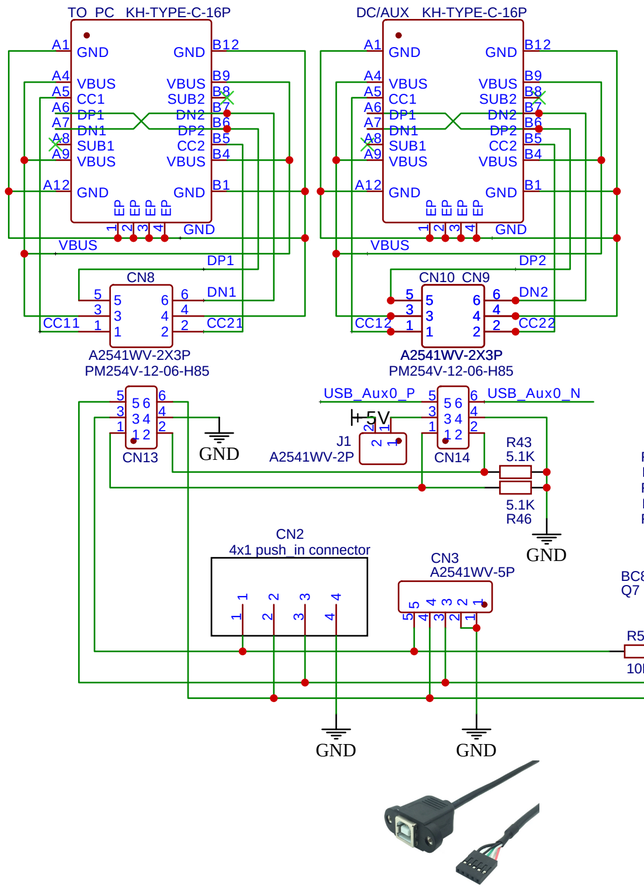
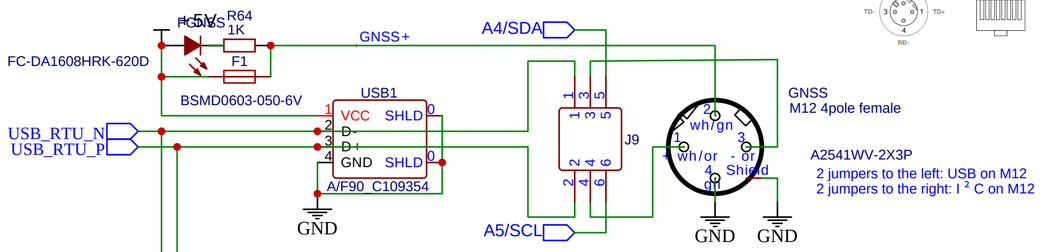
USB-C PC/Tablet USB-C Charger/GP

