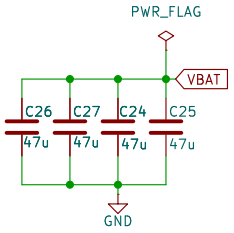
Sheet: /
File: fch7.kicad_sch

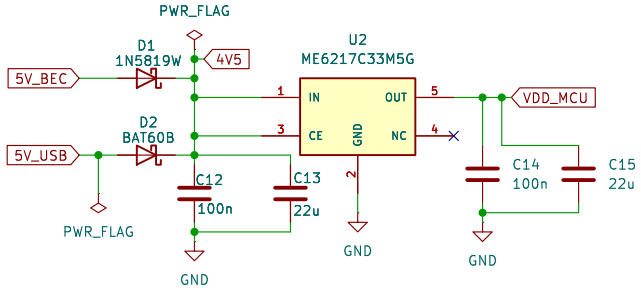
Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.6		Id: 1/7

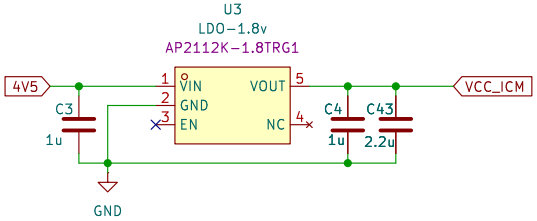
VBAT filtering, absorbing and smoothing input voltage from motor pulling



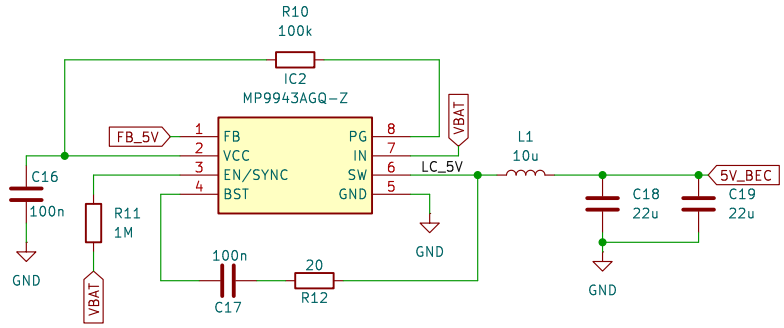
LDO regulator 4V5 to 3.3V for MCU power supply

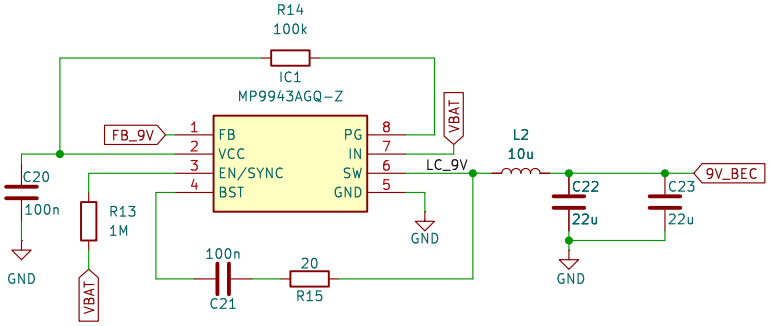


LDO regulator for isolated ICM gyro 1.8V power supply

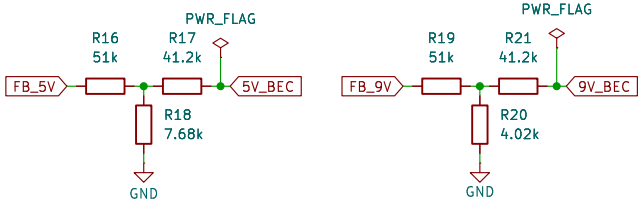


Buck regulator from VBAT(=2S-6S) to 5V or 9V

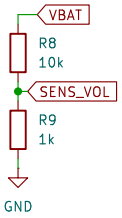




Voltage divider bridge for buck regulator feedback



voltage divider bridge for battery voltage sensor on PC0 MCU pin
(ratio = 11 for 6S voltage 25.2/11=2.29)



