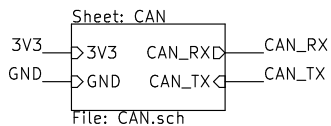
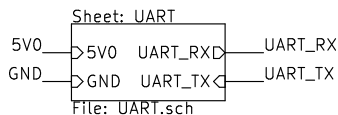


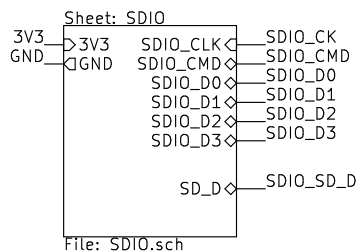
## CAN



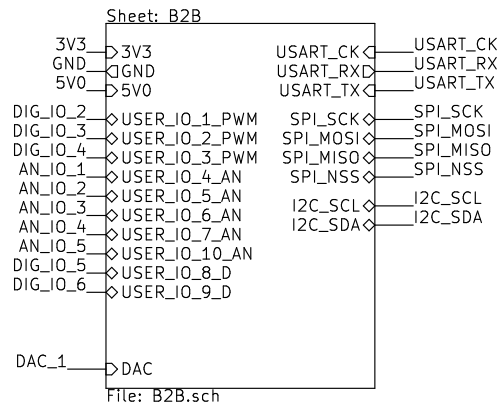
## UART



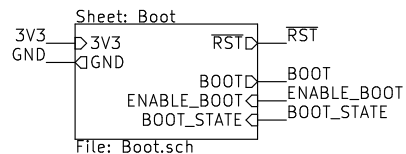
## SDIO (uSD)



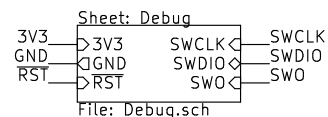
## B2B



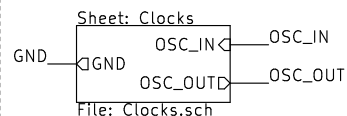
## Boot & Reset



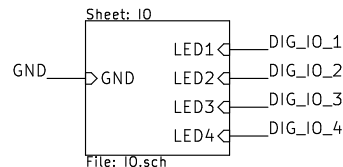
## Debug



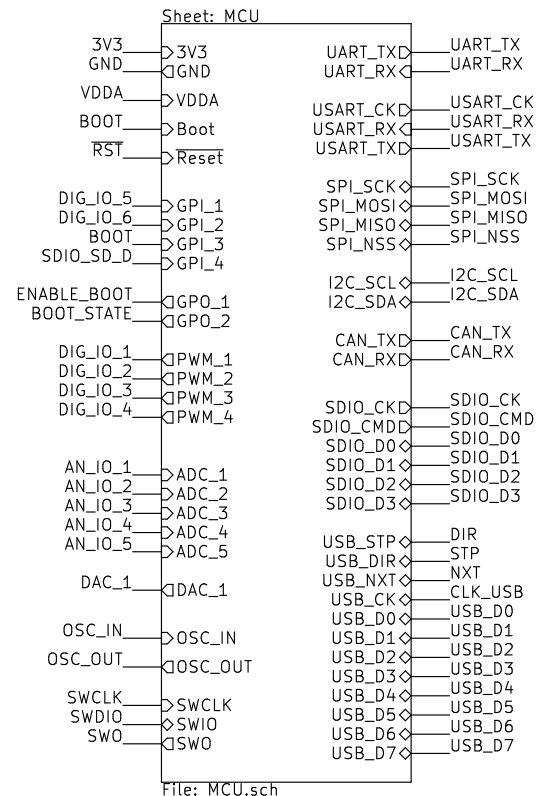
## External Clocks



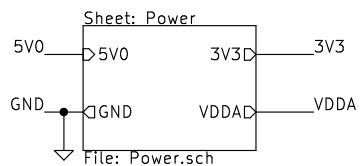
## IO



## MCU



## Power Supply



Kodillo compatible  
<https://github.com/javifercep/Noodleboard>

**Javier Fernández Cepeda**

Sheet: /  
File: Noodleboard.sch

**Title: Noodleboard**

Size: A4 Date: 2015-10-03  
KiCad E.D.A. kicad 4.0.0-rc1-stable

**Rev: 1.0.0**  
Id: 1/12

# USB\_High\_Speed

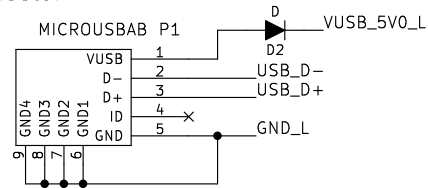
## Power supply

3V30  $\rightarrow$  3V3\_L  
GND  $\rightarrow$  GND\_L  
VUSB\_5V0  $\rightarrow$  VUSB\_5V0\_L

