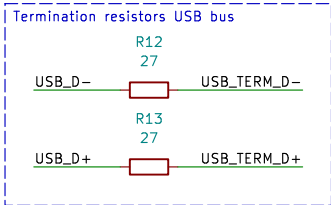
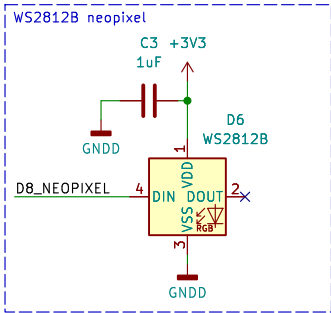
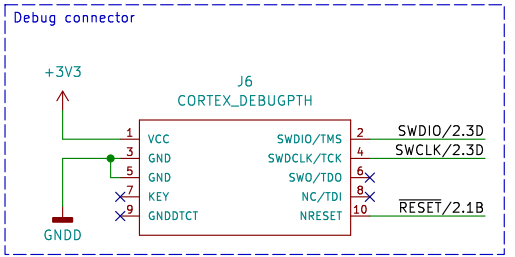
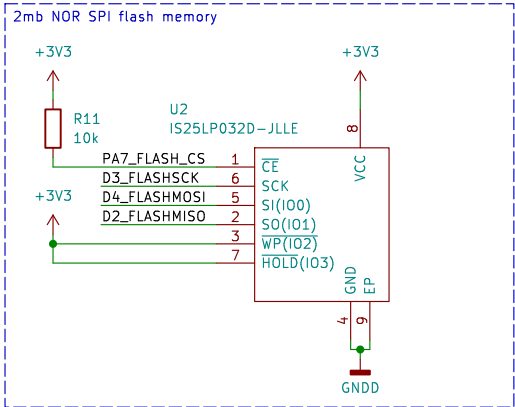
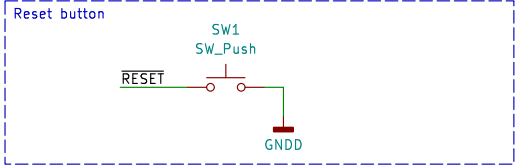
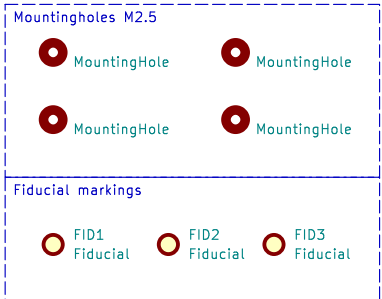
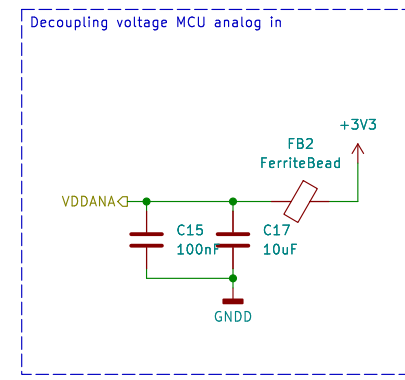
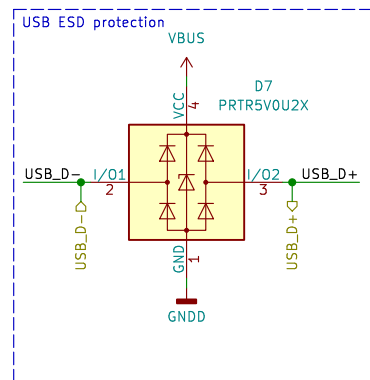
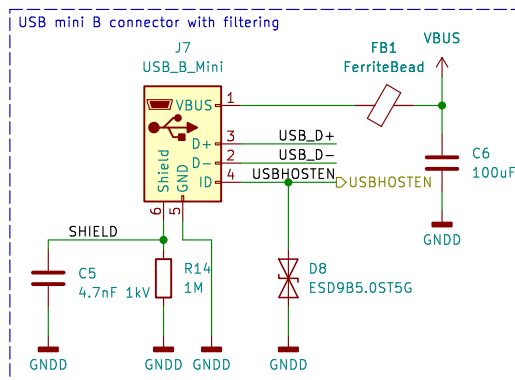
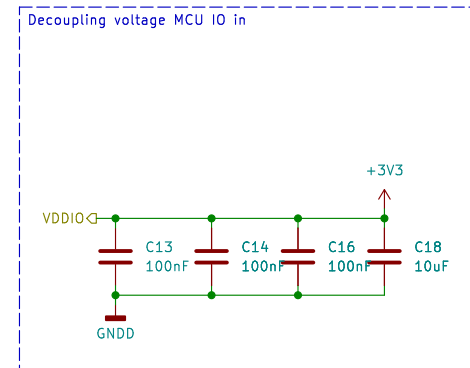
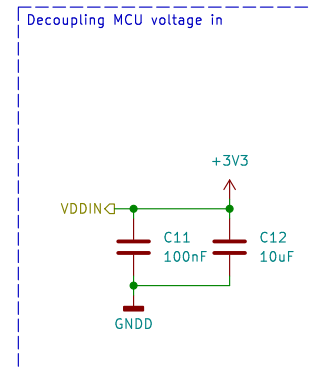
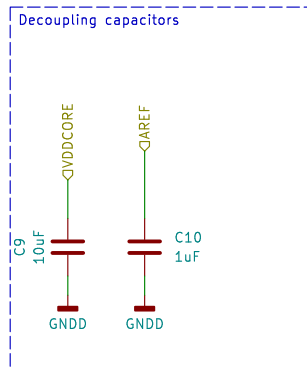
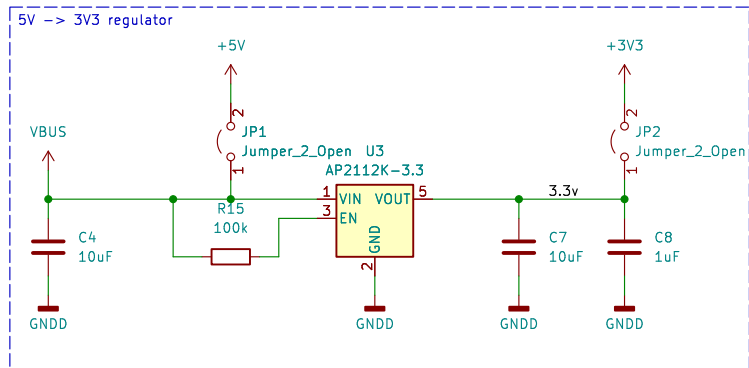