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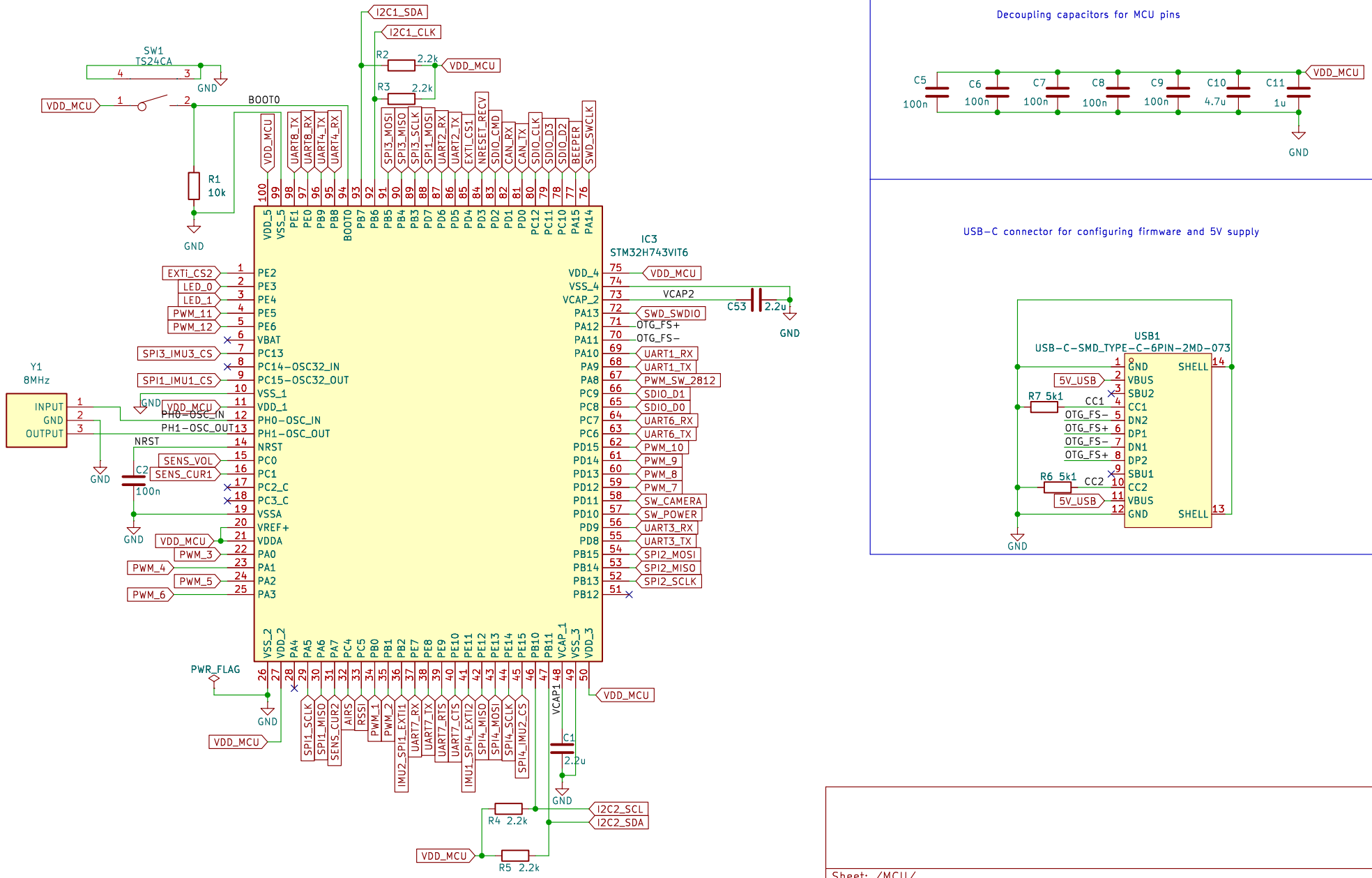

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Size: A4	Date:	**Rev:**
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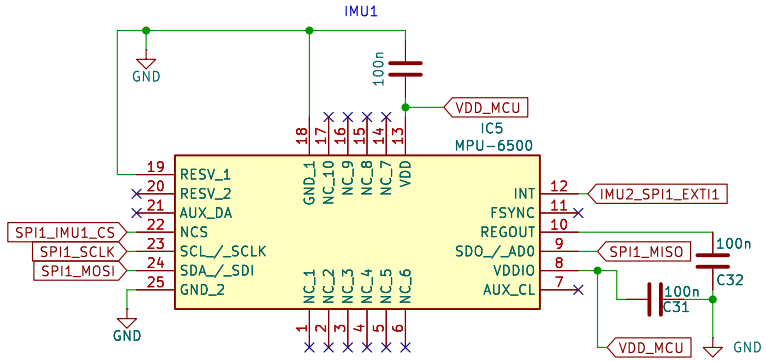

