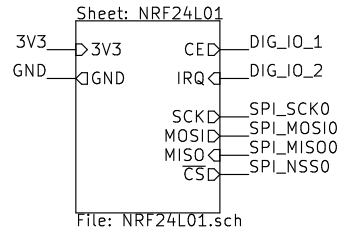
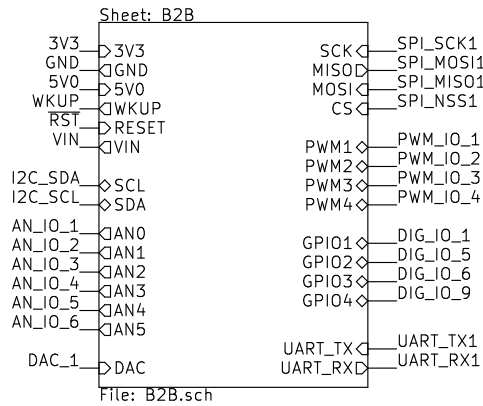


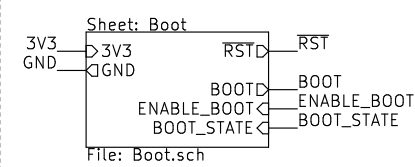
NRF24L01



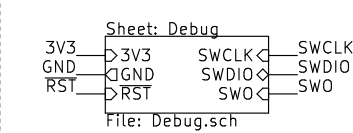
B2B



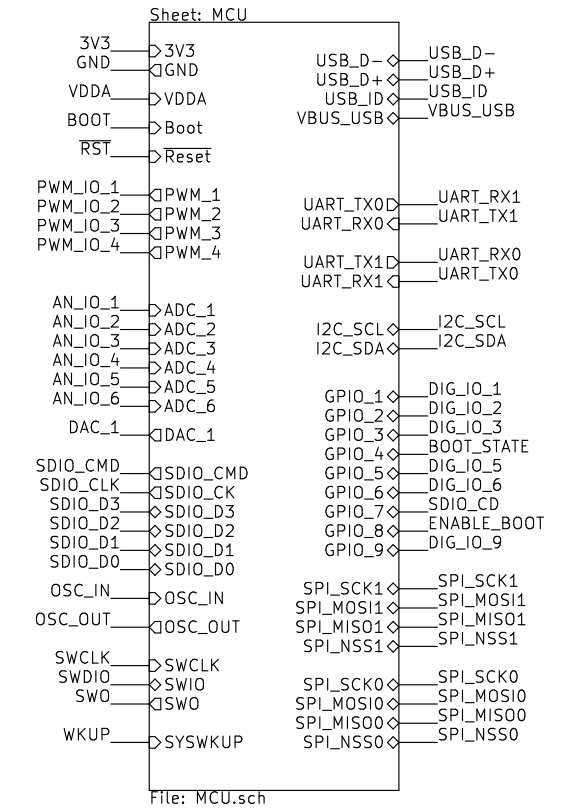
Boot & Reset



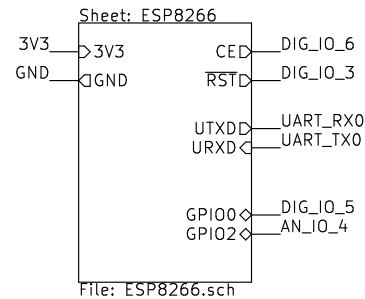
Debug



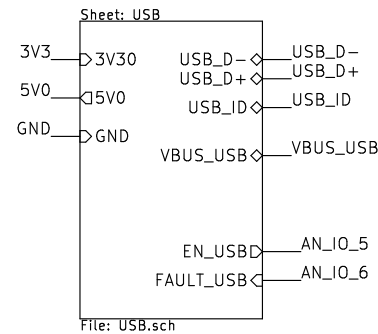
MCU



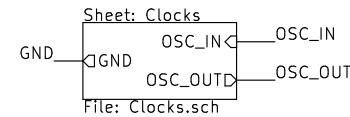
ESP8266



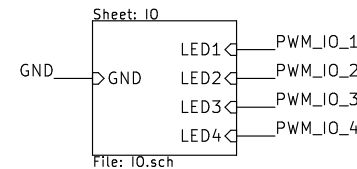
USB_FS



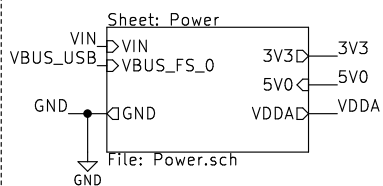
External Clocks



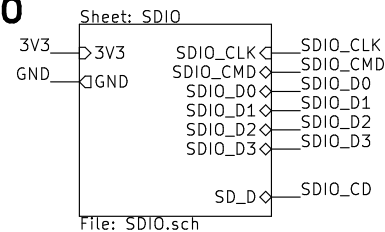
IO



Power Supply



SDIO



<https://github.com/alejandrorosas/Kodillo>
<https://github.com/javifercep/Krakoski>
 Alejandro Rosas
 Javier Fernández

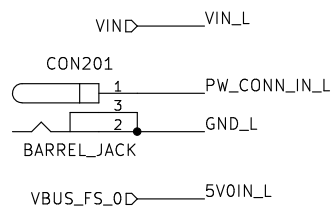
Sheet: /
 File: Krakoski.sch

Title: Krakoski

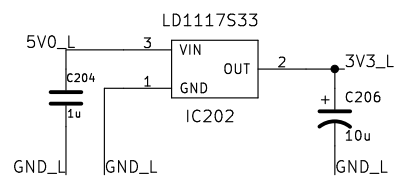
Size: A4
 KiCad E.D.A. kicad 4.0.0-rc1-stable

