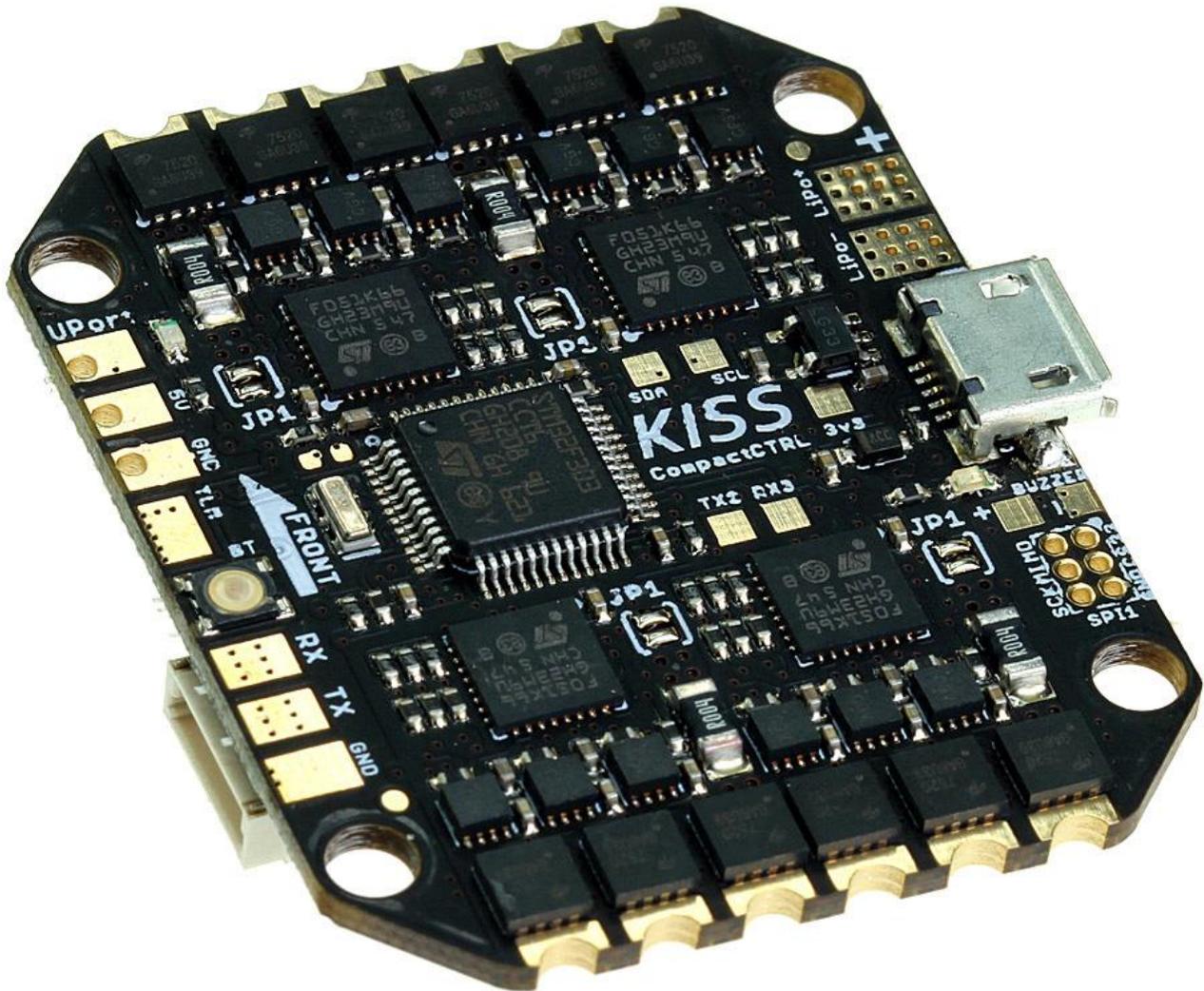


KISS CC (AIOv2) - new Member of the KISS integrated FC&ESCs Family

This version of the All-in-One board by Flyduino consists of a KISS 32bit flight controller and 4x 32bit KISS ESCs, rated at 16A (21A active limit), great for mini FPV setups.