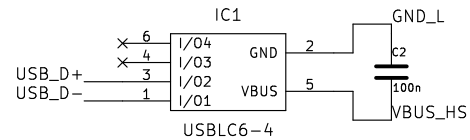
## USB MCU Interface

D7  $\rightarrow$  D7\_L  
D6  $\rightarrow$  D6\_L  
D5  $\rightarrow$  D5\_L  
D4  $\rightarrow$  D4\_L  
D3  $\rightarrow$  D3\_L  
D2  $\rightarrow$  D2\_L  
D1  $\rightarrow$  D1\_L  
D0  $\rightarrow$  D0\_L  
NXT  $\rightarrow$  NXT\_L  
STP  $\rightarrow$  STP\_L  
DIR  $\rightarrow$  DIR\_L  
CLK  $\rightarrow$  CLK\_L

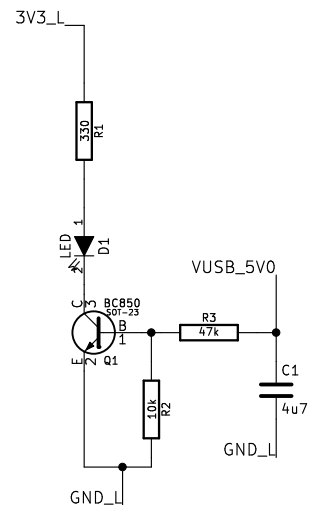
## Connector



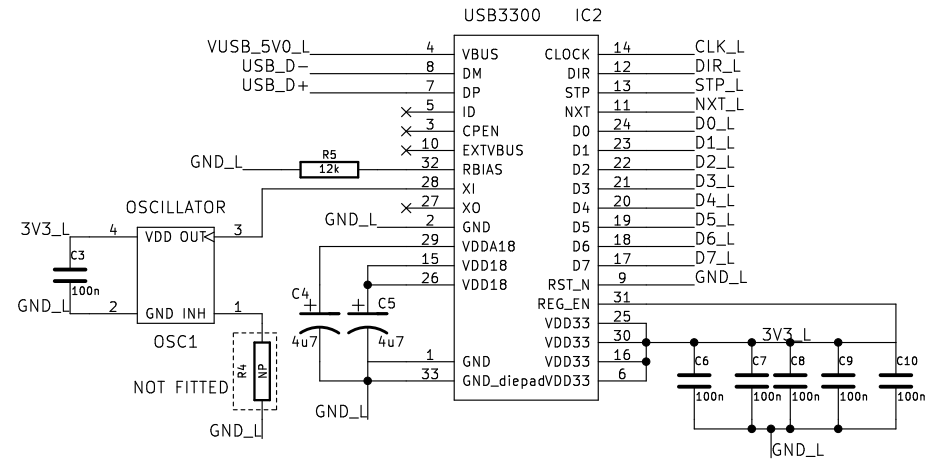
## ESD protection



## Power signaling



## USB ULPI



Kodillo compatible  
<https://github.com/javifercep/Noodleboard>

**Javier Fernández Cepeda**

Sheet: /USB/

File: USB.sch

**Title: Noodleboard**

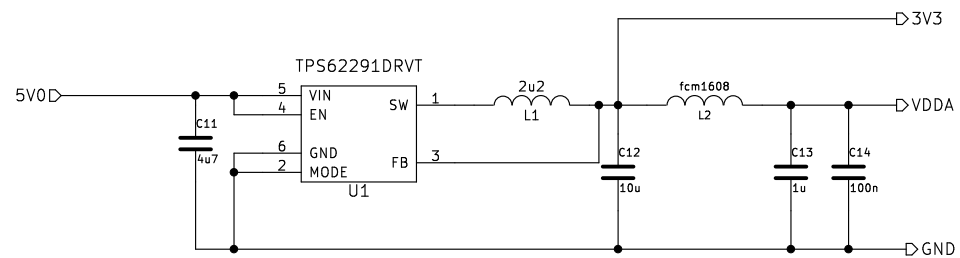
Size: A4 Date: 2015-10-03

KiCad E.D.A. kicad 4.0.0-rc1-stable

**Rev: 1.0.0**

Id: 2/12

## Power



Kodillo compatible  
<https://github.com/javifercep/Noodleboard>