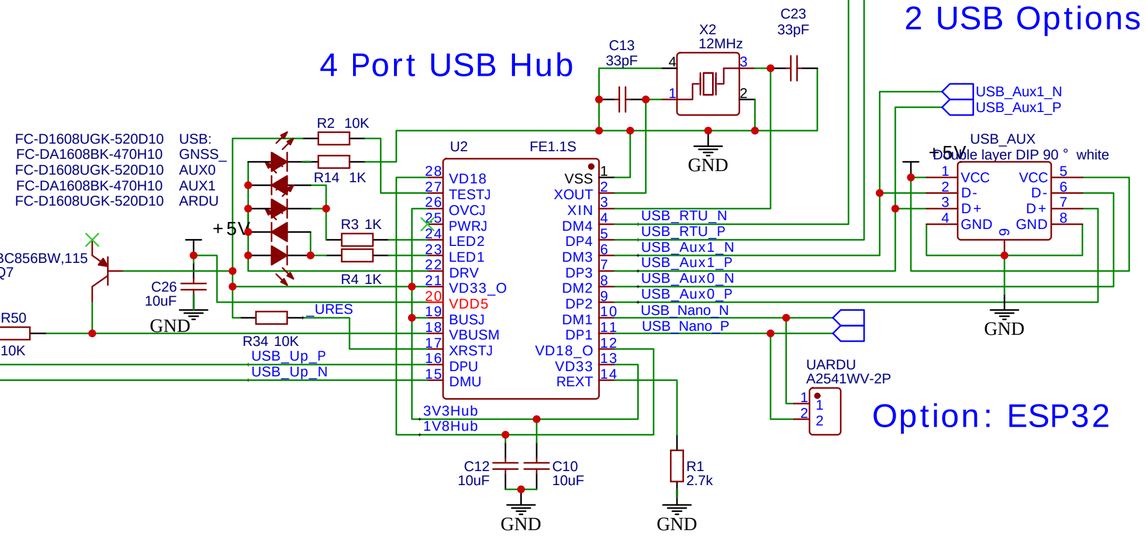


Roof Top Unit Connector



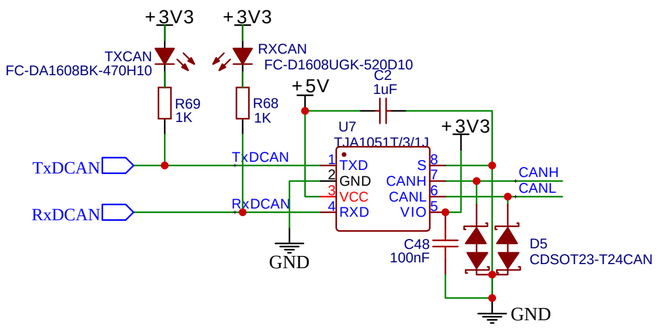
2 USB Options for Modbus RTU, CAN, etc.