Date: 2015-11-14
 Rev: 1.0.0
 Id: 1/12

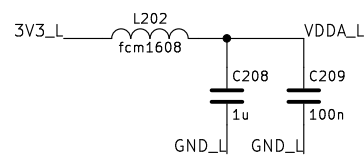
Power sources



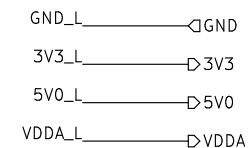
3V3 Generation



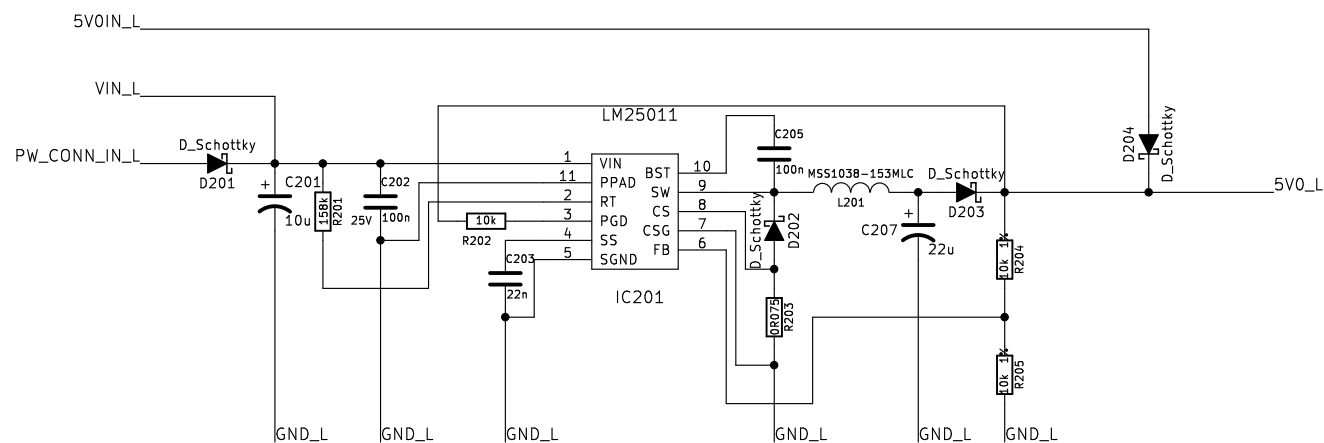
MCU VDDA



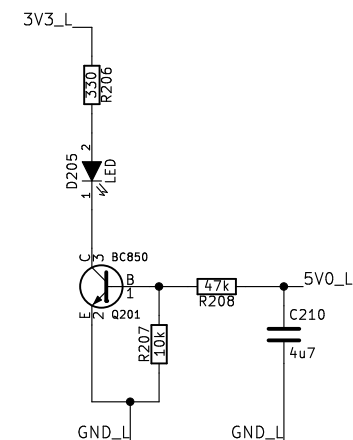
Power outputs



Main 5V generation



Power signaling



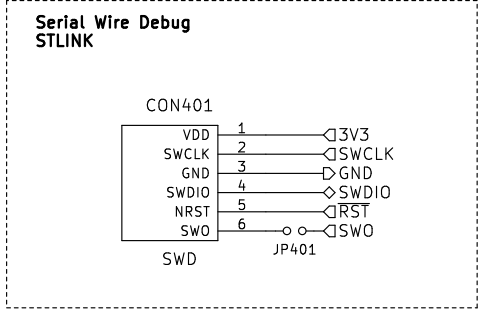
<https://github.com/alejandrorosas/Kodillo>
<https://github.com/javifercep/Krakoski>
 Alejandro Rosas
 Javier Fernández

