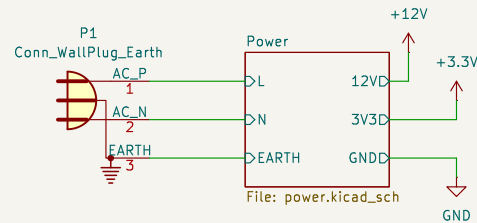
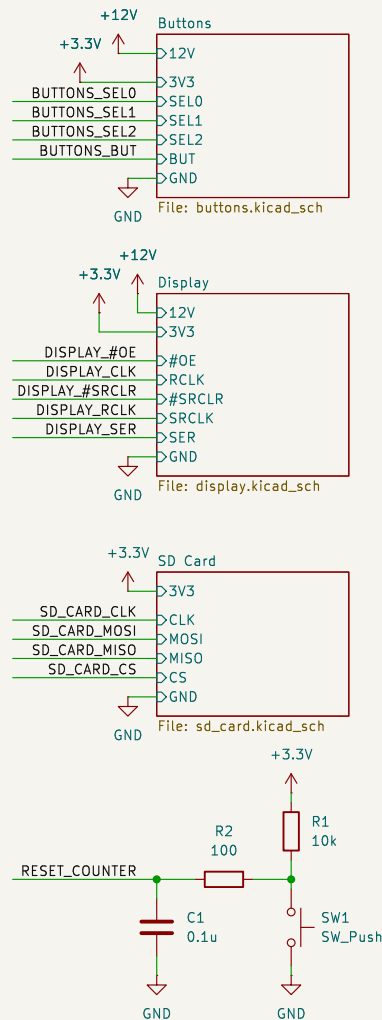
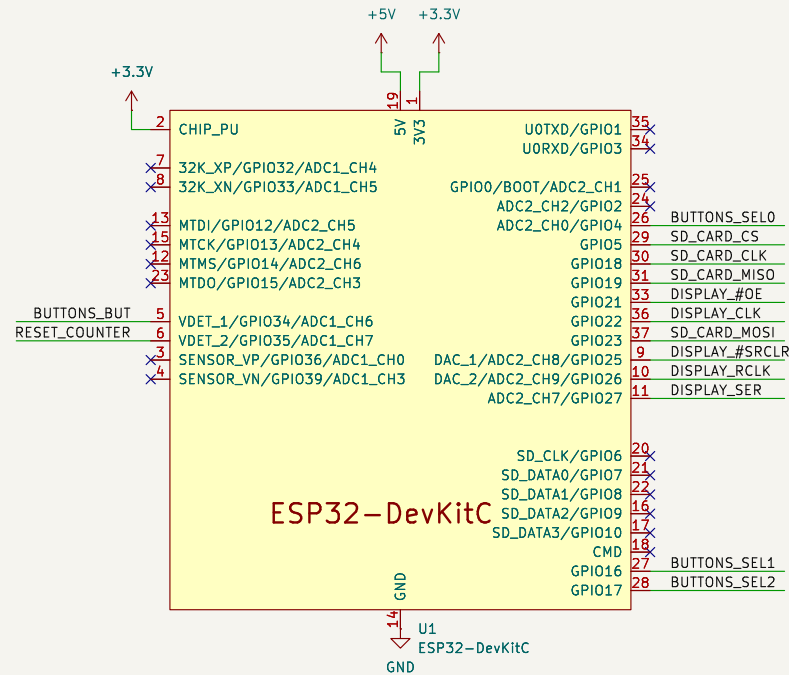


The devkit being used is a different one, and has less pins than the one showed here!!!
(I should create a symbol for the new one, but right now works)

SPI0: GPIO6–11 are usually connected to the SPI flash integrated on the module and therefore should not be used for other purposes.

JTAG: GPIO12–15 are usually used for inline debug.