4 Port USB Hub

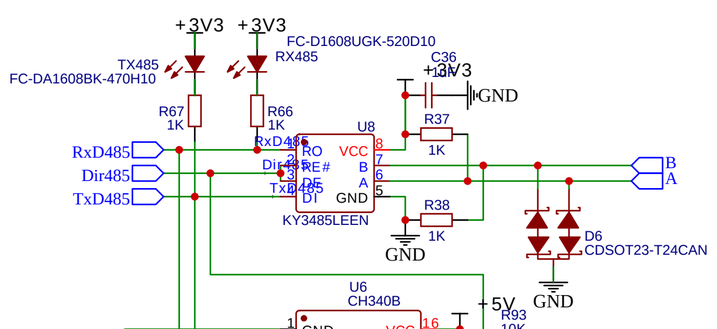


Option: ESP32

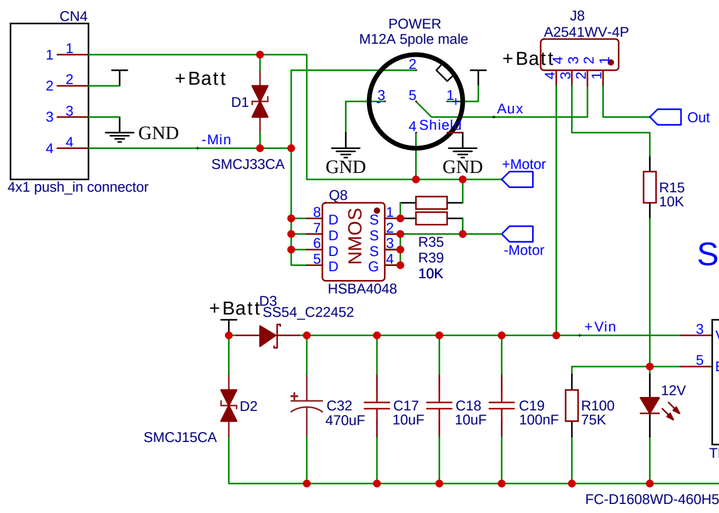
Option: CAN2.0 via ESP32/CANtact



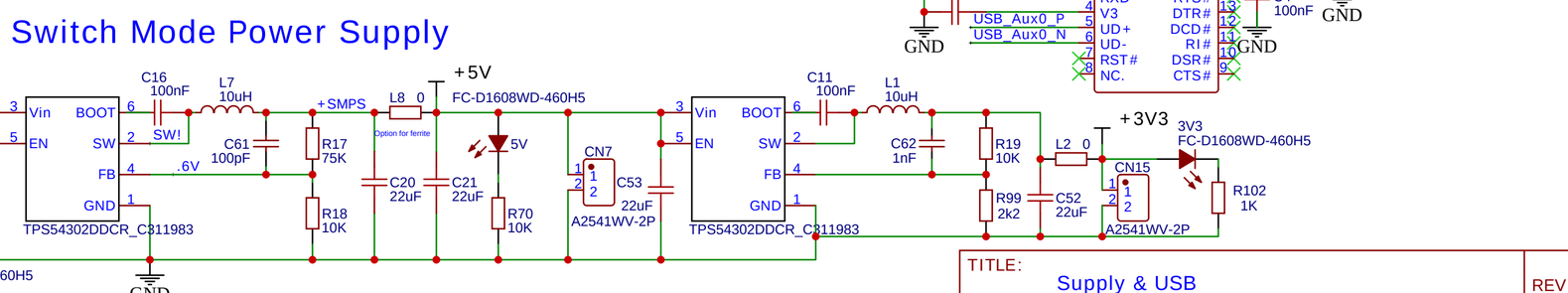
Option: RS485 / M

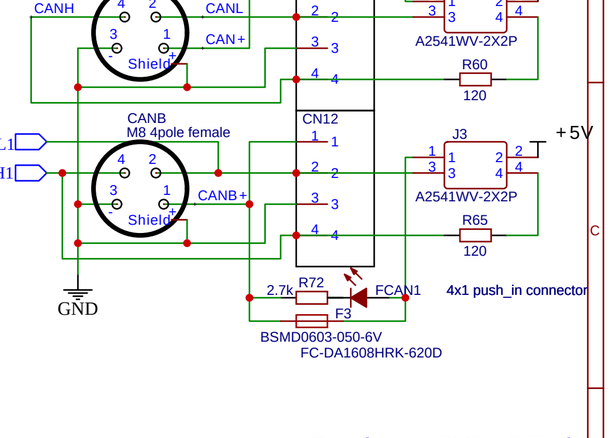


Power Input Connector



