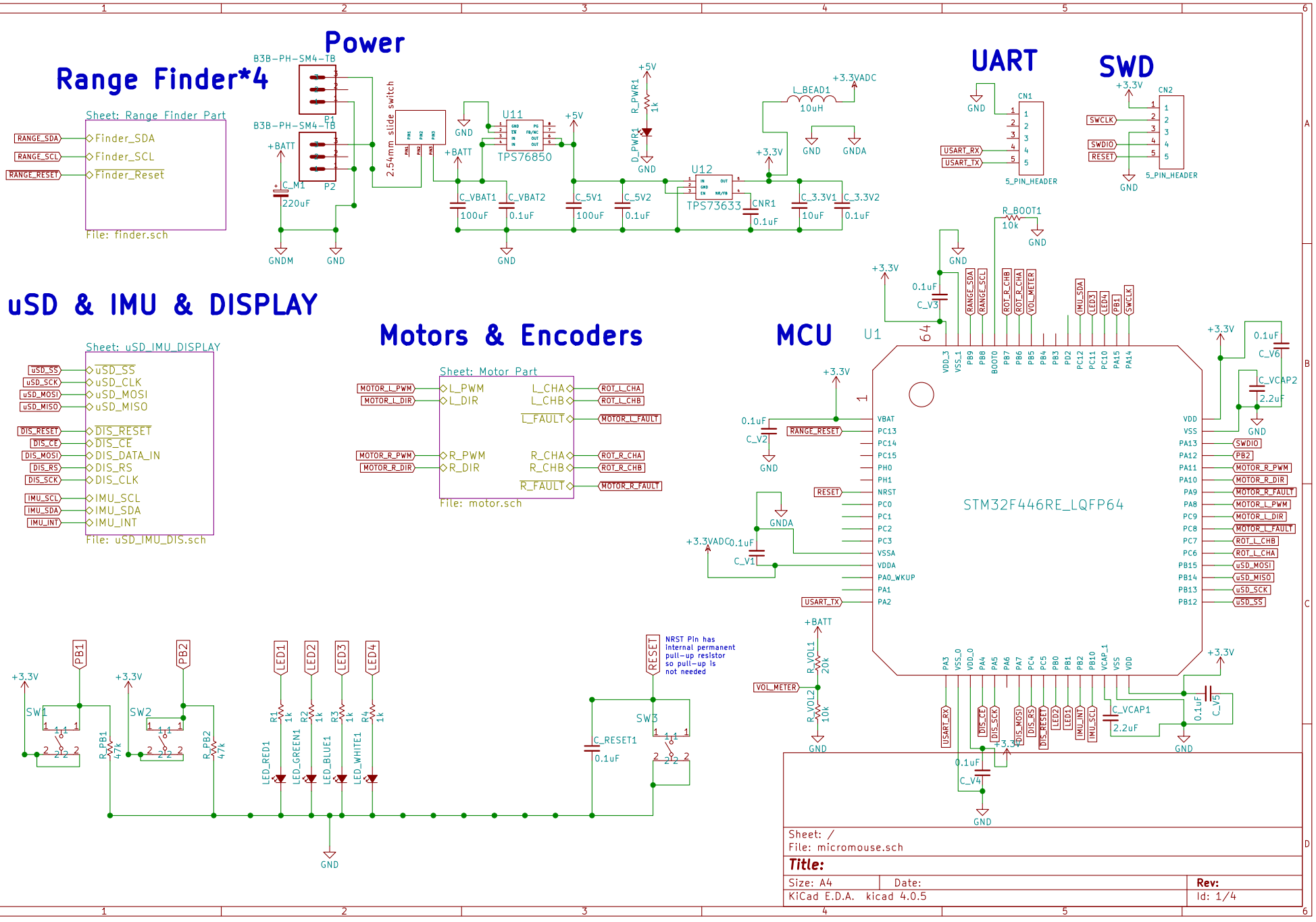
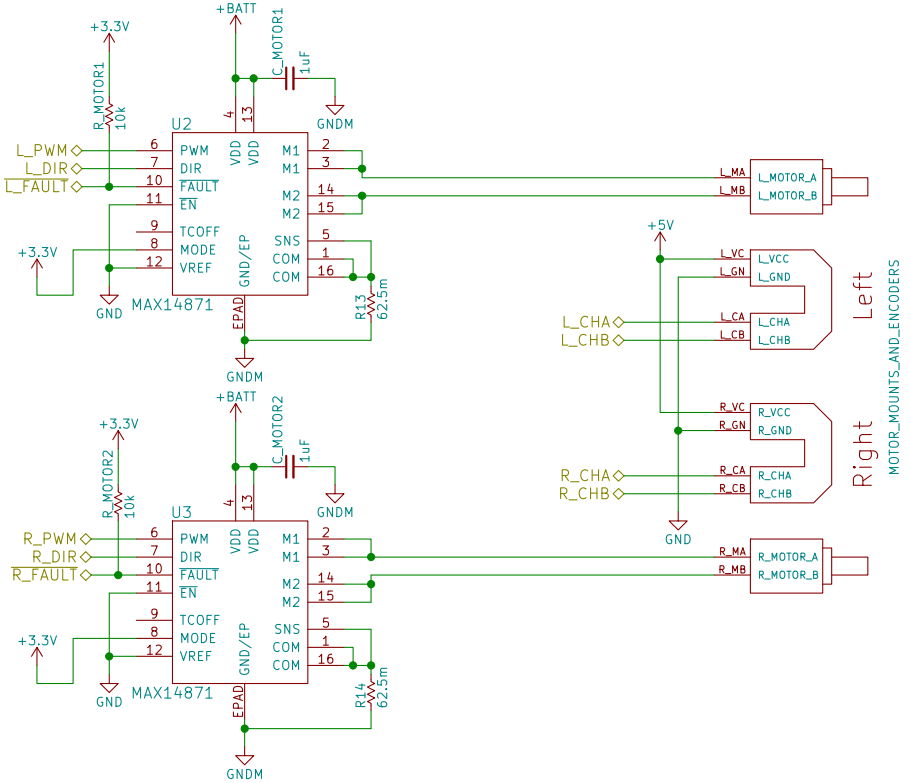