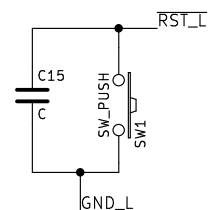
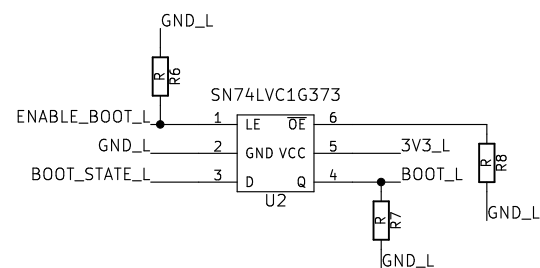
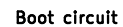
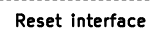
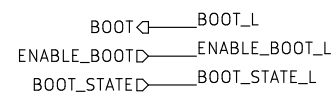
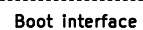
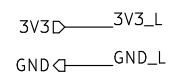
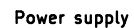
**Javier Fernández Cepeda**

Sheet: /Power/  
File: Power.sch

**Title: Noodleboard**

Size: A4 Date: 2015-10-03  
KiCad E.D.A. kicad 4.0.0-rc1-stable

**Rev: 1.0.0**  
Id: 3/12



Kodillo compatible  
<https://github.com/javifercep/Noodleboard>

**Javier Fernández Cepeda**

Sheet: /Boot/

File: Boot.sch

<b>Title:</b> Noodleboard
---------------------------

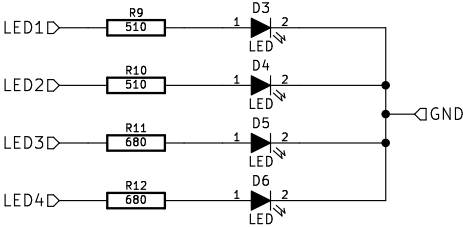
Size: A4	Date: 2015-10-03
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Size: 1.1 MB	Date: 2018-10-08
KiCad E.D.A.	kicad 4.0.0-rc1-stable