Sheet: /Power/
 File: Power.sch

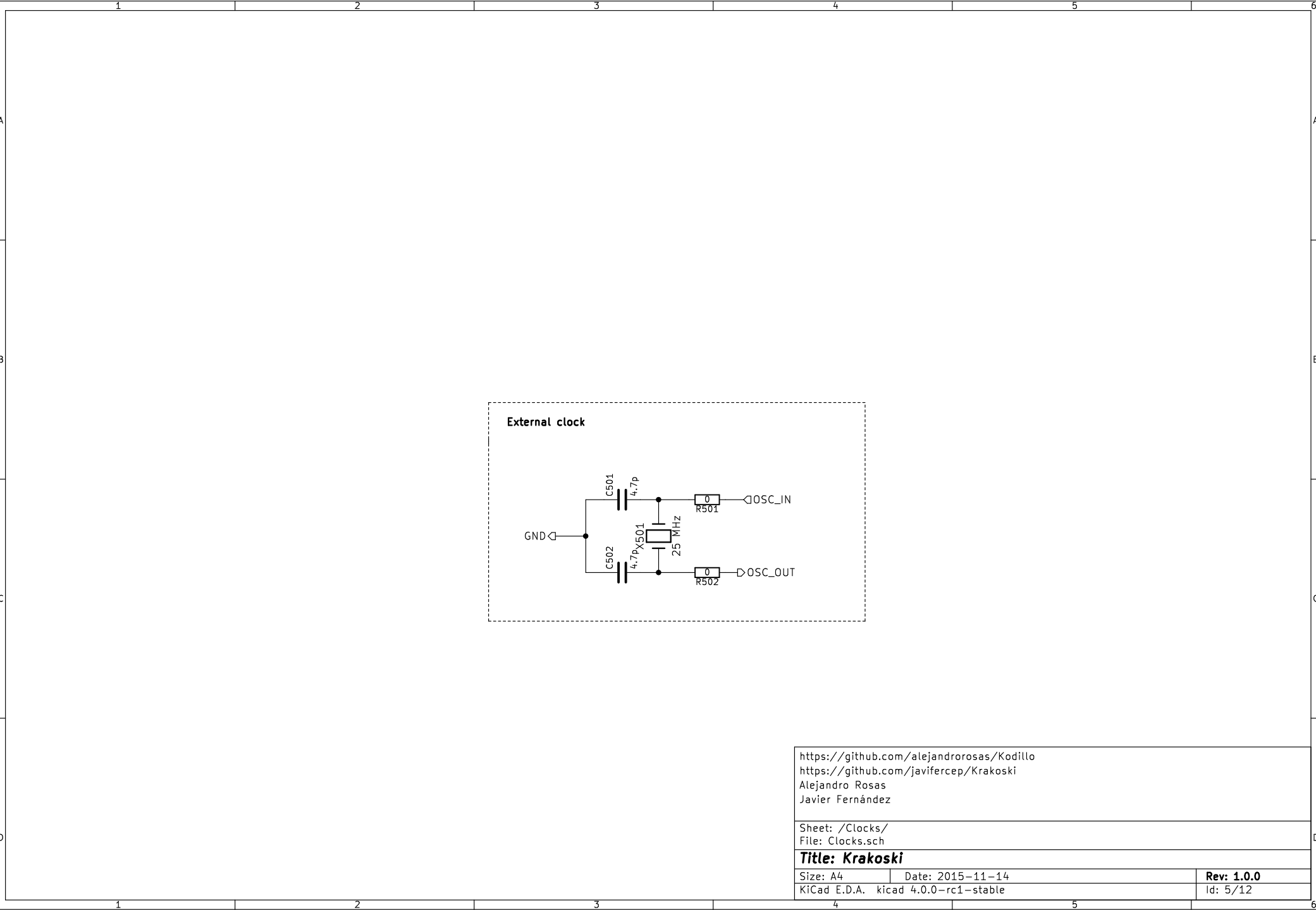
Title: Krakoski

