

Modification for USB/UART breakout board to use for BLHeliSuite with Atmel/SiLabs ESC over the servo cable (BLHeli bootloader).

The best start is a FTDI USB/UART (TTL) board, often used for connecting Arduino's w/o an USB onboard.

FTDI is an USB/serial Interface which is registered by a driver as a VCP (Virtual Comport).

You need to see the FTDI board in the device manager as a "USB serial Port (COMX)", otherwise you need to install the FTDI driver. Get it from their homepage...

If you unknowingly might have bought a board with cloned FTDI chip, be sure inform about the risks using the latest drivers.

Remarks on SiLabs CP2102: it needs a different driver, it will most likely NOT work with BLHeli bootloader on SiLabs chips.

You need to build a cable with at least two additional parts. D1 can be a normal silicone type, but best is to use a Schottky type – for SiLabs CP2102 a must have.

R1 is also very important and it is hard to determine the best value for all possible scenarios, because it depends on various ESC signal input constructions.

A value of 27K to 47K is tested to work with Atmel and SiLabs BLHeli bootloader.

NOTE: connection to Atmel BLHeli bootloader which was initially flashed with BLHeliSuite prior rev . 13.2.0.0 R1 need to stay 4K7 or below.

The SiLabs BLHeli bootloader connects only at a fixed baud rate of 19200.

From BLHeliSuite 13.2 on, the flashed Atmel BLHeli bootloader will also work with a fixed baud rate of 19200.