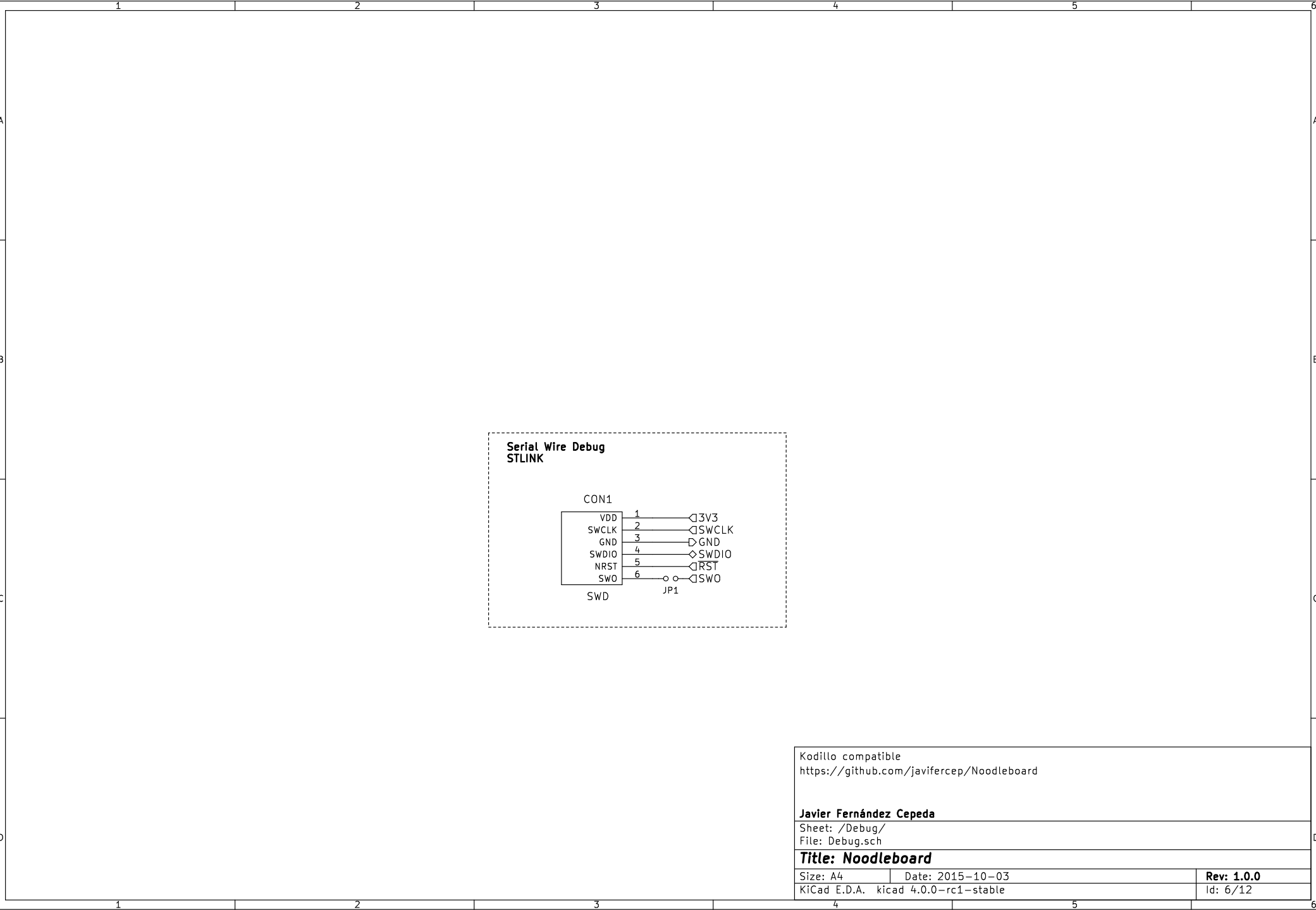
Rev: 1.0.0

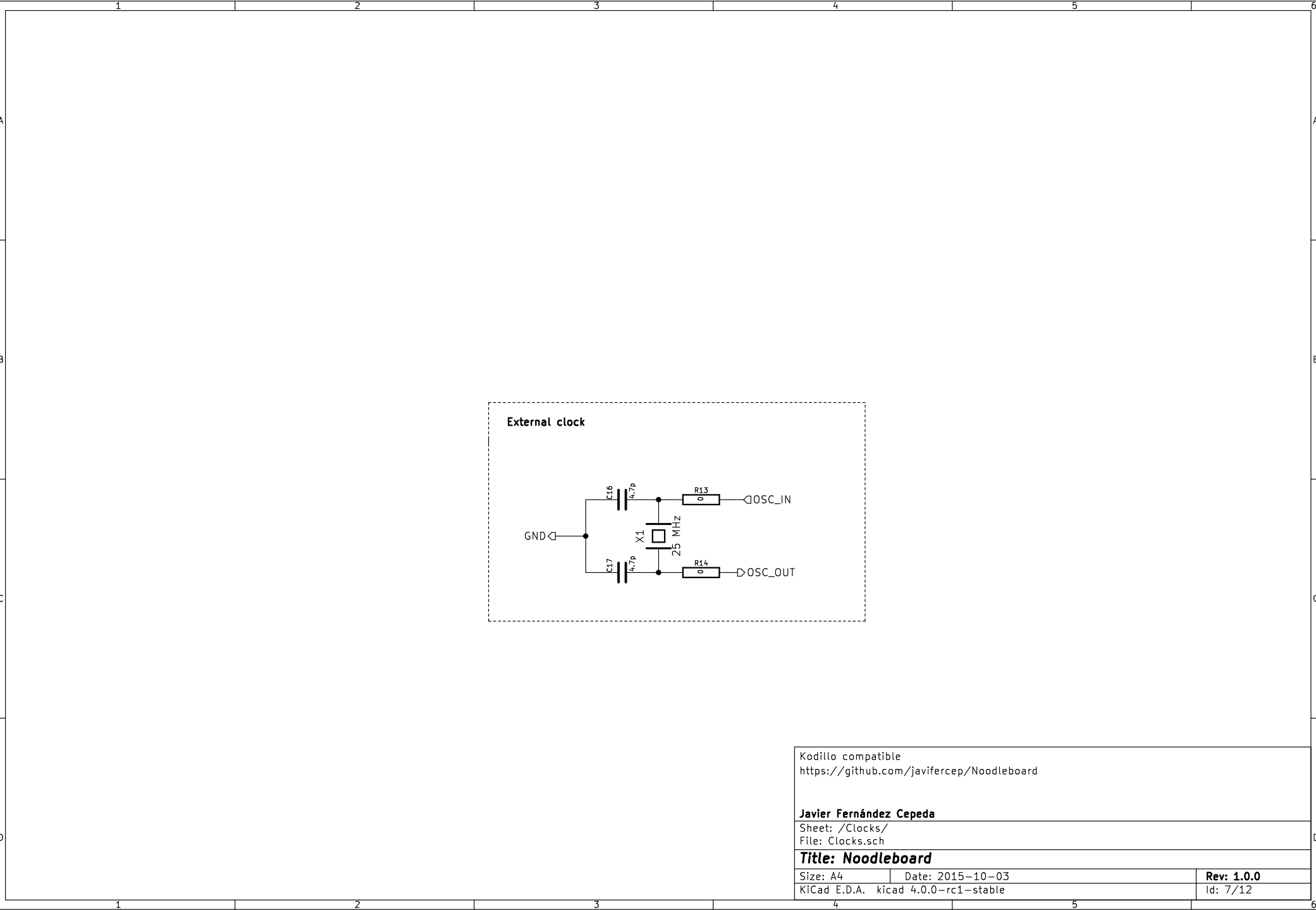
Id: 4/12

On board LEDs



Kodillo compatible <a href="https://github.com/javifercep/Noodleboard">https://github.com/javifercep/Noodleboard</a>		
Javier Fernández Cepeda		
Sheet: /IO/ File: IO.sch		
Title: Noodleboard		
Size: A4	Date: 2015-10-03	Rev: 1.0.0
KiCad E.D.A. kicad 4.0.0-rc1-stable		Id: 5/12







Kodillo compatible  
<https://github.com/javifercep/Noodleboard>