Power
Range Finder*4
UART
SWD
uSD & IMU & DISPLAY
Motors & Encoders
MCU
Sheet: Range Finder Part
File: finder.sch
RANGE_SDA
RANGE_SCL
RANGE_RESET
Finder_SDA
Finder_SCL
Finder_Reset
B3B-PH-SM4-TB
P1
P2
2.54mm slide switch
+BATT
C_M1
220uF
GNDM
GND
U11
TPS76850
+5V
C_VBAT1
100uF
C_VBAT2
0.1uF
C_5V1
C_5V2
R_PWR1
1k
D_PWR1
U12
TPS73633
C_NR1
C_3.3V1
10uF
C_3.3V2
L_BEAD1
10uH
+3.3VADC
+3.3V
GNDA
CN1
5_PIN_HEADER
USART_RX
USART_TX
CN2
SWCLK
SWDIO
RESET
Sheet: uSD_IMU_DISPLAY
File: uSD_IMU_DIS.sch
uSD_SS
uSD_CLK
uSD_MOSI
uSD_MISO
DIS_RESET
DIS_CE
DIS_DATA_IN
DIS_RS
DIS_CLK
IMU_SCL
IMU_SDA
IMU_INT
Sheet: Motor Part
File: motor.sch
MOTOR_L_PWM
MOTOR_L_DIR
L_PWM
L_DIR
L_CHA
L_CHB
L_FAULT
ROT_L_CHA
ROT_L_CHB
MOTOR_L_FAULT
MOTOR_R_PWM
MOTOR_R_DIR
R_PWM
R_DIR
R_CHA
R_CHB
R_FAULT
ROT_R_CHA
ROT_R_CHB
MOTOR_R_FAULT
U1
STM32F446RE_LQFP64
R_BOOT1
10k
C_V1
C_V2
C_V3
C_V4
C_V5
C_V6
C_VCAP1
C_VCAP2
2.2uF
RANGE_RESET
RESET
VOL_METER
R_VOL1
20k
R_VOL2
10k
PB1
PB2
SW1
SW2
SW3
R_PB1
47k
R_PB2
LED1
LED2
LED3
LED4
R1
R2
R3
R4
LED_RED1
LED_GREEN1
LED_BLUE1
LED_WHITE1
C_RESET1
NRST Pin has internal permanent pull-up resistor so pull-up is not needed
Sheet: /
File: micromouse.sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad 4.0.5
Id: 1/4