Switch Mode Power Supply





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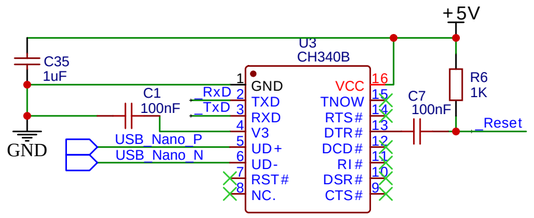
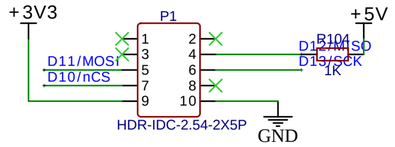
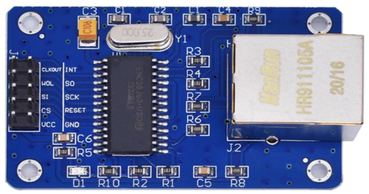
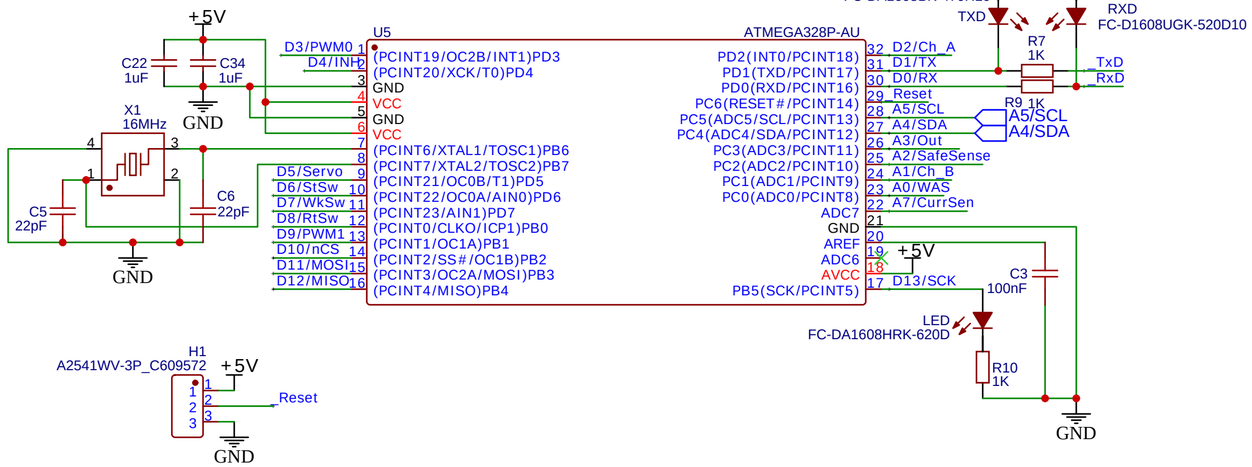
Nano