**Javier Fernández Cepeda**

Sheet: /CAN/

File: CAN.sch

**Title:** Noodleboard

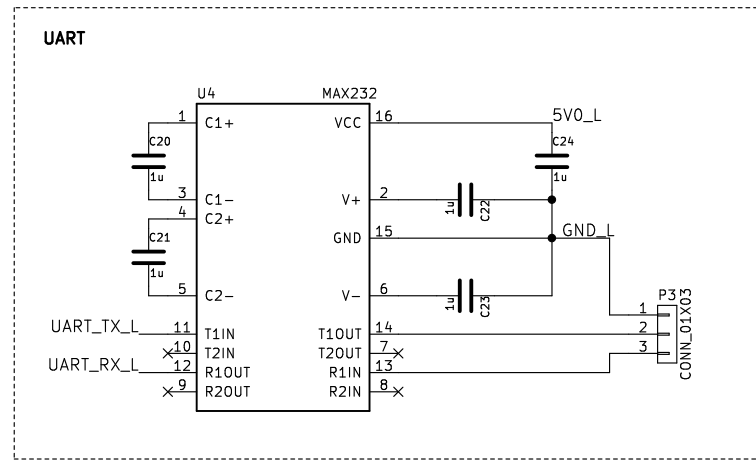
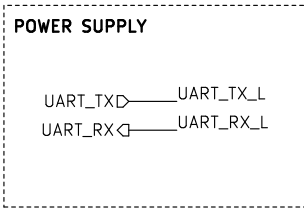
Size: A4	Date: 2015-10-03
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Size: A4	Date: 2019-10-09
KiCad E.D.A.	kicad 4.0.0-rc1-stable

Rev: 1.0.0

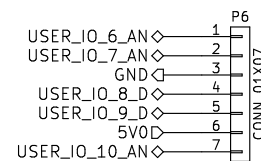
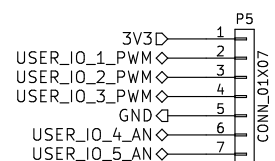
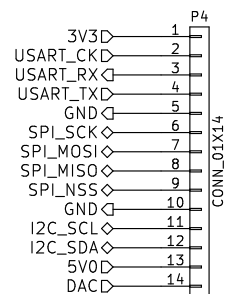
Id: 8/12





