ESP32

C1 100nF
U5
Reset RES TXD
GND SVP RXD
NC IO26 IO22
SVN IO18 IO25
IO35 IO21
IO19 IO17
IO33 TDI
IO34 IO16
IO5 IO4
TMS IO0
3.3V VCC
NC IO2
SD2 TD0
TCK SD1
CMD SD0
SD3 CLK

TXD1 / SCL / TxD2 / SDA / Out / RxD2 / _Key1 / GND / _Key2

+5V
C2 220uF
+3V3

TG_WEMOS_D1_ESP32(CLONE)

GND

SPI +5V
SCK
MISO
MOSI
SS_SPI
SPI
PM254V-12-06-H85
GND

LED1 / LED2 / LED3

+5V
WIFI NTRIP LED
R1 R4 R5
2.2K
LED1 LED2 LED3
BT-102GEK-31-572D

RECONN
_Key1
GND
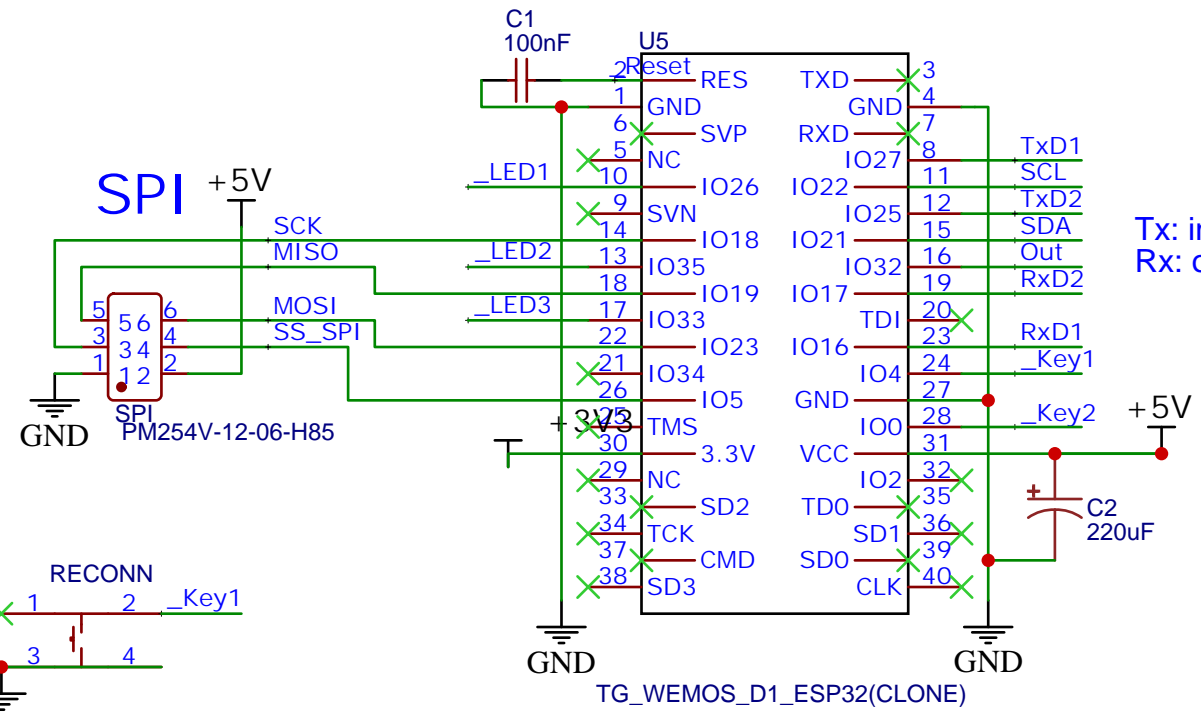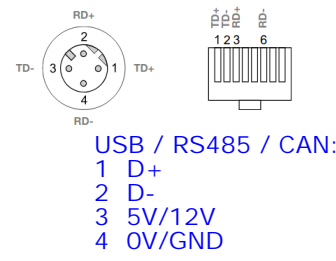KEY
_Key2
GND
K2-1102DP-M4SW-04

Tx: input of ESP32
Rx: output of ESP32!

