# Specifications

| Product Name | FLASH HOBBY F405 30.5x30.5 Flight Controller |
|---|---|
| MCU | STM32F405 |
| IMU(Gyro) | ICM42688 |
| USB Port Type | Type-C |
| Barometer | BMP280 |
| OSD Chip | BetaFlight OSD w/ AT7456E chip |
| DJI Air Unit Connection Way | Two ways supported: 6-pin connector or direct |
| 6-pin DJI Plug | Supported. Completely compatible with DJI O3/RunCam Link/Caddx Vista/DJI Air Unit V1, no wire is needed to be changed. |
| Black box | 16M Black Box |
| Current Sensor Input | Supported. For 50A ESC, please set scale = 180 and Offset = 0. |
| Power Input | 3S - 6S Lipo(Through ESC 8-PIN connector) |
| 5V BEC Output | 5 grous 5V output，the total current load is 3A |
| 9V Output | 3 groups 9V output，the total current load is 2.5A |
| 3.3V Output | 1 group 3.3V output，maxmum current is 300mA |
| ESC Signal | M1 - M4 |
| UART | 6 sets(UART2 UART5, UART3), UART6(Dedicated for SBUS), UART4(Dedicated for ESC telemetry),UART1 (Dedicated for VTX data setting) |
| Sbs | Debugging to UART6 Channel |
| ESC Telemetry | UART R4(UART4) |
| I2C | Supported. SDA & SCL pads on front side. Used for magnetometer. |
| LED Pad | Supported. LED,5V, and GND pads on bottom of the front side. Used for WS2812 LED controlled by Betaflight firmware. |
| Buzzer | supported，5V,BZ pads for 5V Buzzer |
| BOOT Button | Supported.<br>[A]. Press and hold BOOT button and power the FC on at the same time will force the FC to enter DFU mode, this is for firmware flashing when the FC gets bricked.<br>[B]. When the FC is powered on and in standby mode, the BOOT button can be used to controller the LED strips connected to LED1-LED4 connectors on the bottom side. By default, short-press the BOOT button to cycle the LED displaying mode. Long-press the BOOT button to switch between SpeedyBee-LED mode and BF-LED mode. Under BF-LED mode, all the LED1-LED4 strips will be controlled by Betaflight firmware. |

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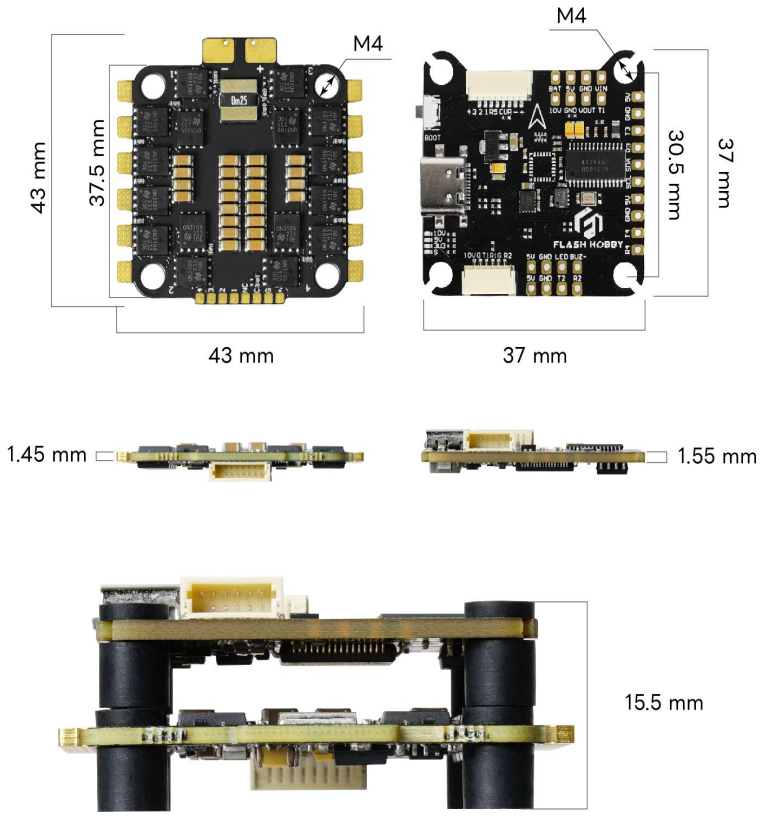
|---|---|
| Supported Flight Controller Firmware | BetaFlight(Default), |
| Firmware Target Name | STM32F405 |
| Mounting | 30.5 x 30.5mm( 4mm hole diameter) |
| Dimension | 37(L) x 37(W) x 6.6(H)mm |
| Weight | 7.5g |
| **Product Name** | **FLASH HOBBY BLS 60A 30.5x30.5 4-in-1 ESC** |
| Firmware | BLS 16.7 |
| PC Configurator Download Link | https://esc-configurator.com/ |
| Continuous Current | 60A * 4 |
| Burst Current | 65A(5seconds) |
| TVS Protective diode | Yes |
| External Capacitor | 35V560uF Low ESR Capacitor(In the package) |
| ESC Protocol | DSHOT300/600 |
| Power Input | 3-6S LiPo |
| Power Output | VBAT |
| Current Sensor | Support (Scale=180 Offset=0) |
| ESC Telemetry | Not supported |
| Mounting | 30.5 x 30.5mm( 4mm hole diameter) |
| Dimension | 42.3(L) * 37(W) * 6.2mm(H) |
| Weight | 12g |