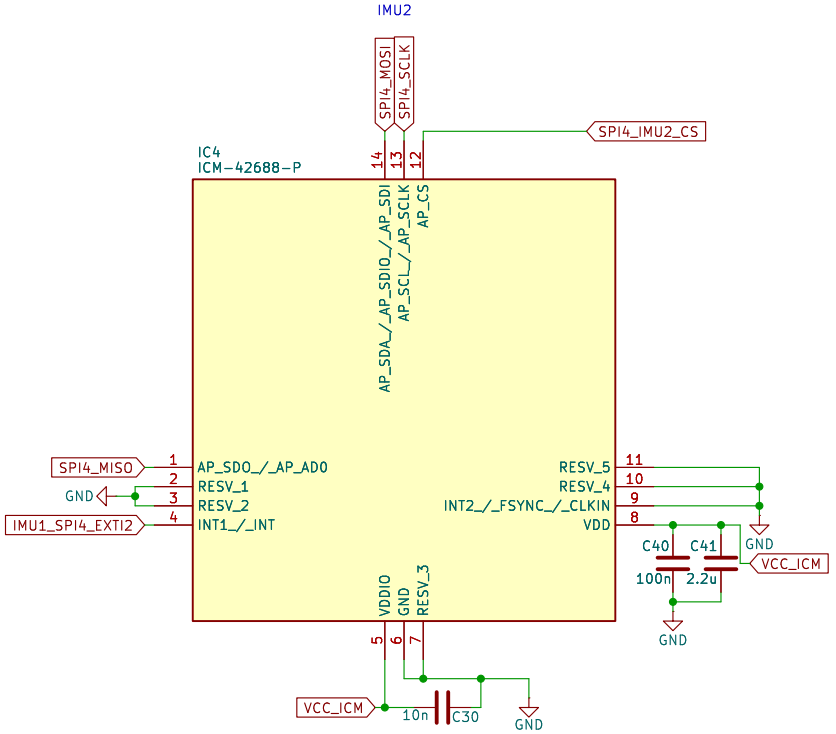

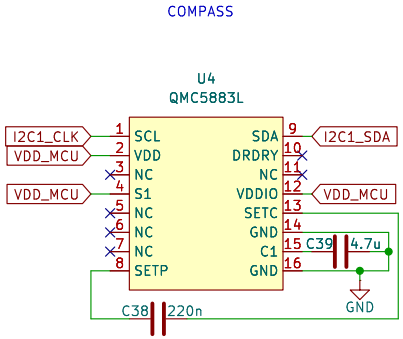

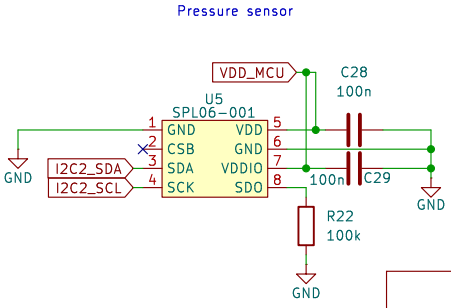

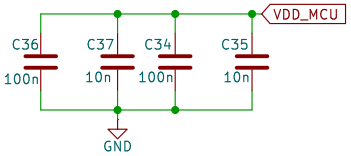

Sheet: /Sensors/
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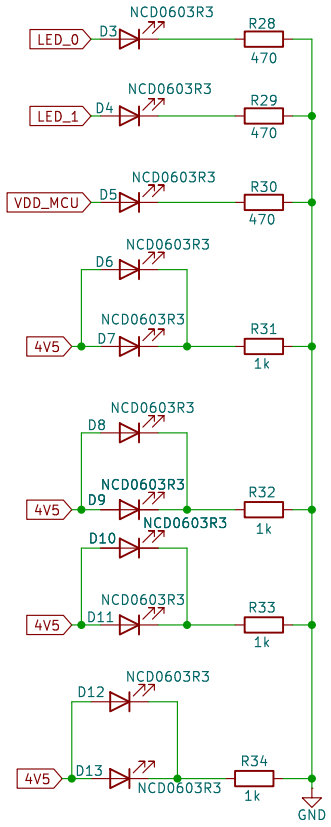
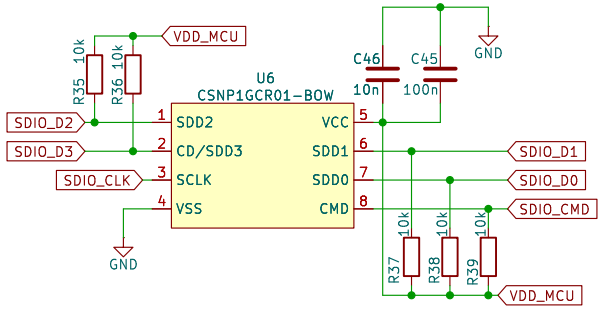
State LEDS indicator