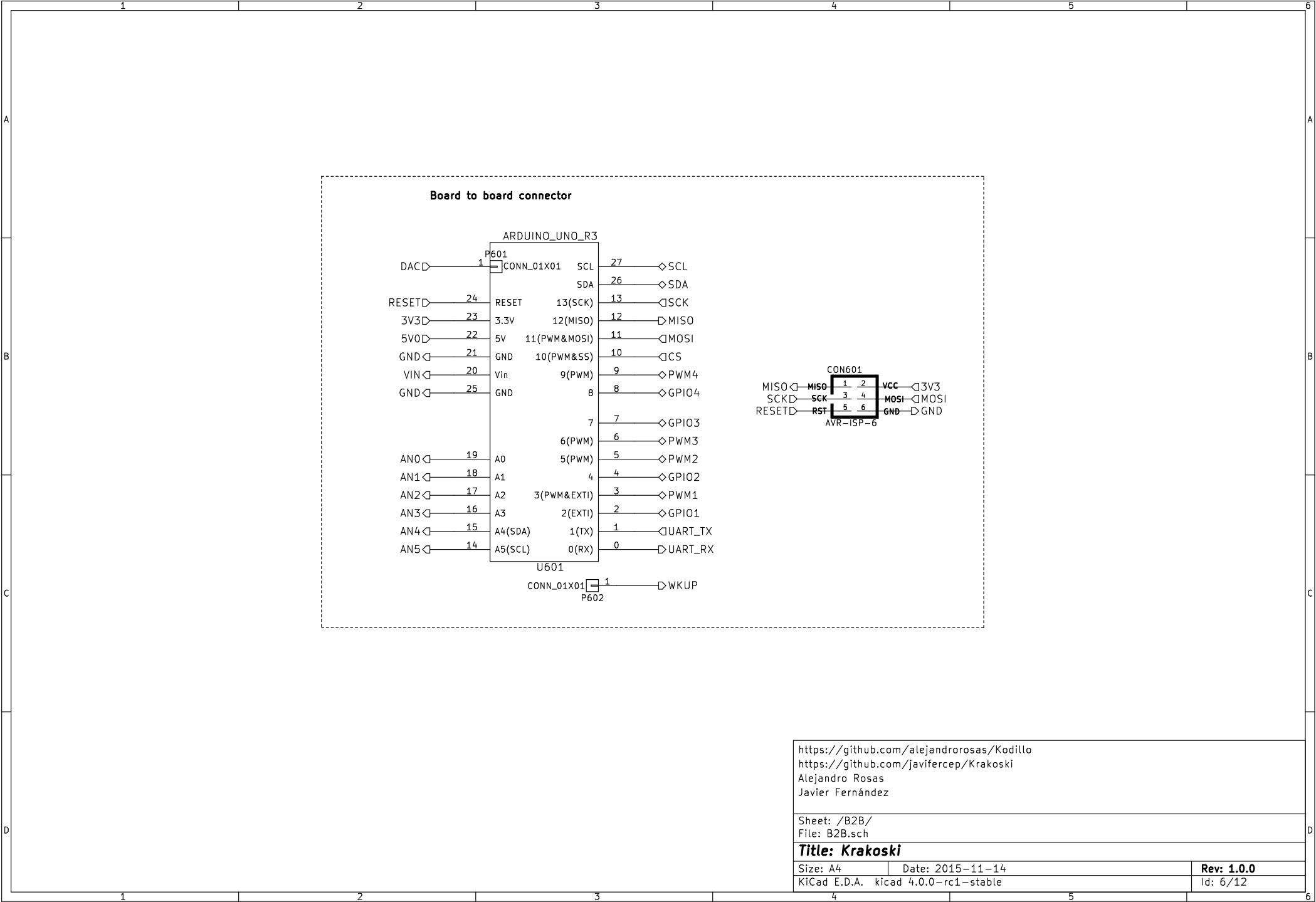
Size: A4 Date: 2015-11-14
 KiCad E.D.A. kicad 4.0.0-rc1-stable