It's made for instant DIY success as you only need to solder motor wires, connect power and a radio and go.



The KISS CC should be ideally driven up to 4s and up to 4 inch props. 5 inch props are possible but you need to choose motors carefully. The CC will actively limit the output to 21A.

Please read the following instructions carefully.

Specs of the CC

- Weight of PCB: 11g (without wires)
- Size 35x42mm (with cut off corners)
- Mounting holes 30x30mm, 3.2mm diameter
- 4x KISS ESC 32bit ESC's 2-4S 16A (21A active current limiter)
- KISS FC F3 32bit with serial, buzzer and LED ports
- 5V output supports max. 1A

The CC supports full telemetry and logging via serial port. Setup is the same as with the regular KISS FC.

Flashing & Setup

For flashing the FC and ESCs you will need one of the [GUIs v1.14](#) or greater.

Flashing the FC on Windows PCs also requires the [STM Defuse Demo](#) software. **Install it before you plug in the CC in bootloader mode for the first time!** Please follow the instructions for [installing the STM drivers](#).

- Press and hold the boot button.
- Plug in the CC into your USB
- Windows will now recognize the CC and install the bootloader driver
- Start Defuse and follow the steps for [Flashing the FC](#)

Flashing the ESCs through the GUI

Warning! Always remove props before flashing the ESCs as you will have to connect a Lipo to power them during the flashing.

- Connect the lipo to the CC and let it boot up properly.
- Connect the USB to your PC. No matter what OS (Win, Mac...) you use, you can flash all ESCs at once through the GUI (min. v1.14)
- Once connected via serial COM port go to the "ESC Flasher" tab of the GUI and follow the steps.
- Disconnect the CC, re-power and re-connect it. Go to the Flasher tab again and look if the serial numbers and the firmware version are displayed. This is important to check if the flashing went ok. If one of the ESCs is mismatching you wouldn't be able to use the CC correctly. [More information](#)