Rev: 1.0.0  
Id: 9/12

### Board to board connector



Kodillo compatible  
<https://github.com/javifercep/Noodleboard>

**Javier Fernández Cepeda**

Sheet: /B2B/

File: B2B.sch

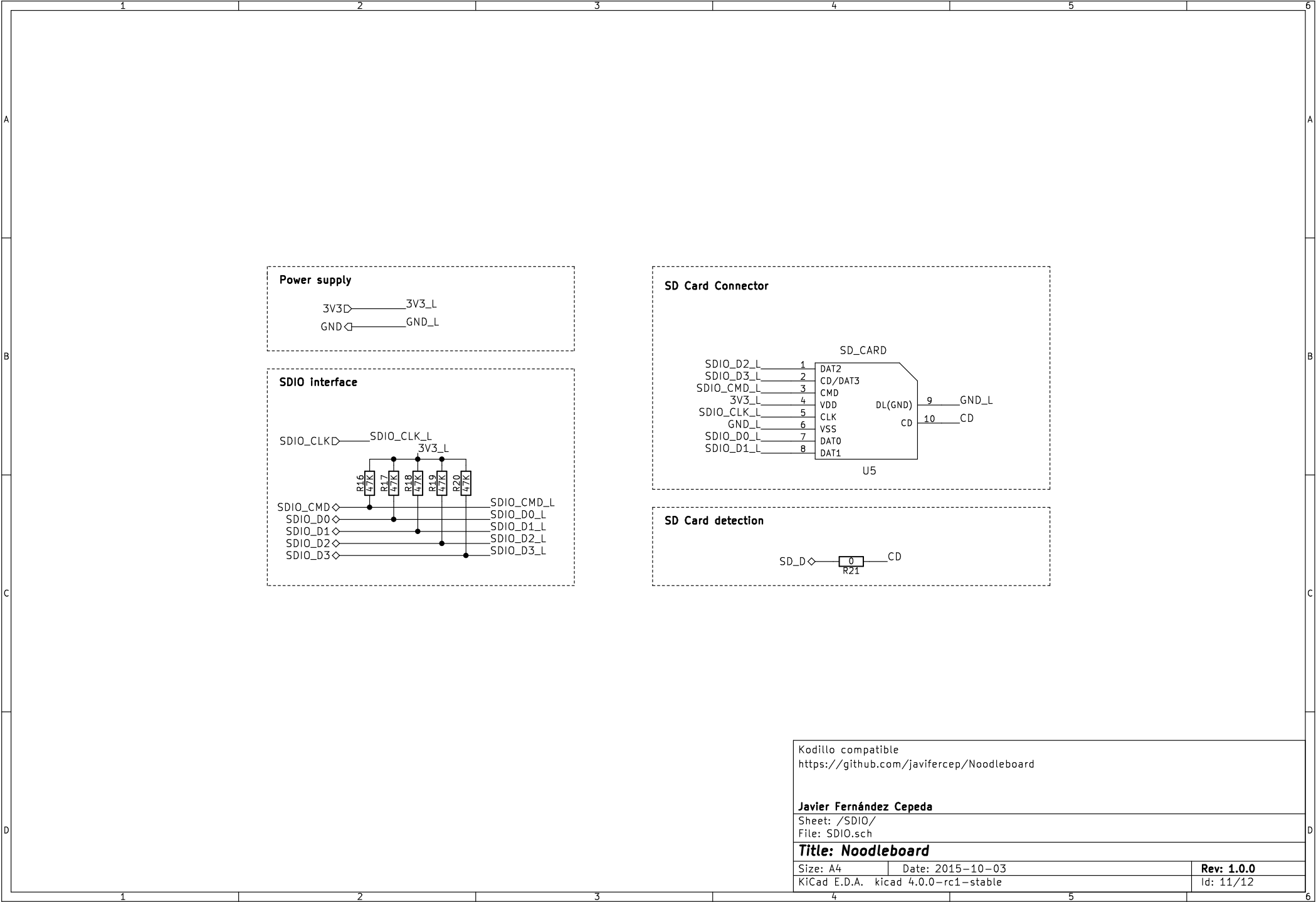
**Title: Noodleboard**

Size: A4 Date: 2015-10-03

KiCad E.D.A. kicad 4.0.0-rc1-stable

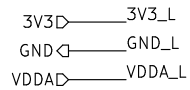
**Rev: 1.0.0**

Id: 10/12

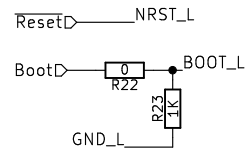


# MCU: STM32F405RG / STM32F105

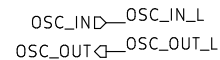
## Power inputs



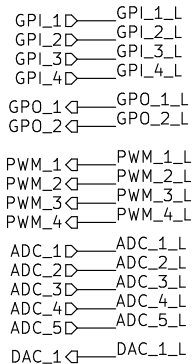
## Reset & boot



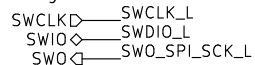
## External Clock



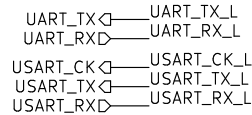
## IO



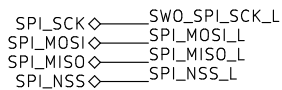