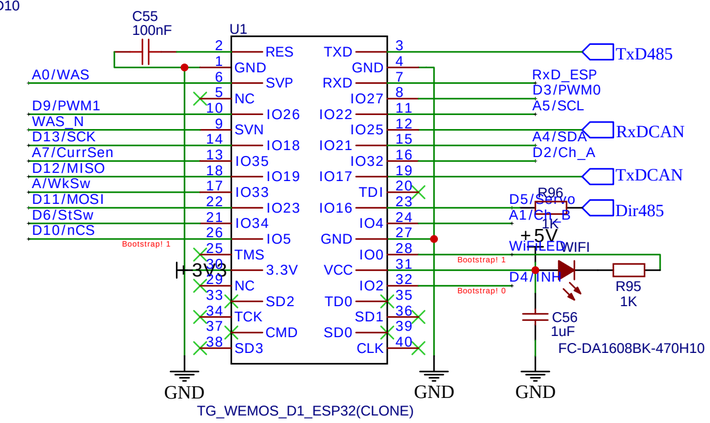
Cut CLKOUT before connecting!

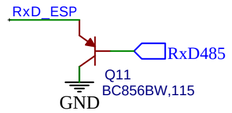


Option: ESP32

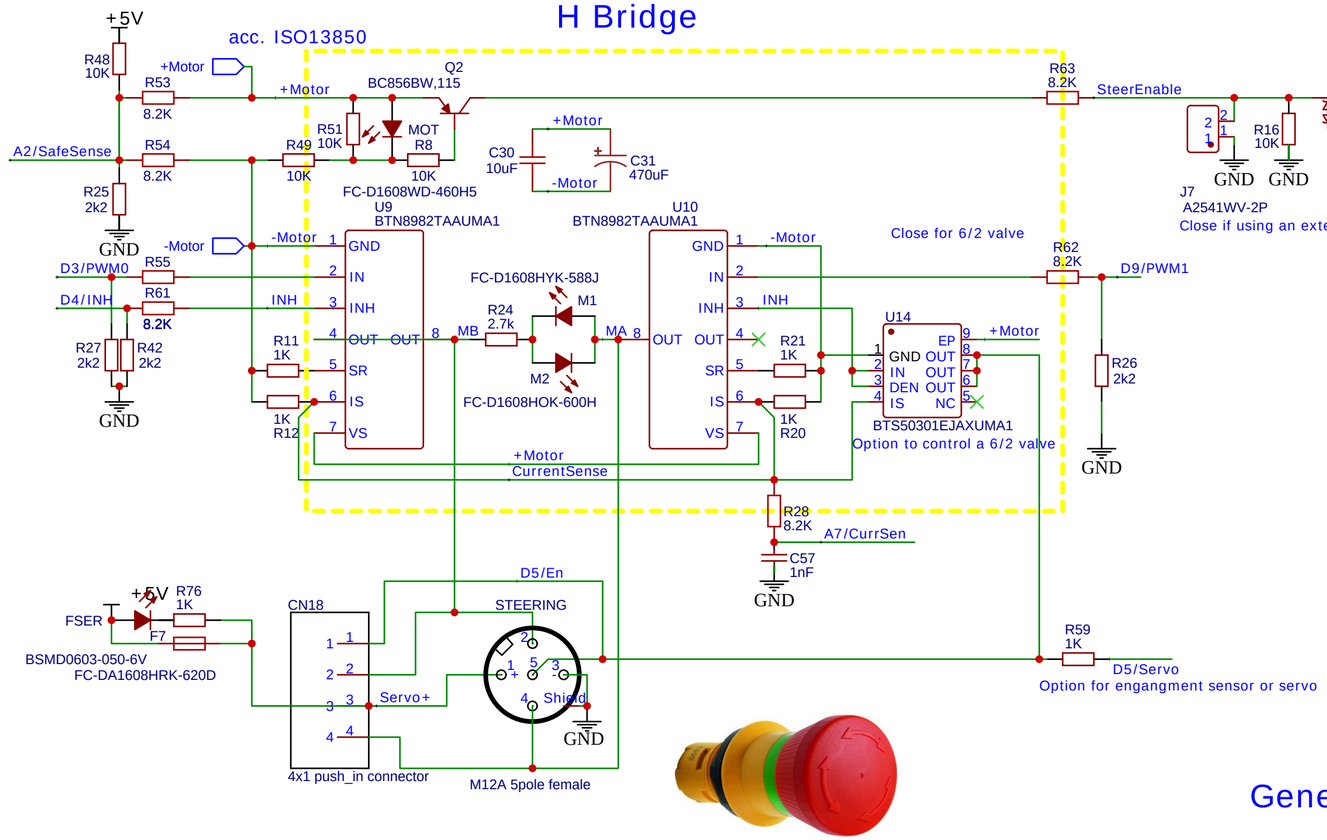
Set jumper on H1 2-3 when using ESP32

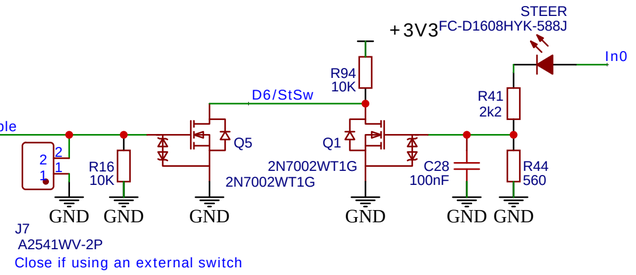
Firmware: https://github.com/mtz8302/AOG_Autosteer_ESP32

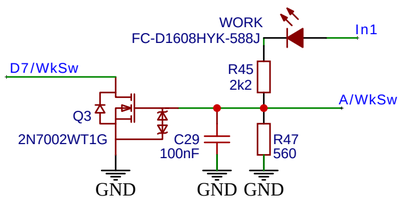


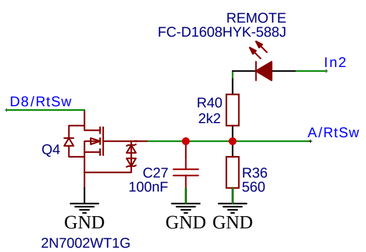


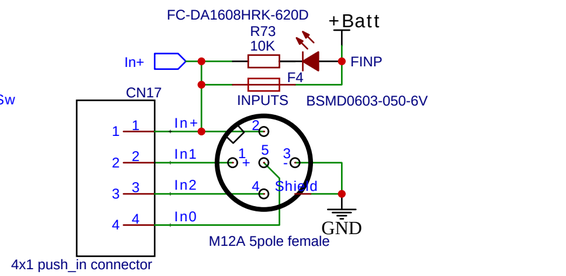
H Bridge





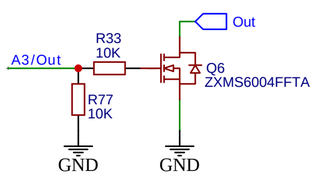






Protected General Propose Inputs

General Propose Output



TITLE: µC, Motor Driver, I/O		REV: 1.8
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CANtact