- Check inputs and outputs to MCU
- Check other connections
- Add pogopin header???
- Add another I2C header???
- Check Mountinghole size





Author(s): Emiel Visser & Joris Bol
Health Concept Lab

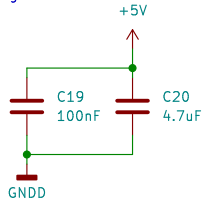
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 File: Power_V1.0.kicad_sch

Title: Led driver board BabySim

Size: A4 Date: 06-09-2023
 KiCad E.D.A. kicad 7.0.9

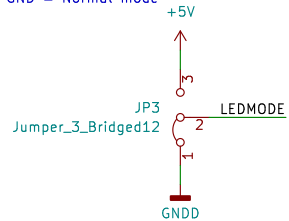
Rev: V1.0
 Id: 2/4

Decoupling



Mode selector:

5V = Graycode mode
GND = Normal mode



Calculation for IREF resistors

$$I_{MAX} = (V(IREF) / R(IREF)) * 31.5$$

$$V(IREF) = 5V$$

$$R(IREF) = ?$$

$$I_{MAX} = 80mA$$

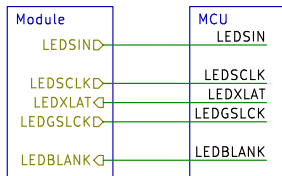
$$80mA = (5V/R(IREF)) * 31.5 \quad | \quad /31.5$$

