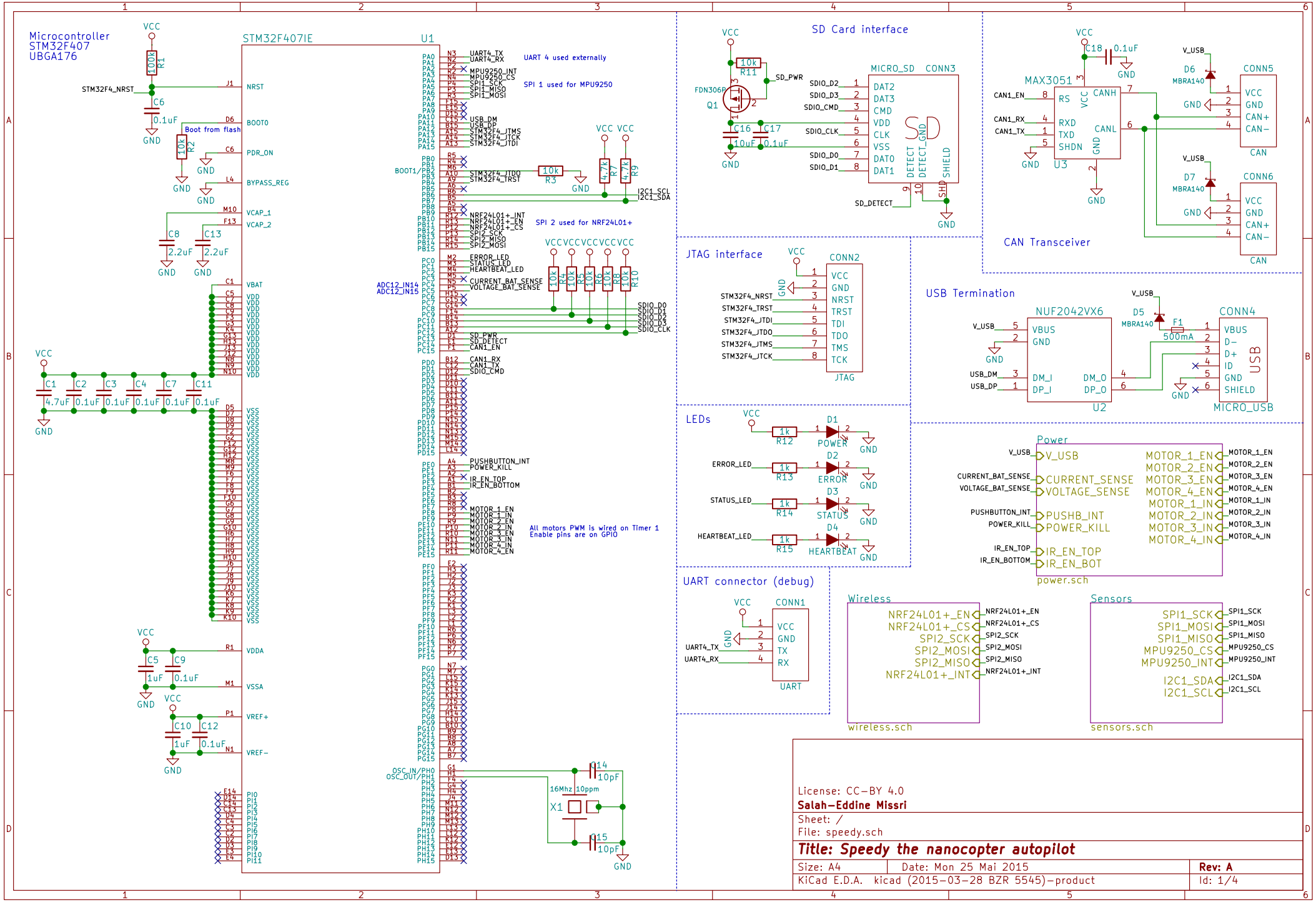
Microcontroller
STM32F407
UBGA176
STM32F407IE
U1
SD Card interface
JTAG interface
USB Termination
LEDs
UART connector (debug)
CAN Transceiver
Power
Wireless
Sensors
UART4 used externally
SPI 1 used for MPU9250
SPI 2 used for NRF24L01+
All motors PWM is wired on Timer 1
Enable pins are on GPIO
Boot from flash
wireless.sch
sensors.sch
power.sch
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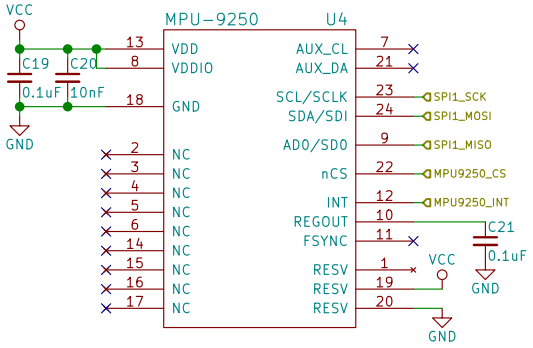
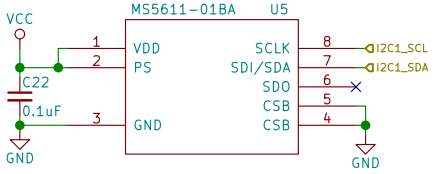
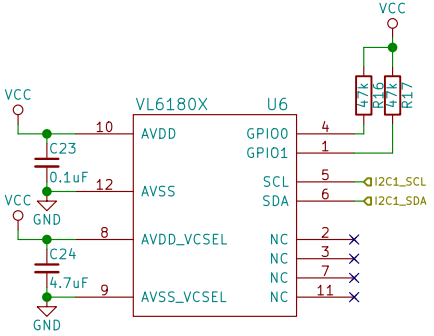
Salah-Eddine Missri
Sheet: /
File: speedy.sch
Title: Speedy the nanocopter autopilot
Size: A4
Date: Mon 25 Mai 2015
Rev: A
KiCad E.D.A. kicad (2015-03-28 BZR 5545)-product
Id: 1/4