Motors & Encoders



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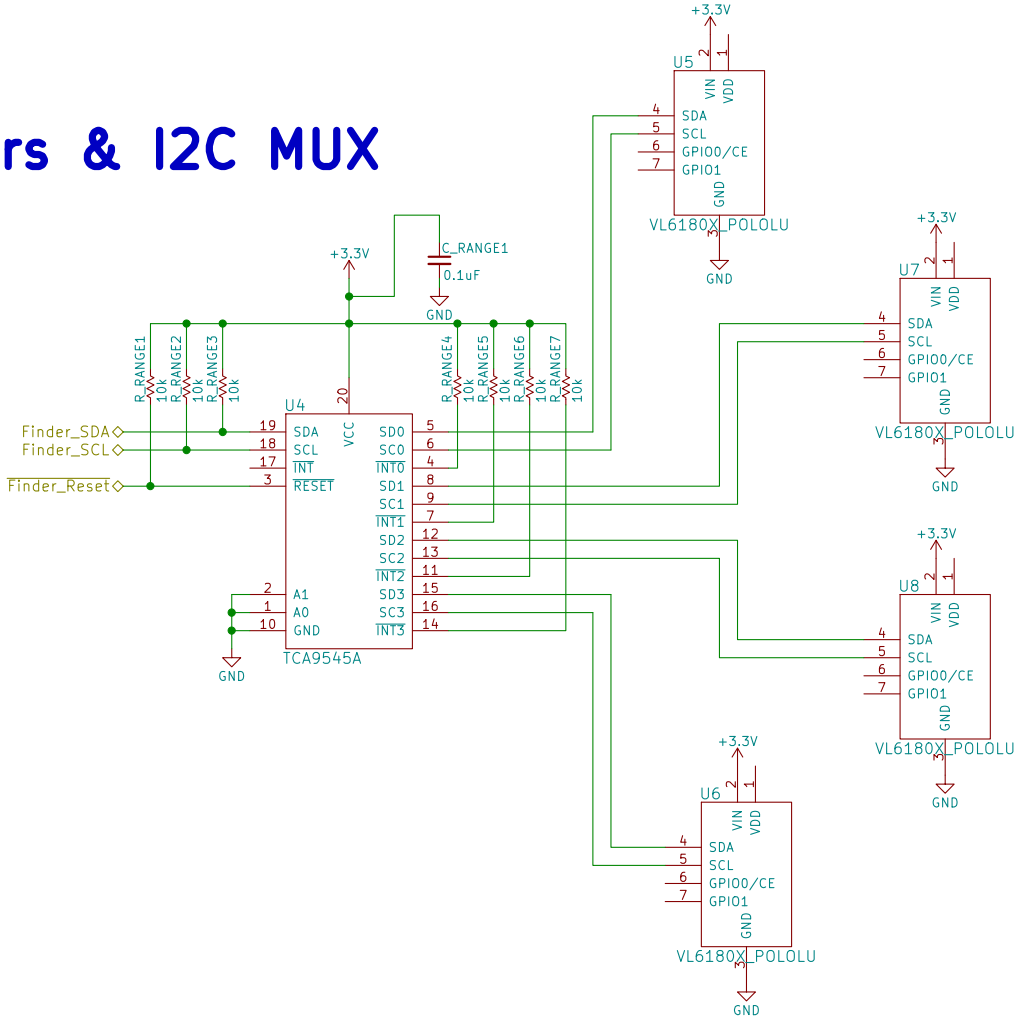
File: motor.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 4.0.5		Id: 2/4

Range Finders & I2C MUX

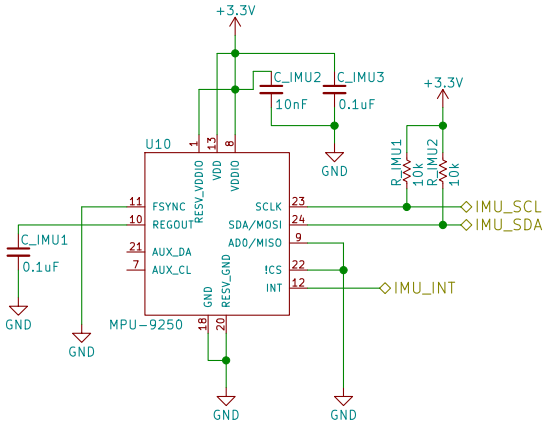


Sheet: /Range Finder Part/
File: finder.sch

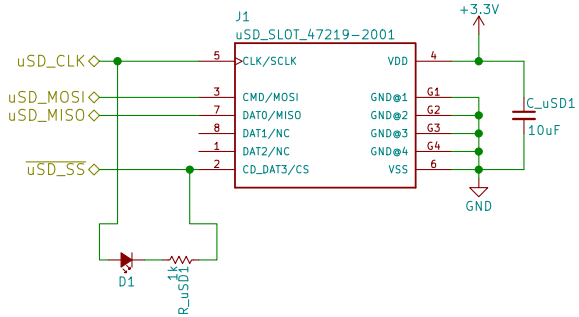
Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 4.0.5		Id: 3/4

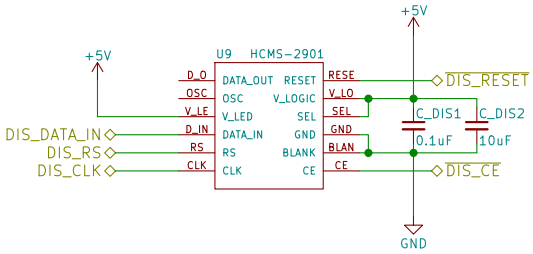
MPU_9250 9-DoF IMU Sensor



Micro SD Card Slot



HCMS-2901 LED Display



Sheet: /uSD_IMU_DISPLAY/		
File: uSD_IMU_DIS.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 4.0.5		Id: 4/4