## Debug



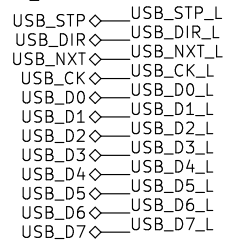
## UART & USART



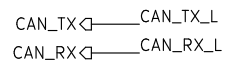
## SPI



## USB\_HS



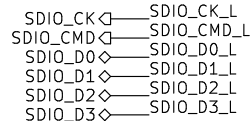
## CAN



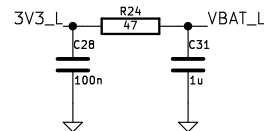
## I2C



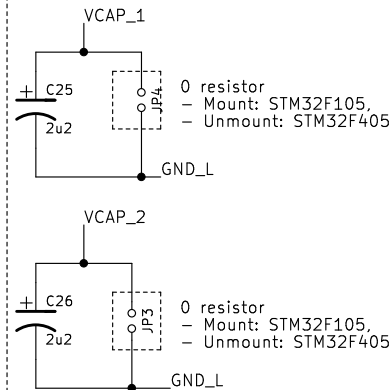
## SDIO



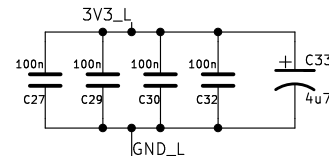
## VBAT stabilization



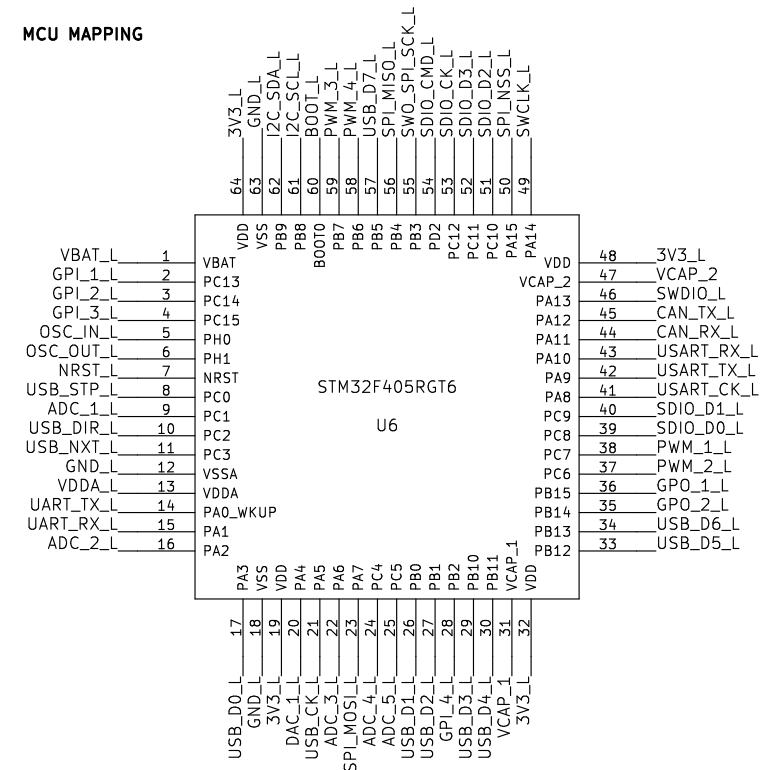
## Power scheme adaptor STM32F105/STM32F405



## Decoupling capacitors



## MCU MAPPING



Kodillo compatible  
<https://github.com/javifercep/Noodleboard>

**Javier Fernández Cepeda**

Sheet: /MCU/  
 File: MCU.sch

**Title: Noodleboard**

Size: A4 Date: 2015-10-03  
 KiCad E.D.A. kicad 4.0.0-rc1-stable

**Rev: 1.0.0**  
 Id: 12/12