IMU 10dof





Ground distance sensor
(Time of flight)



Salah-Eddine Missri

Sheet: /Sensors/
File: sensors.sch

Title: Speedy the nanocopter autopilot

Size: A4	Date: Mon 25 Mai 2015	**Rev: A**
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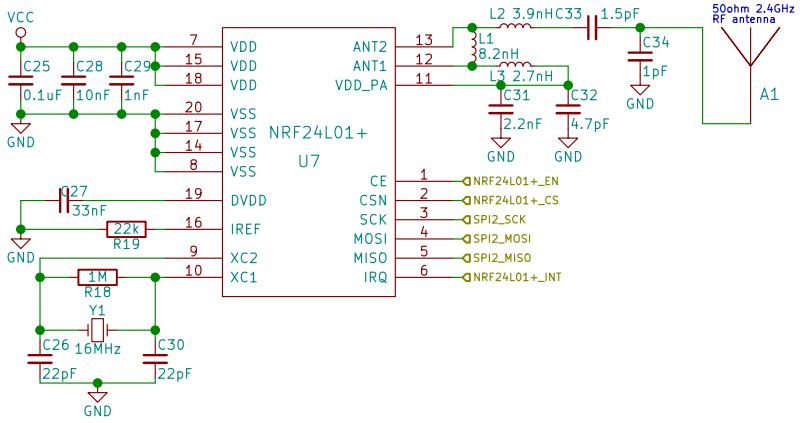


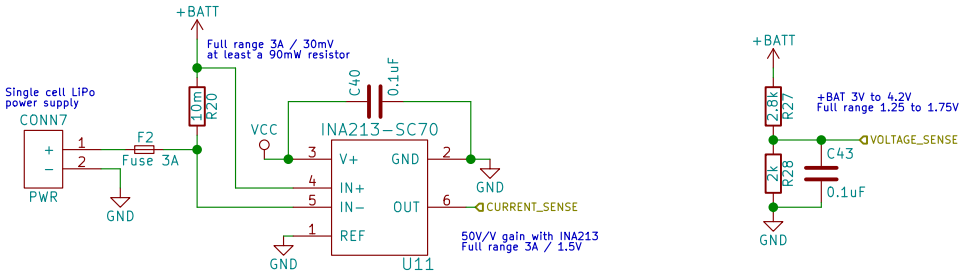
Salah-Eddine Missri

Sheet: /Wireless/
File: wireless.sch

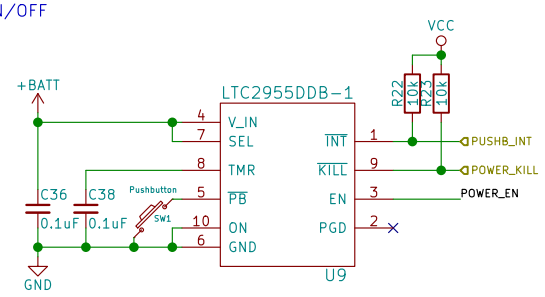
Title: Speedy the nanocopter autopilot

Size: A4	Date: Mon 25 Mai 2015	**Rev: A**
KiCad E.D.A. kicad (2015-03-28 BZR 5545)-product		Id: 3/4