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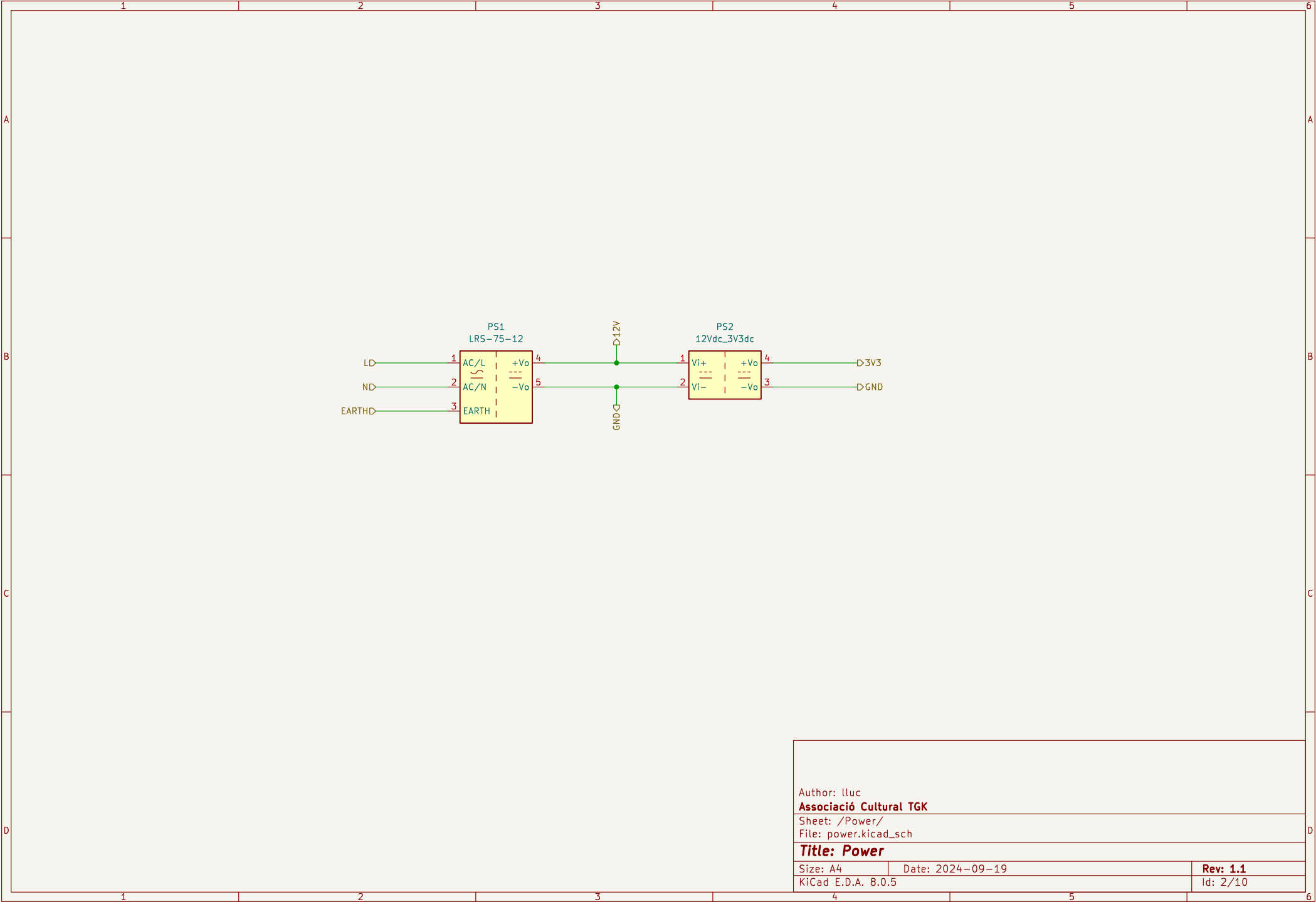
Sheet: /
File: compta-birres.kicad_sch