Host Connector

to MicroUSB of ESP32

USB / RS485 / CAN:
1 D+
2 D-
3 5V/12V
4 0V/GND
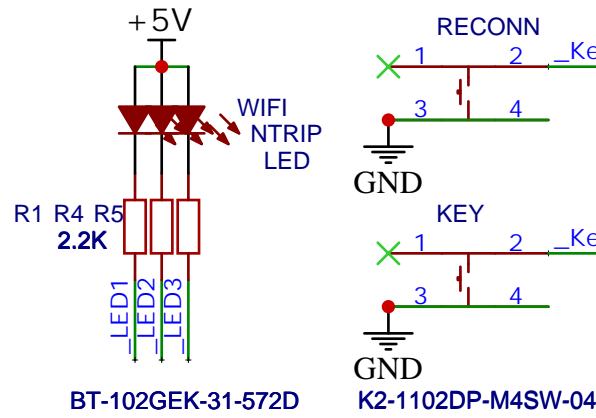
Ardusimple Module(s) via Pixhawk connector

ARDU1
SM06B-GHS-TB(LF)(SN)
+5V
RxD1 / TxD1 / SCL / SDA
GND GND

ARDU2
SM06B-GHS-TB(LF)(SN)
+5V
RxD2 / TxD2 / SCL / SDA
GND GND

LEFT UPPER HEADING
RIGHT LOWER POSITION

GND
5V
Right TX1 to ESP RX1 (27) OUT — UBX-NAV-PVT
RTCM IN
Right RX1 to ESP TX1 (16)
Left TX1 to ESP RX2 (23) HEADING UBX-RELPOSNED OUT
Left RX1 to ESP TX2 (17)

fritzing

RichStratton (https://agopengps.discourse.group/t/dual-gps-setups/1067/231)
Info: X-connection has 2mm pitch
Two cables with 2 connectors JST GHR-06V-S
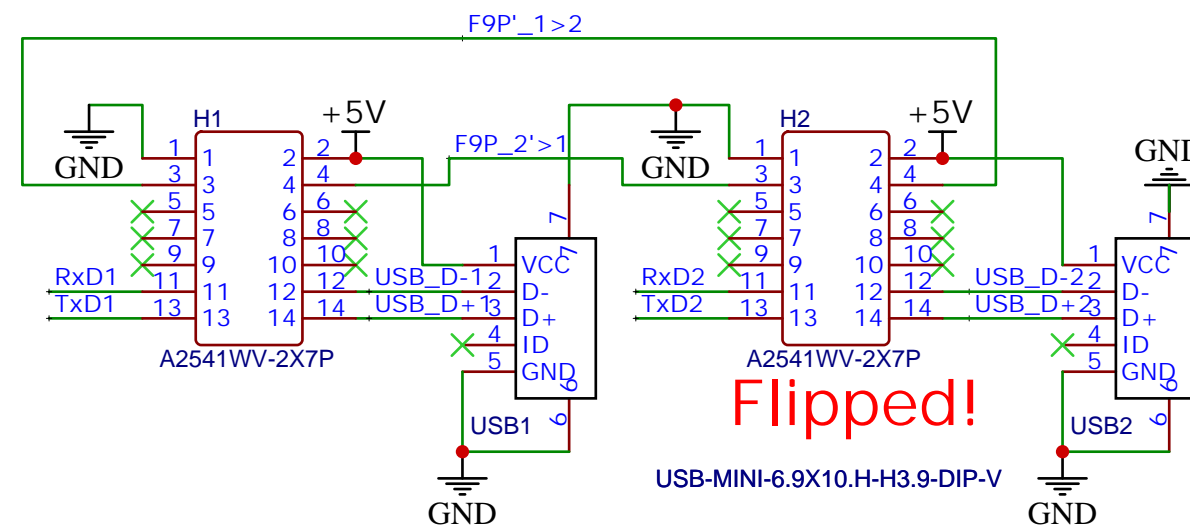
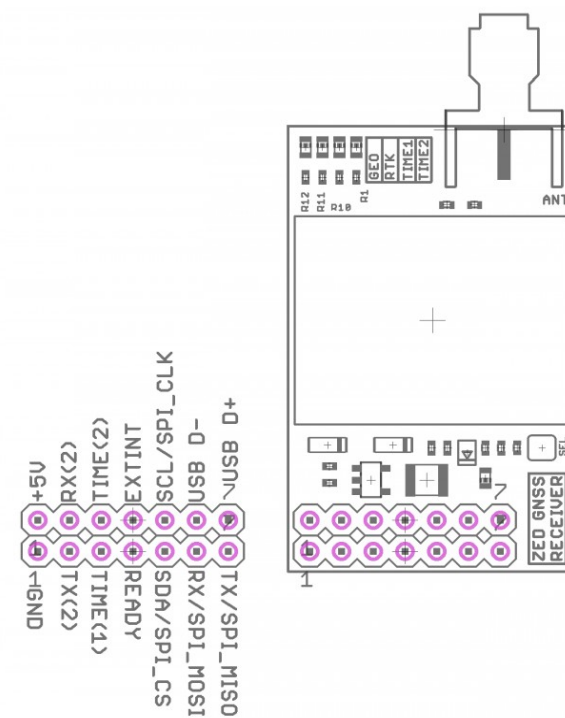## THT ZED modules

https://www.gnss.store/gnss-gps-modules/105-ublox-zed-f9p-rtk-gnss-receiver-board-with-sma-base-or-rover.html

