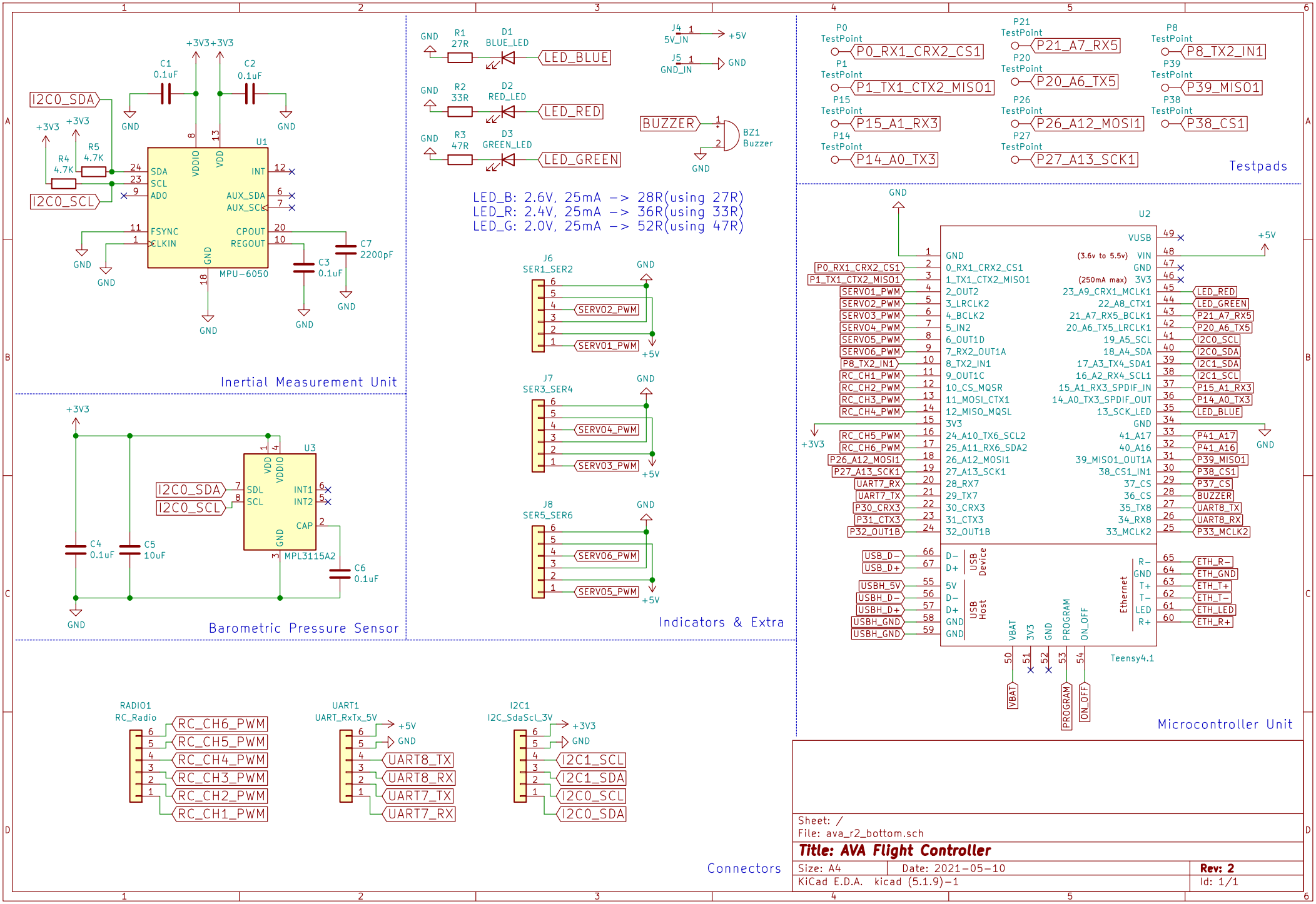
Inertial Measurement Unit
U1
MPU-6050
SDA
SCL
AD0
FSYNC
CLKIN
VDDIO
VDD
GND
INT
AUX_SDA
AUX_SCL
CPOUT
REGOUT
C1 0.1uF
C2 0.1uF
C3 0.1uF
C7 2200pF
R4 4.7K
R5 4.7K
I2C0_SDA
I2C0_SCL
+3V3
Barometric Pressure Sensor
U3
MPL3115A2
SDL
SCL
INT1
INT2
CAP
C4 0.1uF
C5 10uF
C6 0.1uF
Indicators & Extra
R1 27R
R2 33R
R3 47R
D1 BLUE_LED
D2 RED_LED
D3 GREEN_LED
LED_BLUE
LED_RED
LED_GREEN
J4 5V_IN
J5 GND_IN
BUZZER
BZ1 Buzzer
LED_B: 2.6V, 25mA -> 28R(using 27R)
LED_R: 2.4V, 25mA -> 36R(using 33R)
LED_G: 2.0V, 25mA -> 52R(using 47R)
J6 SER1_SER2
J7 SER3_SER4
J8 SER5_SER6
SERVO1_PWM
SERVO2_PWM
SERVO3_PWM
SERVO4_PWM
SERVO5_PWM
SERVO6_PWM
Testpads
P0 TestPoint
P1 TestPoint
P15 TestPoint
P14 TestPoint
P21 TestPoint
P20 TestPoint
P26 TestPoint
P27 TestPoint
P8 TestPoint
P39 TestPoint
P38 TestPoint
P0_RX1_CRX2_CS1
P1_TX1_CTX2_MISO1
P15_A1_RX3
P14_A0_TX3
P21_A7_RX5
P20_A6_TX5
P26_A12_MOSI1
P27_A13_SCK1
P8_TX2_IN1
P39_MISO1
P38_CS1
Microcontroller Unit
U2
Teensy4.1
VUSB
VIN (3.6v to 5.5v)
3V3 (250mA max)
USB Device
USB Host
Ethernet
VBAT
PROGRAM
ON_OFF
Connectors
RADIO1 RC_Radio
RC_CH6_PWM
RC_CH5_PWM
RC_CH4_PWM
RC_CH3_PWM
RC_CH2_PWM
RC_CH1_PWM
UART1 UART_RxTx_5V
UART8_TX
UART8_RX
UART7_TX
UART7_RX
I2C1 I2C_SdaScl_3V
I2C1_SCL
I2C1_SDA
I2C0_SCL
I2C0_SDA
Sheet: /
File: ava_r2_bottom.sch
Title: AVA Flight Controller
Size: A4
Date: 2021-05-10
Rev: 2
KiCad E.D.A. kicad (5.1.9)-1
Id: 1/1