Title: Root

Size: A4
KiCad E.D.A. 8.0.5

Date: 2024-09-29

Rev: 1.6
Id: 1/10

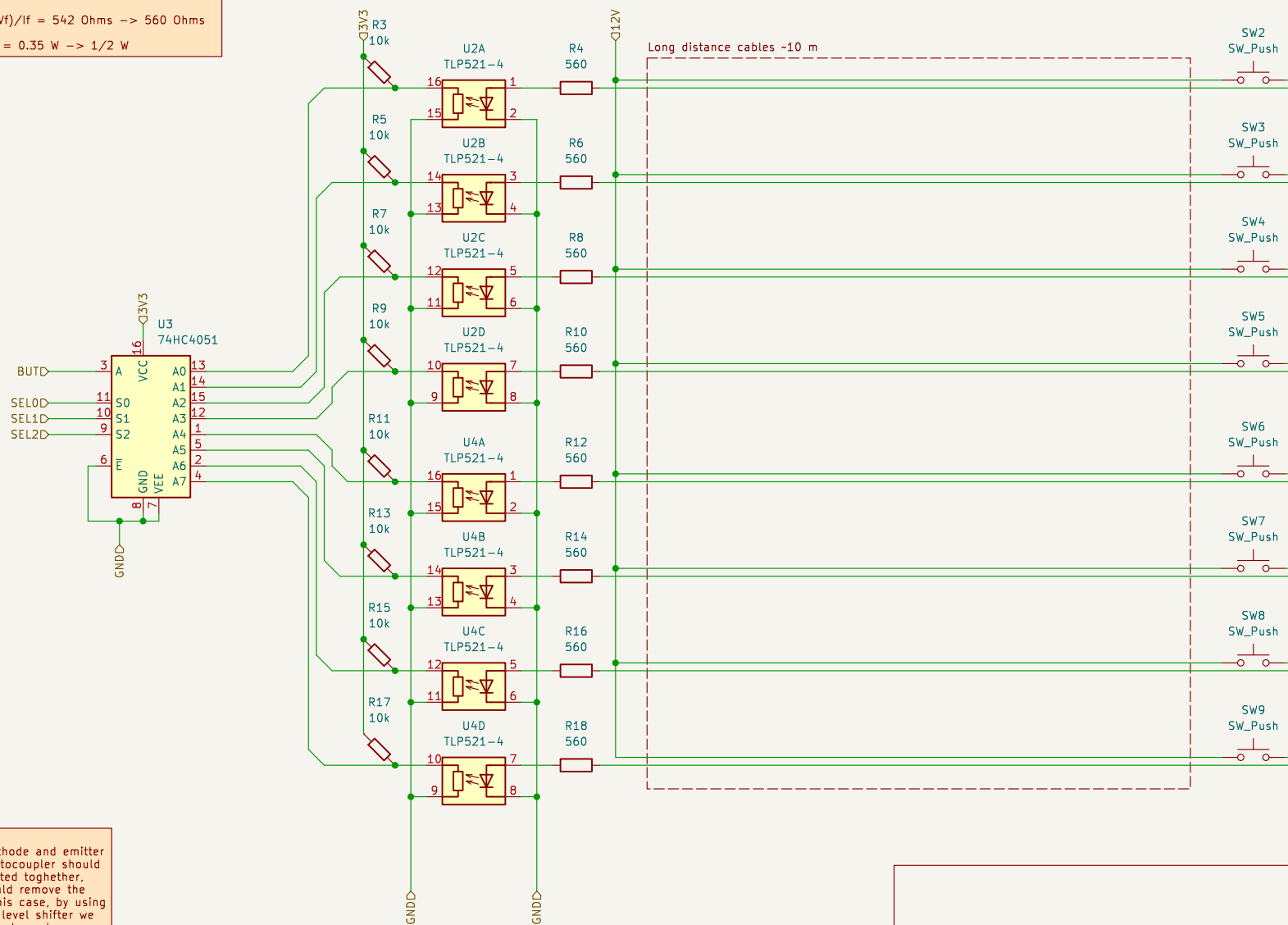


Ra (Anode resistor on optocoupler) Calculation:

$V_f = 1.15 \text{ V}$
 $I_f = 20 \text{ mA}$

$R_a = (V_{cc} - V_f) / I_f = 542 \text{ Ohms} \rightarrow 560 \text{ Ohms}$

$P = R_a \cdot I_f^2 = 0.35 \text{ W} \rightarrow 1/2 \text{ W}$



NOTE:
Ideally the cathode and emitter pins of the optocoupler should not be connected together, since that would remove the isolation. In this case, by using it as a down-level shifter we do not need that much isolation only the down conversion.
For some isolation we could connect the two grounds far from the IC and not the pins at each button.

Author: lluc
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Sheet: /Buttons/
File: buttons.kicad_sch

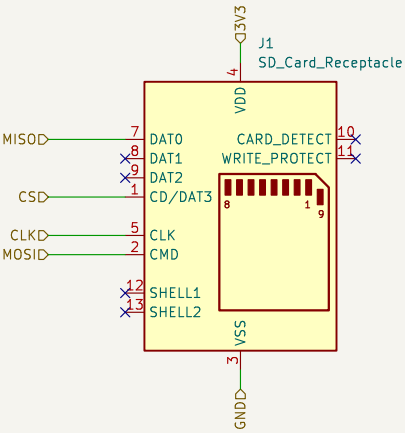
Title: Buttons

Size: A4
KiCad E.D.A. 8.0.5

Date: 2024-09-26

Rev: 1.3

Id: 3/10



Author: lluc

Associació Cultural TGK

Sheet: /SD Card/

File: sd_card.kicad_sch

Title: SD Card

Size: A4

Date: 2024-08-08

Rev: 1.1

KiCad E.D.A. 8.0.5

Id: 4/10