$$80mA/31.5 = 5V/R(IREF) \quad | \quad /5$$

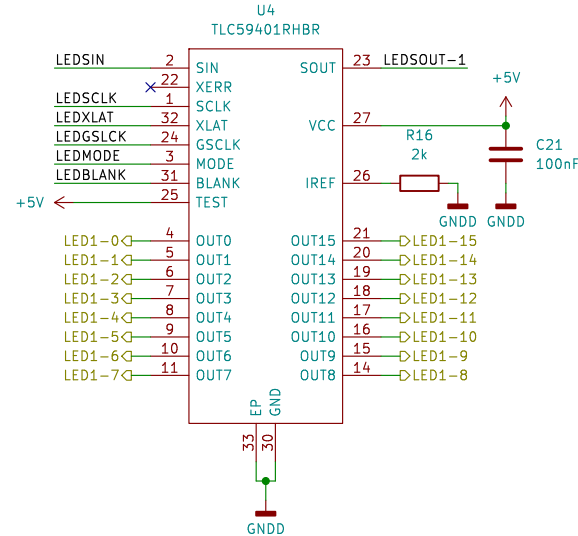
$$5V/(80mA/31.5) = R(IREF)$$

$$R(IREF) = 1968.8 \text{ ohm} = 2Kohm$$

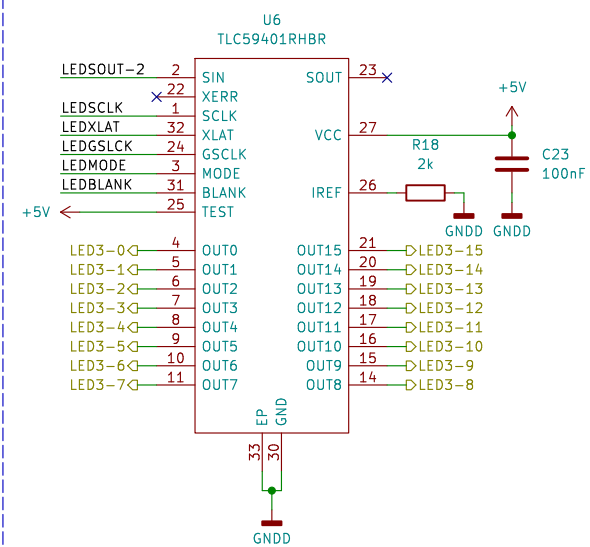
Bus connection



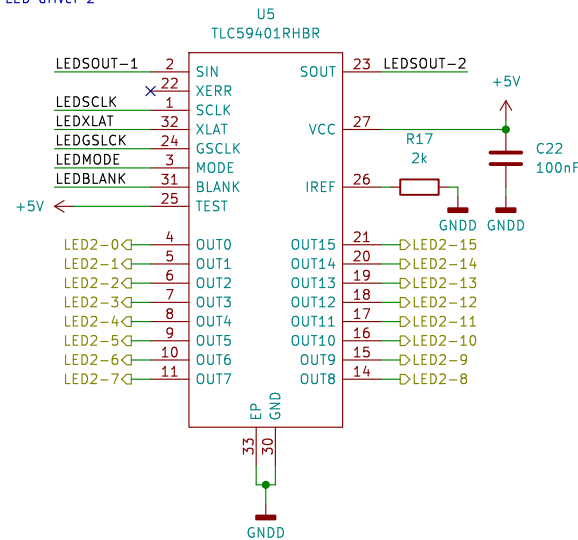
LED driver 1



LED driver 3



LED driver 2



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Health Concept Lab

Sheet: /LedDriver/

File: LedDriver_V1.0.kicad_sch

Title: Led driver board BabySim

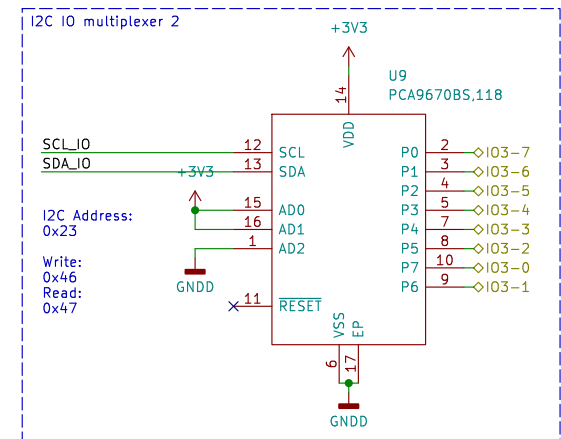
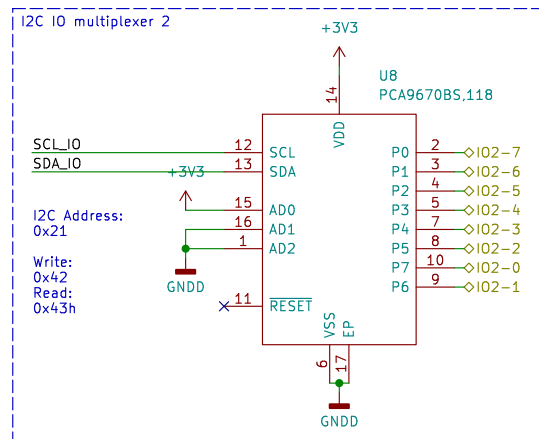
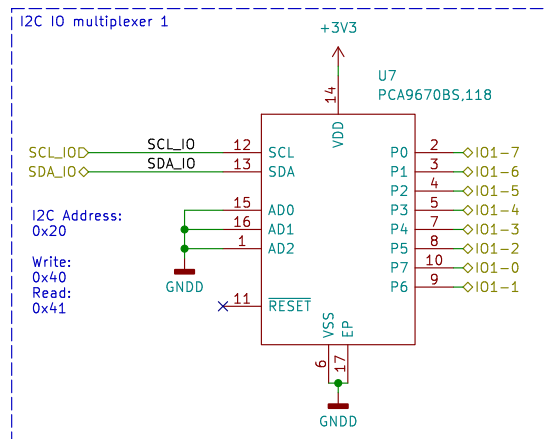
Size: A4

Date: 06-09-2023

Rev: V1.0

KiCad E.D.A. kicad 7.0.9

Id: 3/4



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Sheet: /TouchSens/

File: TouchSens_V1.0.kicad_sch

Title: **Led driver board BabySim**

Size: A4

Date: 06-09-2023

KiCad E.D.A. kicad 7.0.9

Rev: **V1.0**

Id: 4/4