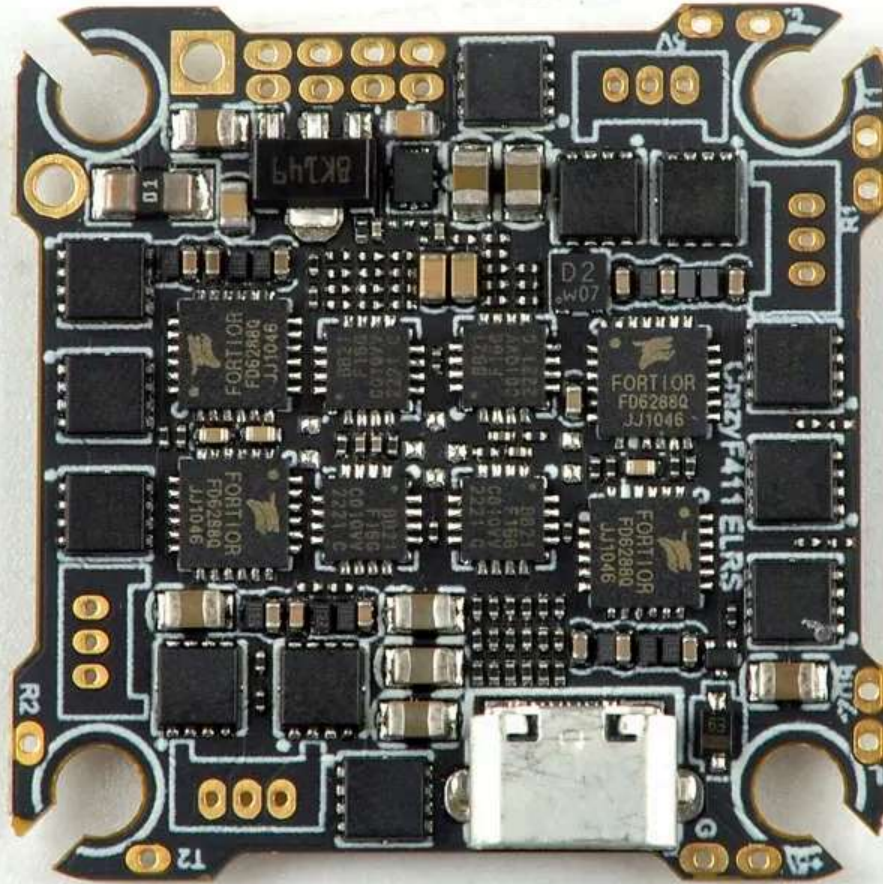
















### Packaging Details

Unit Type: piece

Package Weight: 0.05kg

Package Size: 10cm x 5cm x 3cm