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**MOTOR 1**

Motor orientation: CW

ESC to pin PA8

**MOTOR 2**

Motor orientation: CCW

ESC pin to PC6

**RECEIVER**

PPM out to pin PB8

**-FRONT-**

\*04

\*09

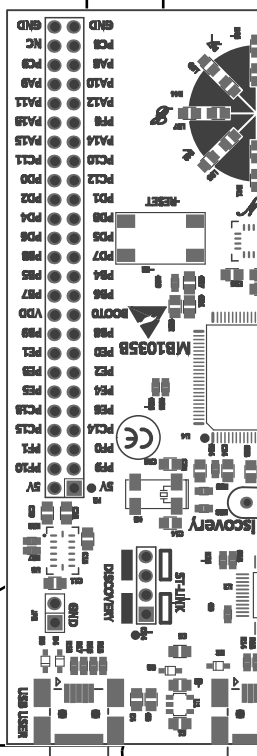
\*10

**Bill Of Materials:**

1x fericopter 3D printed frame  
 4x fericopter 3D printed motor mount  
 4x 2300kv motor (2x CW, 2x CCW)  
 4x 12A ESC  
 1x power distribution board with BEC  
 1x STM32F3Discovery dev board  
 1x RC receiver with PPM out  
 1x 1300 mAh 3S LiPo battery  
 1x Velcro strip for battery  
 4x 200 x 4.8 zip-tie  
 1x 98 x 2.5 zip-tie  
 7x 200 x 2.6 zip-tie  
 8x 20mm M3 screws + nuts  
 16x 11mm M3 screws  
 2x 9mm M3 crews  
 1x RC transmitter  
 3x female-female connecting wire  
 4x prop (2x L, 2x R)

**Legend:**

\*01 - "landing gear" zip-tie cutout  
 \*02 - motor wires cutout  
 \*03 - motor mounting holes  
 \*04 - RC receiver zip-tie cutout  
 \*05 - battery Velcro strap cutout  
 \*06 - power-board mounting holes  
 \*07 - power-board zip-tie cutout  
 \*08 - battery connector cutout  
 \*09 - power-board wires cutout  
 \*10 - motor mount mounting holes

**-BACK-****POWER-BOARD**

Connect 5V and GND to dev board

**MOTOR 4**

Motor orientation: CCW

ESC pin to PC8

**MOTOR 3**

Motor orientation: CW

ESC pin to PC7

Created by:

**LSPO**

Title:

**feriCopter V1****Assembly instructions:**

step #00: Make sure all the necessary components are prepared.  
 step #01: Loop and press the "landing gear" zip-ties in to the cutout, then cut them flush with the frame.  
 step #02: Screw the motor mounts using M3 15mm screws, covering the landing gear "zip-ties".  
 step #03: Insert the power-board, aligning the battery connector with the cutout in the frame, then pass the wires leading from the board through the ready made holes.  
 step #04: Screw the power-board in place with M3 9mm screws and secure the battery connector with a zip-tie looped through the adjacent holes.  
 step #05: Screw in the motors with M3 11mm screws, then pass the wires through the cutout next to the motor mount.  
 step #06: Connect the ESC with the motor wires, then fold the ESC with the wires under the motor mount, securing it with the zip-tie looped around the motor mount through the provided notches.  
 step #07: Connect the ESC power wires with the wires from the power-board.  
 step #08: Loop the Velcro strip over the power-board through the cutouts in the frame.  
 step #09: Insert the STM32F3Discovery dev board under the hinges on the front part of the frame and push it down until the board sits level and latches on the back part of the frame.  
 step #10: Secure the board with two zip-ties, connected in a loop, through provided notches at the bottom back area of the frame.  
 step #11: Mount the receiver on the front of the frame and secure it with zip-ties.  
 step #12: Attach the receiver antennas to the ends of the zip-ties used to secure the STM32F3Discovery board.  
 step #13: Connect the receiver and ESCs to the STM32F3Discovery board, then secure and connect the battery.

\* STM32F3Discovery dev board image taken from STM "en.DM0063382.pdf" product manual.

Size:

**A4**

Sheet:

**1 / 1**

Scale:

**1 : 1**

Orientation:

**top view**

Drawing number:

**1**

Date:

**2018-04-30**

Revision:

**D**

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