1Gbit/128MO SDNAND flash memory for blackbox storage



Sheet: /Blackbox_led/
File: blackbox_led.kicad_sch

Title:

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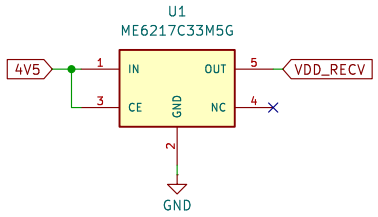
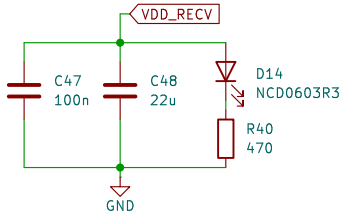
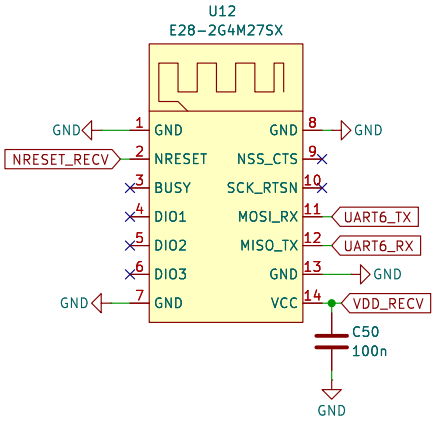
3.3V regulator for power supply net separated for RF modules



Decoupling and indicator LED



ELRS RX



Sheet: /rf_rx/
File: rf_rx.kicad_sch

Title:

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4 PINS UART

U7
HDGC1002WR-S-4P
4V5
GND
UART1_RX
UART1_TX

U8
HDGC1002WR-S-4P
4V5
GND
UART2_RX
UART2_TX

U9
HDGC1002WR-S-4P
UART4_TX
UART4_RX
4V5
GND

U10
HDGC1002WR-S-4P
4V5
GND
UART6_RX
UART6_TX

U11
HDGC1002WR-S-4P
UART8_TX
UART8_RX
4V5
GND

UART1 GPS
UART2 Telemetry
UART3 DJI AIR UNIT
UART4 Serial extension
UART5 Not connected
UART6 RX
UART7 ESC feedback for telemetry bi-directional
UART8 Serial extension

PAD_SOLDER

PIN2216 J2
R42 120
PWM_SW_2812
PIN2216 J3
4V5
PIN2216 J4
GND
PIN2216 J5
R43 120
PWM_9
PIN2216 J6
R44 120
PWM_10
PIN2216 J7
BEEPER
PIN2216 J8
4V5
PIN2216 J9
GND
PIN2216 J12
4V5
GND

DJI air unit connector

U15
HDGC1002WR-S-6P
UART6_RX
UART3_RX
UART3_TX
9V_BEC
GND

U14
HDGC1002WR-S-4P
4V5
GND
I2C1_CLK
I2C1_SDA

ESC

U16
HDGC1002WR-S-8P
VBAT
RN1
PWM8
PWM7
PWM6
PWM5
PWM_8
PWM_7
PWM_6
PWM_5
SENS_CUR2
VBAT
GND

U17
HDGC1002WR-S-8P
GND
RN2
PWM1
PWM2
PWM3
PWM4
PWM_4
PWM_3
PWM_2
PWM_1
SENS_CUR1
UART7_RX
VBAT
VBAT
GND

Vérifier l'ordre des pins pour le connecteur ESC

Debugging

TP4 TestPoint SPI3_MISO
TP1 TestPoint SWD_SWDIO
TP5 TestPoint SPI3_SCLK
TP2 TestPoint SWD_SWCLK
TP6 TestPoint SPI3_IMU3_CS
TP3 TestPoint SPI3_MOSI
TP7 TestPoint AIRS

Sheet: /connectors/
File: connectors.kicad_sch

Title:

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