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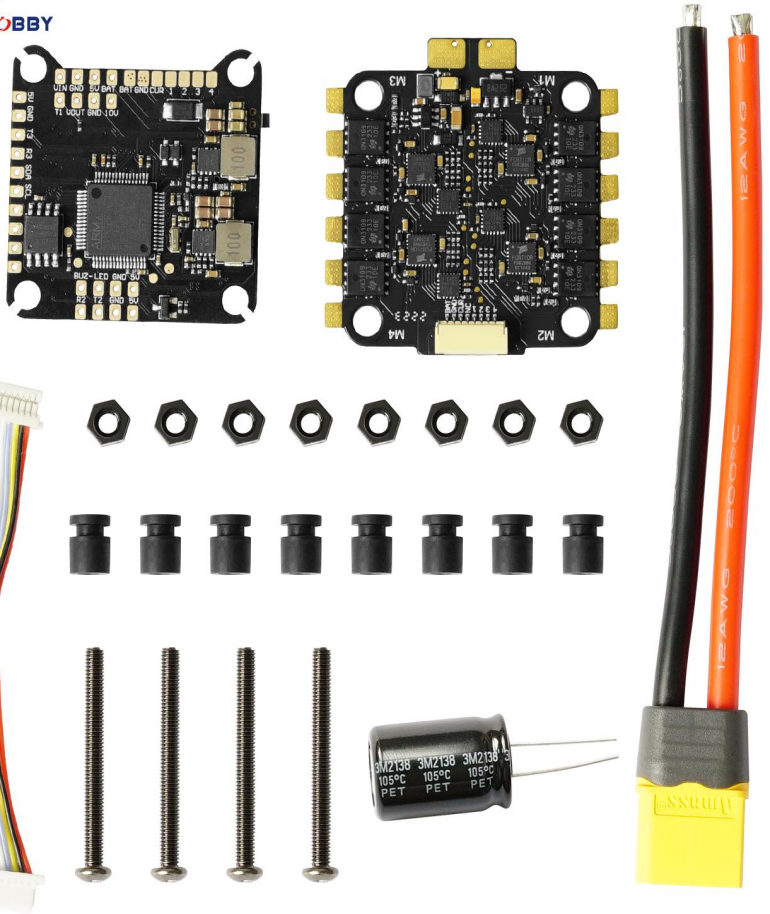

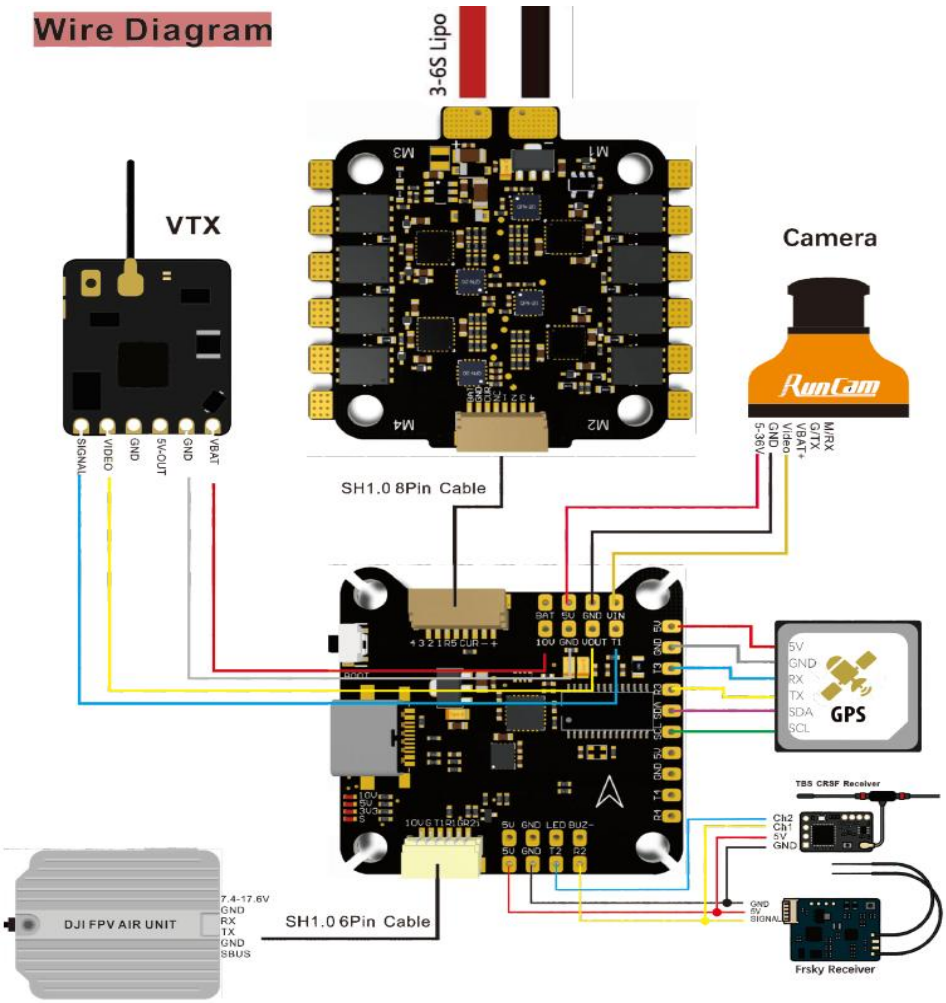
## Wire Diagram