Battery current & voltage monitoring

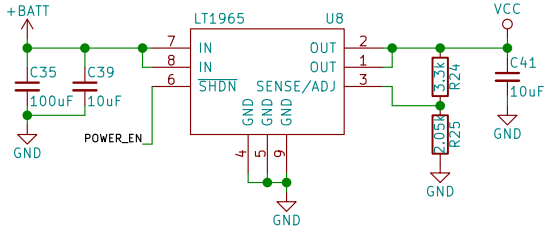


Pushbutton ON/OFF

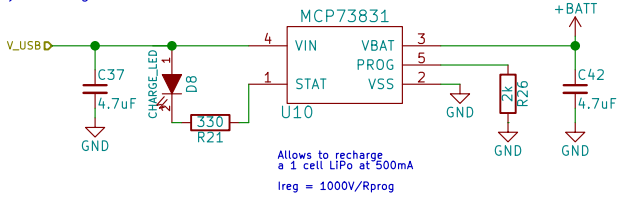


Power regulator (2.8V)

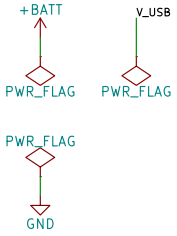
V_OUT = 1.20V x (1+ R2/R1) + 1.7uA x R2 @25°C



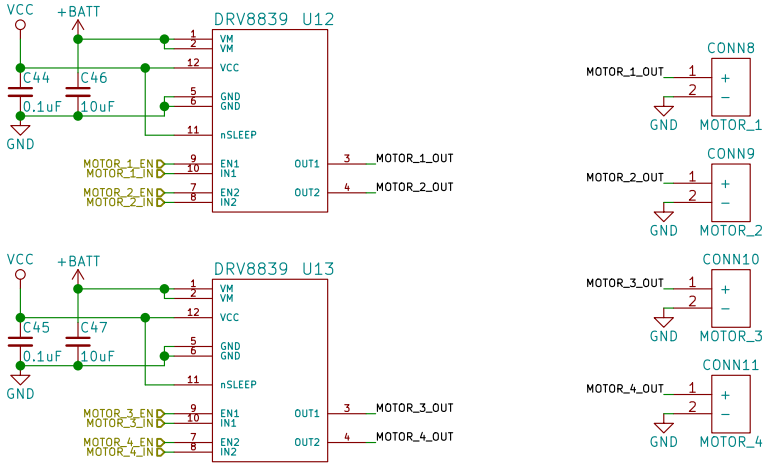
USB Battery recharge



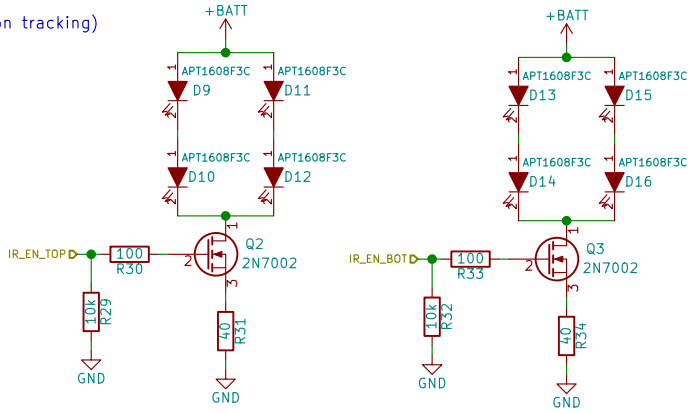
For KiCad DRC checks



Motor drivers



IR LEDs (for motion tracking)



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Sheet: /Power/
File: power.sch

Title: Speedy the nanocopter autopilot

Size: A4	Date: Mon 25 Mai 2015	**Rev: A**
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