U11
LPC54616J512BD100

+3V3
VDD 1, 21, 33, 50, 54, 75, 76, 99
USB1_AVDDC3V3 10
USB1_AVDDTX3V3 11
VDDA 32
VREFP 31
VBAT 45

USB0_DP 97
USB0_DM 98
+5V
USB1_VBUS 9
USB_Aux1_N
USB_Aux1_P
USB1_DM 12
USB1_DP 13
USB1_ID 8
USB1_REXT 7
R82 10K
2.7k R81
10K R80
GND

X3 12MHz
XTALOUT 19
XTALIN 20
C37 33pF
C39 33pF
RTCXIN 51
GND
RTCXOUT 52

+3V3
ResetNXP
R79 10K
R78 10K
RESETN 48
SWDIO
SWCLK
PIO0_12/SWDIO 25
PIO0_11/SWCLK 24
PIO0_10/SWO 23

VSSA/VREFN 30
USB1_AVSSC 6
USB1_AVSSTX3V3 14
VSS 2, 22, 34, 49, 53, 71, 79, 96
+3V3
C41 1uF
C42 1uF
C43 1uF
C47 1uF
C46 1uF
C49 1uF
C50 1uF
C51 1uF
C54 1uF
GND

PIO0_0/CAN1_RD 93
PIO0_1/CAN1_TD 100
PIO0_2/FC3_TXD_SCL_MISO 83
PIO0_3/FC3_RXD_SDA_MOSI 85
PIO0_4/CAN0_RD 87
PIO0_5/CAN0_TD 89
PIO0_6/FC3_SCK 90
PIO0_7/FC5_SCK 61
PIO0_8/FC5_RXD_SDA_MOSI 64
PIO0_9/FC5_TXD_SCL_MISO 65
PIO0_13/FC1_CTS_SDA_SSEL0 67
PIO0_14/FC1_RTS_SCL_SSEL1 69
PIO0_15/ADC0_3 26
PIO0_16/ADC0_4 27
PIO0_17/FC4_SSEL2 70
PIO0_18/FC4_CTS_SDA_SSEL0 72
PIO0_19/FC4_RTS_SCL_SSEL1 91
PIO0_20/FC3_CTS_SDA_SSEL0 74
PIO0_21/FC3_RTS_SCL_SSEL1 77
PIO0_22/FC6_TXD_SCL_MISO_WS 80
PIO0_23/SPIFI_CSN 35
PIO0_24/SPIFI_IO0 38
PIO0_25/SPIFI_IO1 40
PIO0_26/SPIFI_CLK 56
PIO0_27/SPIFI_IO3 42
PIO0_28/SPIFI_IO2 44
PIO0_29/FC0_RXD_SDA_MOSI 82
PIO0_30/PIO0_30 95
PIO0_31/SD_D2 28
PIO1_0/SD_D3 29
PIO1_1/FC3_RXD_SDA_MOSI 55
PIO1_2/CAN0_TD 58
PIO1_3/CAN0_RD 60
PIO1_4/SD_D0 3
PIO1_5/FC0_RXD_SDA_MOSI 4
PIO1_6/FC0_TXD_SCL_MISO 15
PIO1_7/SD_D1 18
PIO1_8/SD_CLK 36
PIO1_9/FC4_CTS_SDA_SSEL0 39
PIO1_10/ENET_TXD1 41
PIO1_11/ENET_TX_EN 94
PIO1_12/ENET_RXD0 62
PIO1_13/ENET_RXD1 66
PIO1_14/FC5_CTS_SDA_SSEL0 78
PIO1_15/ENET_RX_CLK 84
PIO1_16/ENET_MDC 88
PIO1_17/ENET_MDIO 47
PIO1_18/FC8_TXD_SCL_MISO 5
PIO1_19/FC4_SCK 16
PIO1_20/FC4_TXD_SCL_MISO 17
PIO1_21/FC4_RXD_SDA_MOSI 37
PIO1_22/SD_CMD 43
PIO1_23/FC2_SCK 46
PIO1_24/FC2_RXD_SDA_MOSI 57
PIO1_25/FC2_TXD_SCL_MISO 59
PIO1_26/FC2_CTS_SDA_SSEL0 63
PIO1_27/CLKOUT 68
PIO1_28/FC7_SCK 73
PIO1_29/FC7_RXD_SDA_MOSI_DATA 81
PIO1_30/USB1_UP_LED 86
PIO1_31/MCLK 92