Rev: 1.0.0
 Id: 2/12



https://github.com/alejandrorosas/Kodillo https://github.com/javifercep/Krakovski Alejandro Rosas Javier Fernández		
Sheet: /Debug/ File: Debug.sch		
Title: Krakovski		
Size: A4	Date: 2015-11-14	Rev: 1.0.0
KiCad E.D.A. kicad 4.0.0-rc1-stable		Id: 4/12





<https://github.com/alejandrorosas/Kodillo>
<https://github.com/javifercep/Krakovski>
Alejandro Rosas
Javier Fernández

Sheet: /B2B/
File: B2B.sch

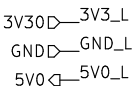
Title: Krakoski

Size: A4 Date: 2015-11-14
KiCad E.D.A. kicad 4.0.0-rc1-stable

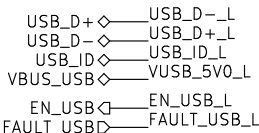
Rev: 1.0.0
Id: 6/12

USB_Full_Speed

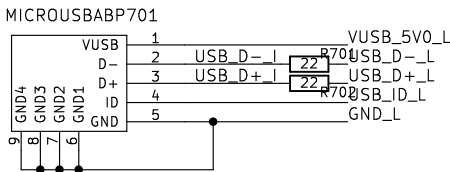
Power supply



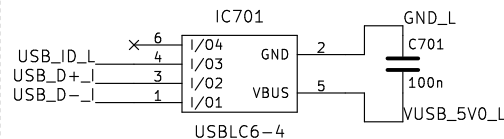
USB MCU Interface



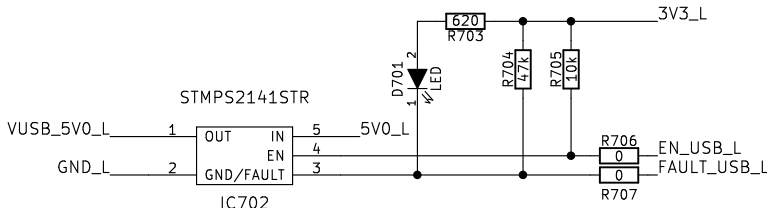
Connector



ESD protection



USB OTG



<https://github.com/alejandrorosas/Kodillo>
<https://github.com/javifercep/Krakoski>
Alejandro Rosas
Javier Fernández

Sheet: /USB/
File: USB.sch

Title: Krakoski

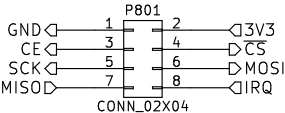
Size: A4
KiCad E.D.A. kicad 4.0.0-rc1-stable