Connections & Wiring

1 Motor Outputs 2

CC TOP VIEW

**RECEIVER
INPUT**

SIGNAL

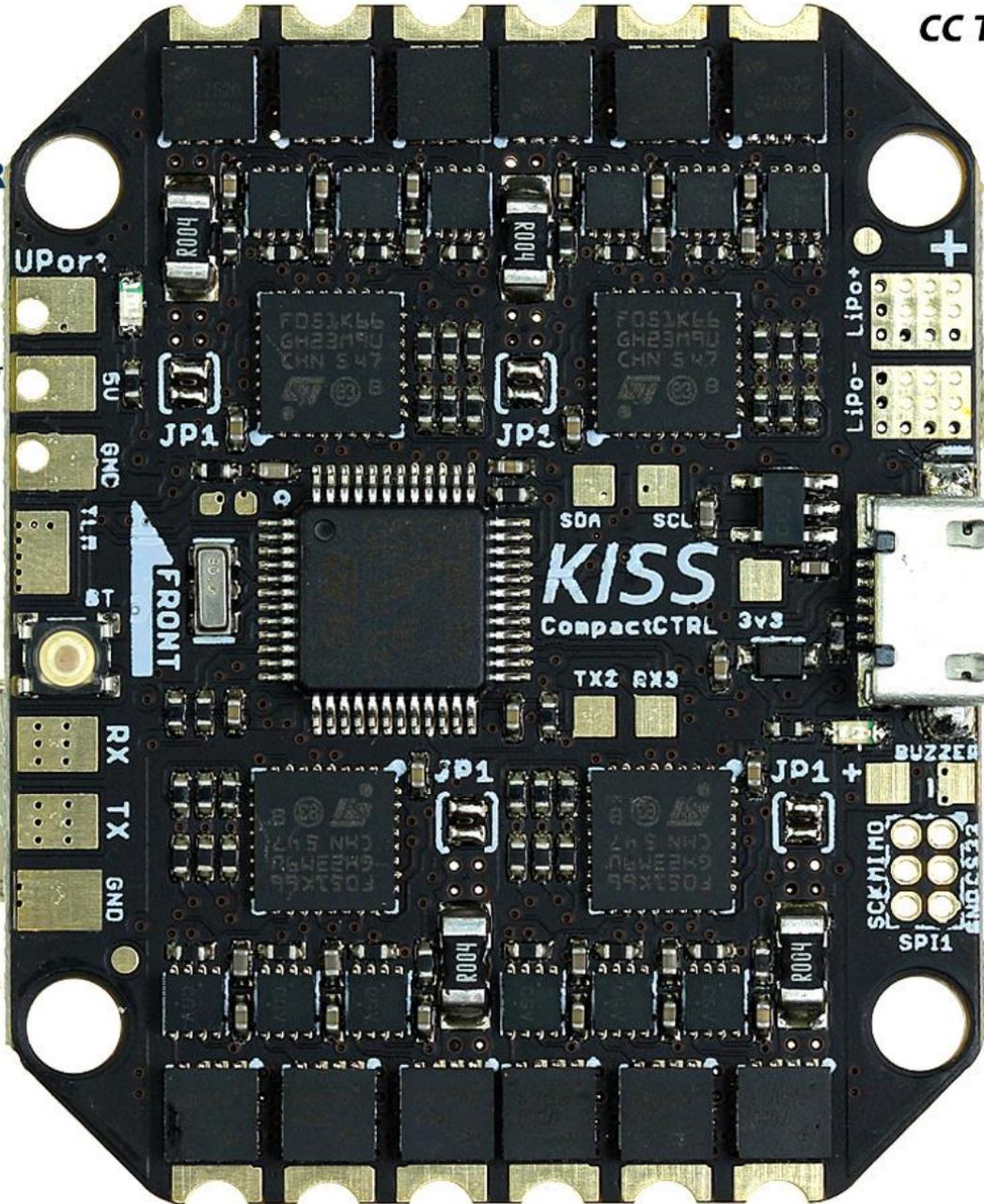
5V 3.3V Output for Spektrum SAT on the Bottom!