R83 10
BOOT A2541WV-2P
GND
DNP R83 for MSC
Populate for DFU
https://cantact.io/cantact-pro/users-guide.html

+3V3
CN6 1315-1206G0M075CP01
SWDIO
SWCLK
ResetNXP
GND

R84 1K
LED1
FC-D1608UGK-520D10
FC-DA1608BK-470H10
R87 1K
LED4
GND

TxDCAN
RxDCAN

R85 1K
LED2
FC-DA1608BK-470H10
GND

+3V3
TXCAN1
FC-DA1608BK-470H10
R88 1K
+3V3
RXCAN1
FC-D1608UGK-520D10
R89 1K
+5V
C40 1uF
GND

U12
TJA1051T/3/1J
TXD 1
GND 2
VCC 3
RXD 4
S 8
CANH 7
CANL 6
VIO 5
TxDCAN1
RxDCAN1
+3V3
CANH1
CANL1
C45 100nF
D7 CDSOT23-T24CAN
GND

R86 1K
LED3
FC-D1608UGK-520D10
GND

TITLE: CANtact controller		REV: 1.8
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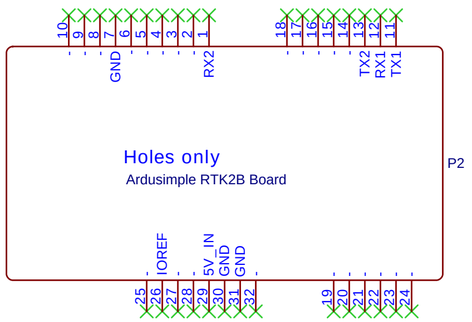
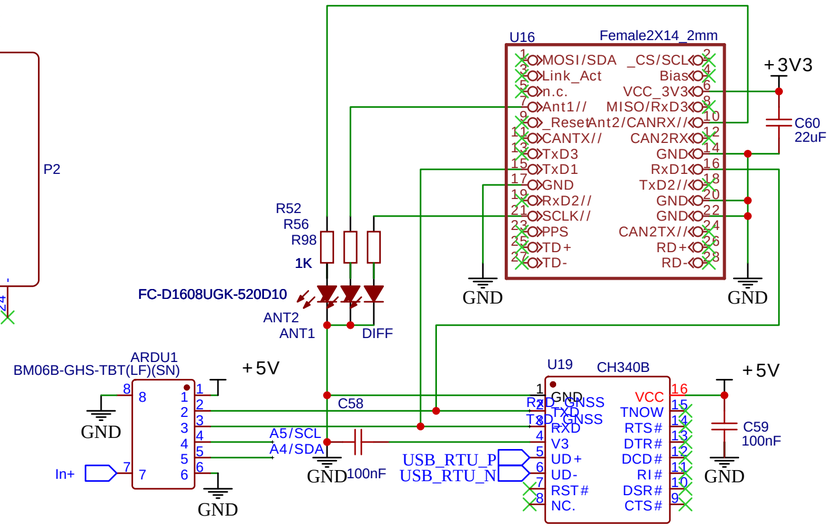
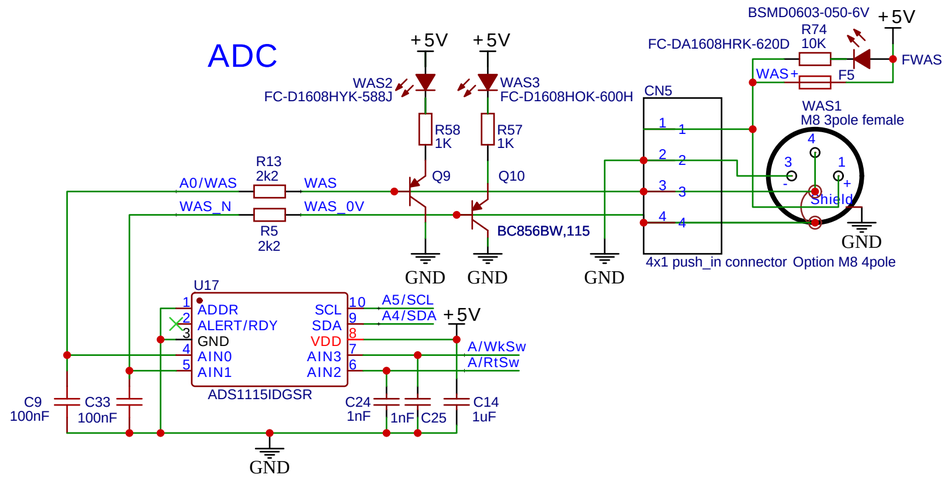
Option: Ardusimple