Date: 2015-11-14

Rev: 1.0.0

Id: 7/12

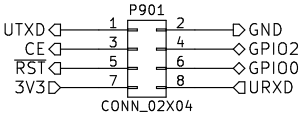
NRF24L01 Interface



MCU internal pull-ups & pull-downs are used

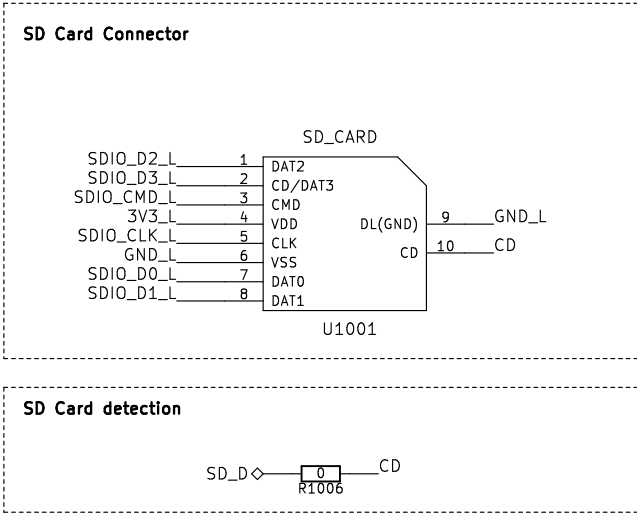
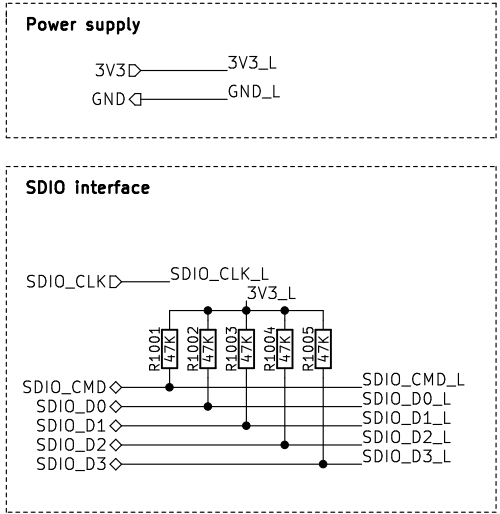
https://github.com/alejandrorosas/Kodillo https://github.com/javifercep/Krakoski Alejandro Rosas Javier Fernández		
Sheet: /NRF24L01/ File: NRF24L01.sch		
Title: Krakoski		
Size: A4	Date: 2015-11-14	Rev: 1.0.0
KiCad E.D.A. kicad 4.0.0-rc1-stable		Id: 8/12

ESP8266 Interface



MCU internal pull-ups & pull-downs are used

https://github.com/alejandrorosas/Kodillo https://github.com/javifercep/Krakoski Alejandro Rosas Javier Fernández		
Sheet: /ESP8266/ File: ESP8266.sch		
Title: Krakoski		
Size: A4	Date: 2015-11-14	Rev: 1.0.0
KiCad E.D.A. kicad 4.0.0-rc1-stable		Id: 9/12



<https://github.com/alejandrorosas/Kodillo>
<https://github.com/javifercep/Krakoski>
Alejandro Rosas
Javier Fernández

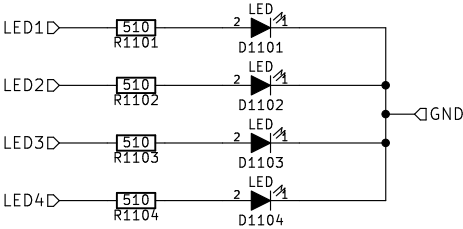
Sheet: /SDIO/
File: SDIO.sch

Title: Krakoski

Size: A4 Date: 2015-11-14
KiCad E.D.A. kicad 4.0.0-rc1-stable

Rev: 1.0.0
Id: 10/12

On board LEDs



<https://github.com/alejandrorosas/Kodillo>
<https://github.com/javifercep/Krakovski>
Alejandro Rosas
Javier Fernández