F9P'_1>2
H1 +5V
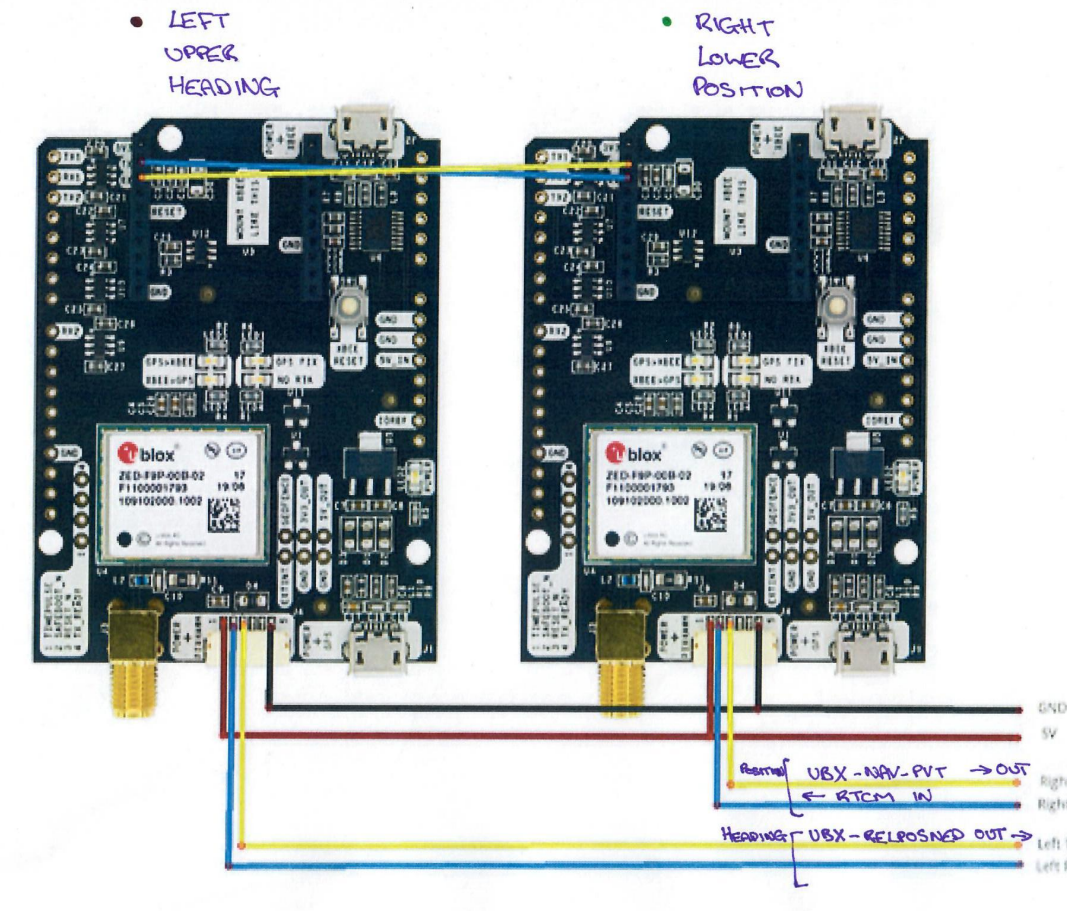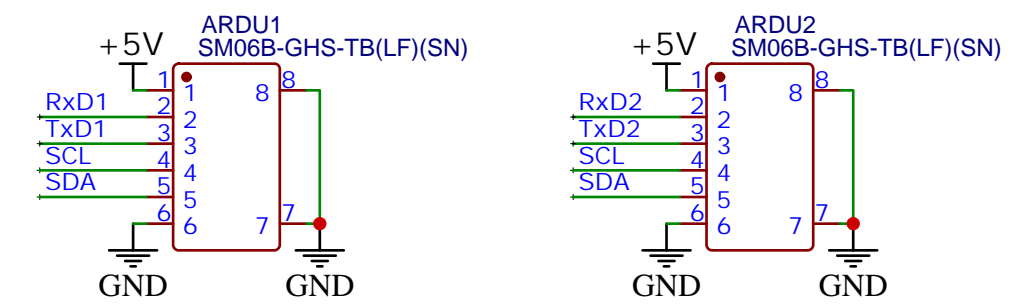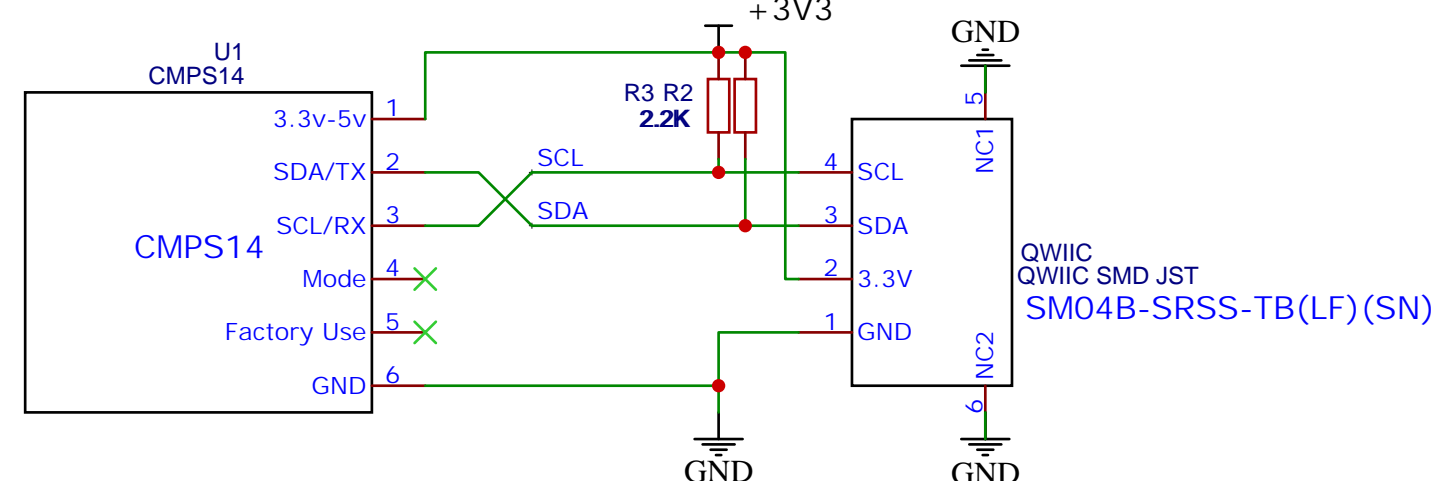F9P_2'>1
H2 +5V
GND GND GND
RxD1 / TxD1
USB_D-1 / USB_D+1
RxD2 / TxD2
USB_D-2 / USB_D+2
A2541WV-2X7P
A2541WV-2X7P