GND

RC TLM

**BOOT
BUTTON**

**SERIAL
OUTPUT**



**LIPO
INPUT
2-4S**

USB

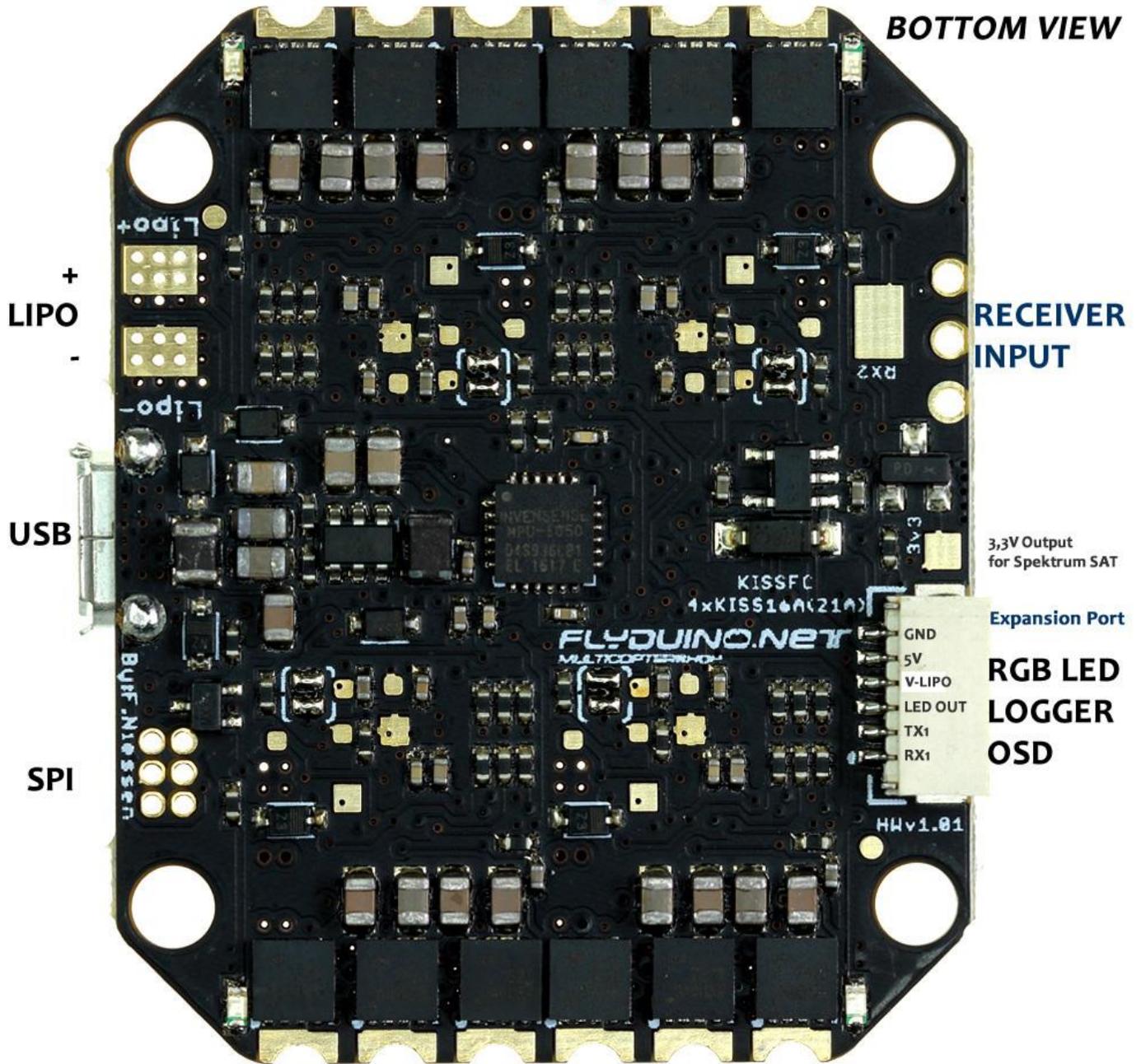
BUZZER

SPI

4 Motor Outputs 3

2 Motor Outputs 1

BOTTOM VIEW

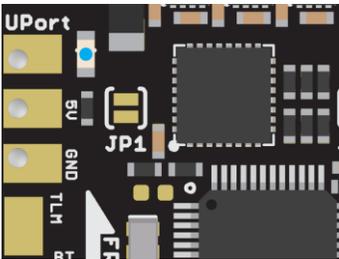


3 Motor Outputs 4



Motor Wires: To change the rotation direction you can use the [JP1] solder jumpers on top of the board to match Mot1/CW, Mot2/CCW, Mot3/CW and Mot4/CCW.

So you can solder your wires straight to the motor pads and change the direction later by closing the matching solder jumpers next to the motor outputs on top of the board.



Receiver input: Connect your 3-wire (S-Bus, Spektrum, PPM ...) receiver signal port to the "UPort". The receiver's telemetry wire goes to the "RC TLM" on top of the board.

Spektrum Sats can also be connected to the UPort but the 3,3V needs to be connected to the 3,3V pad on the bottom side.



Expansion Port: Can be used for serial in/output (RX1 / TX1), e.g. logger or OSD, WiFi connection and LED support. The 5V output can handle 1A max.

V-Lipo outputs the lipo power.