Sheet: /IO/
File: IO.sch

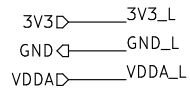
Title: Krakovski

Size: A4 Date: 2015-11-14
KiCad E.D.A. kicad 4.0.0-rc1-stable

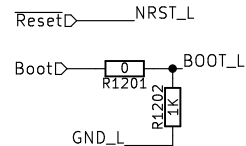
Rev: 1.0.0
Id: 11/12

MCU: STM32F405 / STM32F205 / STM32F105

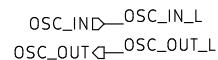
Power inputs



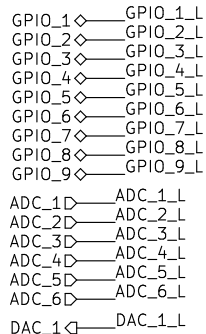
Reset & boot



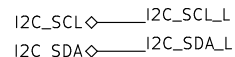
External Clock



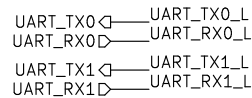
IO



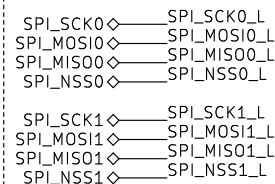
I2C



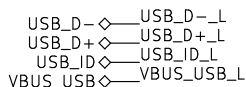
UART & USART



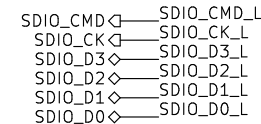
SPI



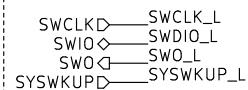
USB_FS



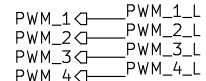
SDIO



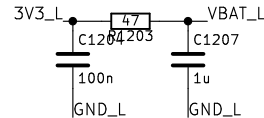
Debug & SYS



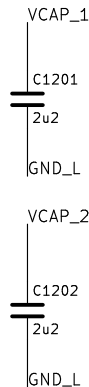
PWM



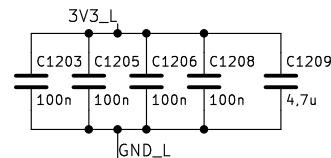
VBAT stabilization



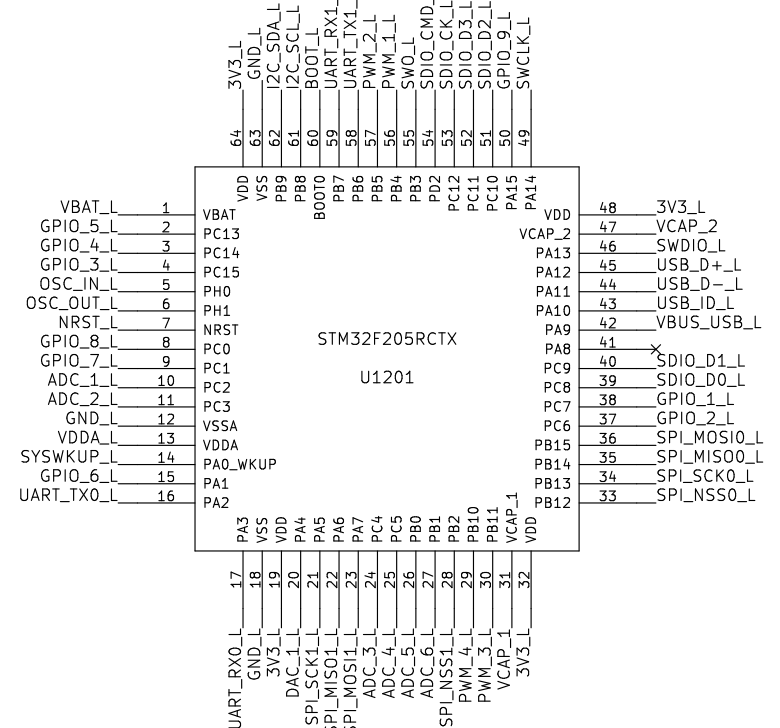
Power scheme adaptor STM32F105/STM32F405



Decoupling capacitors



MCU MAPPING



PA10, PA9 & PA8
reserved for future improvements
- USB OTG

<https://github.com/alejandrorosas/Kodillo>
<https://github.com/javifercep/Krakoski>
Alejandro Rosas
Javier Fernández

Sheet: /MCU/
File: MCU.sch

Title: Krakoski

Size: A4 Date: 2015-11-14
KiCad E.D.A. kicad 4.0.0-rc1-stable

Rev: 1.0.0
Id: 12/12