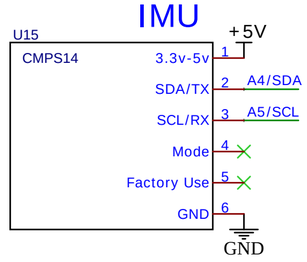
Option: Bynav-C1



Wheel Angle Sensor



IMU



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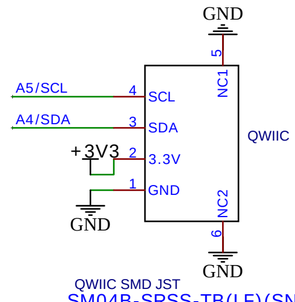
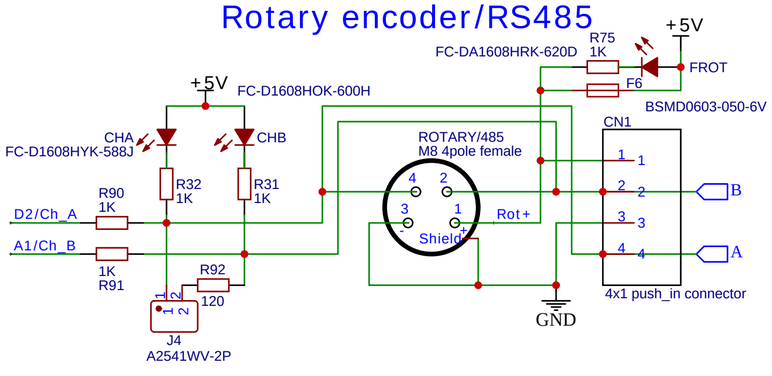
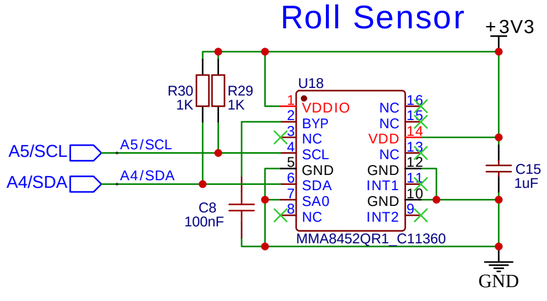


Rotary encoder/RS485



Roll Sensor



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