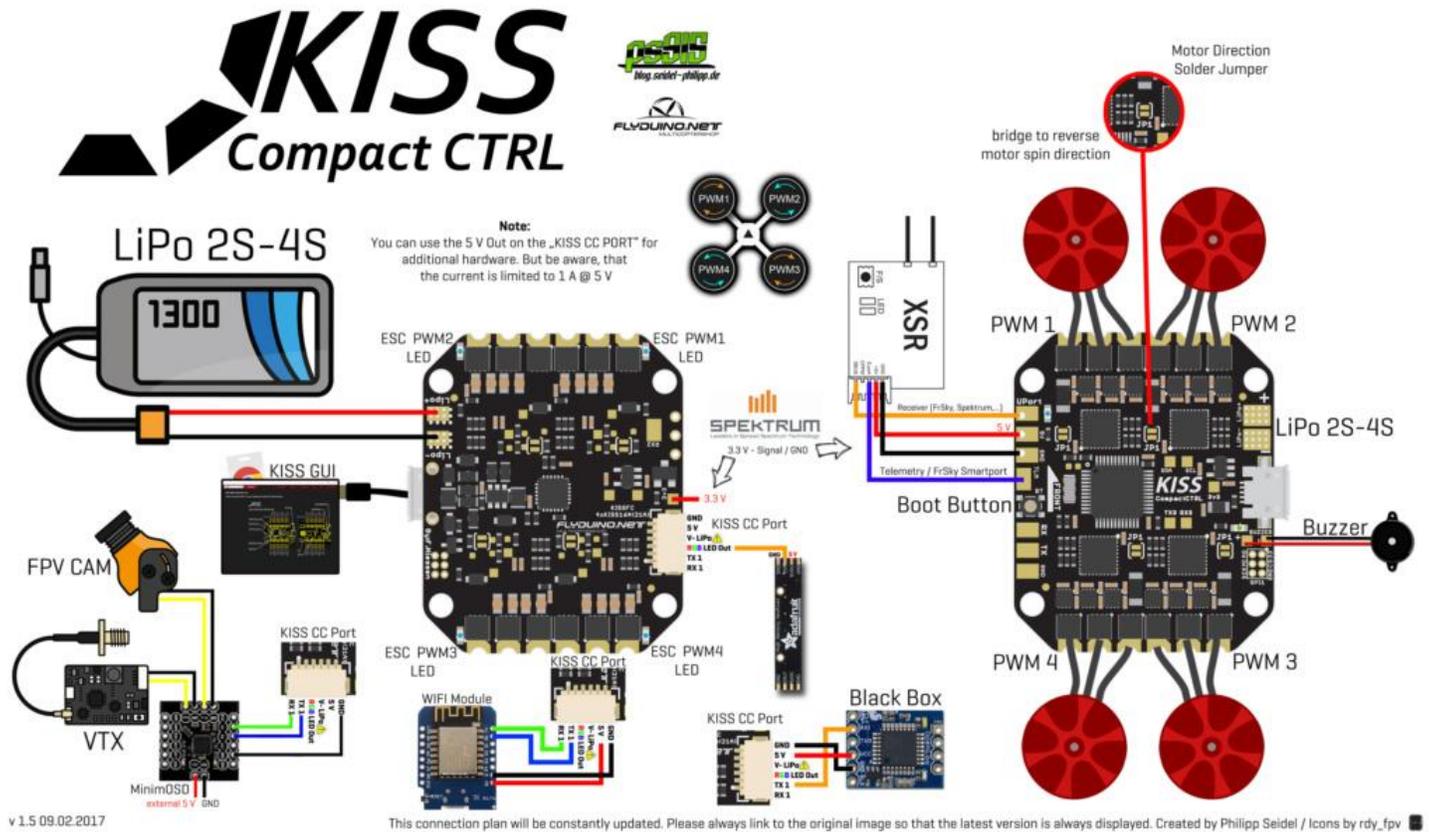
When using external devices make sure their current consumption doesn't overload the CC, especially for VTXs and LEDs. Use a Polulu stepdown or PDB 5/12V instead.



Lipo connector on the bottom: The GND and Lipo + on the bottom can be used to feed external devices.

ESC Telemetry: For the ESC telemetry the TX jumpers on the backside are already bridged. No need to solder them like with the AIOv1.

Complete Connection Plan by Philipp Seidel



For further [updates on the Connection Plan](#) please visit Philipps Blog

Also visit his frequently updated KISS Blog with loads of [informations, manuals and more...](#)