VCC / D- / D+ / ID / GND
USB1
USB2
USB-MINI-6.9X10.H-H3.9-DIP-V
Flipped!
GND

ZED GNSS RECEIVER
ANT

Option: THT IMU Module / QWIIC

U2 USR-ES1
GND GND
GND VIN33
MOSI VIN33
SCK PWDN
SS_SPI nRESET
nSS MISO
nINT
USR-ES1
MOSI / SCK / SS_SPI
+3V3
Reset / MISO
GND

U1 CMPS14
3.3v-5v
SDA/TX
SCL/RX
Mode
Factory Use
GND
CMPS14

R3 R2 2.2K
+3V3
SCL
SDA
GND

QWIIC
QWIIC SMD JST
SM04B-SRSS-TB(LF)(SN)
SCL / SDA / 3.3V / GND
NC1 / NC2
GND GND
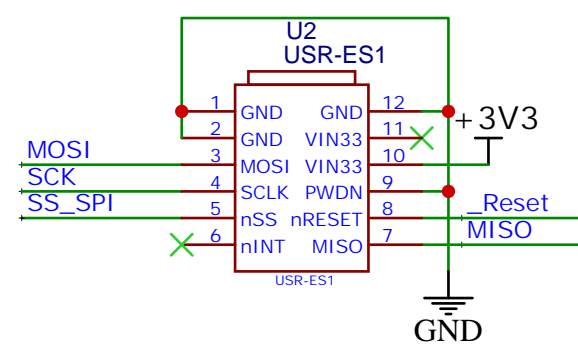
Option: RS232 for sprayer

e.g.: https://de.aliexpress.com/item/2054995985.html

SERIAL
A2541WV-4P
+3V3
Out
RxD2
GND

Option: 14V Input

X1
AKL701_215
+5V
U3
MP1584EN
VIN
GND
VOUT
GND
GND