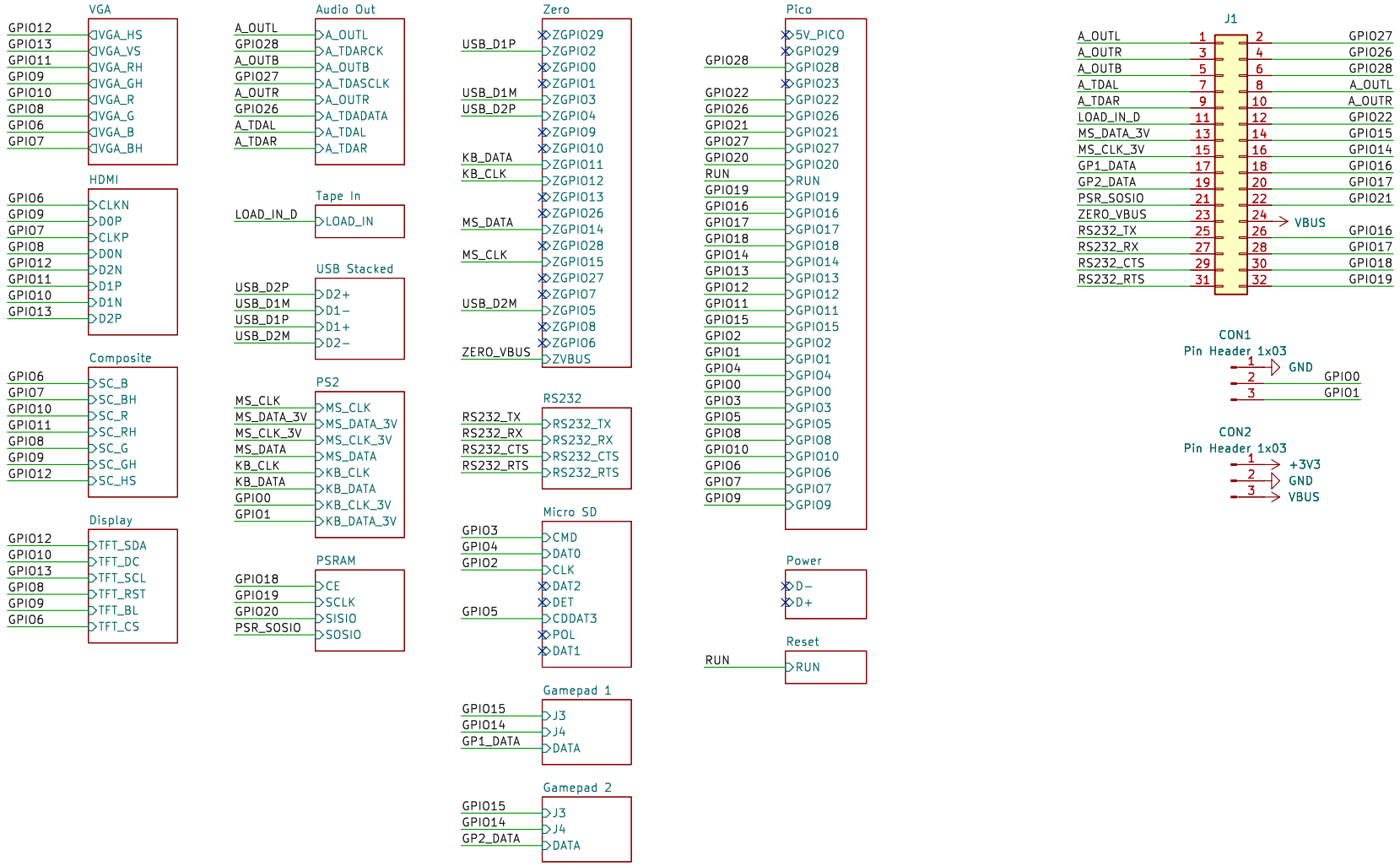


https://github.com/xtremespb/frank

Mikhail Matveev

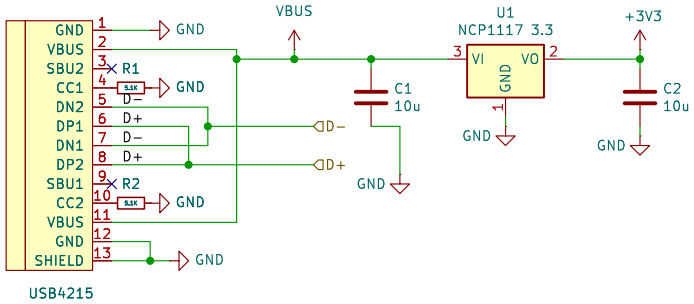
Sheet: /

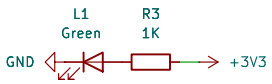
File: CMZJ2.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 1/18

The power source is USB-C connector.
The NCP1117 transforms +5V to +3V3.





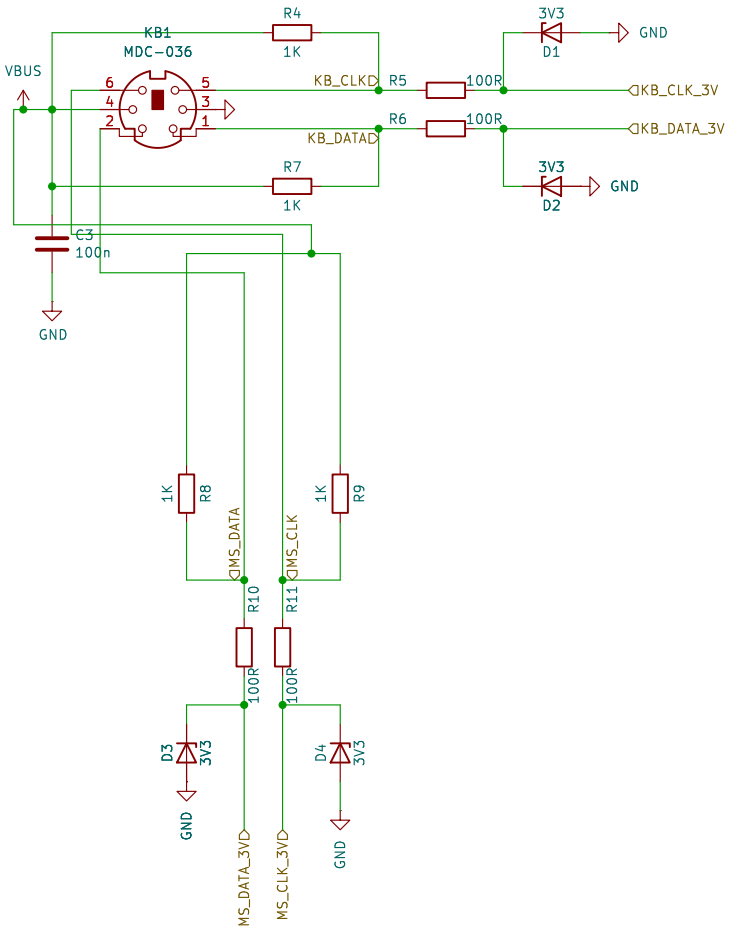
The LED indicates +3V power availability.
Usually it's green, but you decide ;-)

https://github.com/xtremespb/frank
Mikhail Matveev

Sheet: /Power/
File: power.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 3/18



https://github.com/xtremespb/frank

Mikhail Matveev

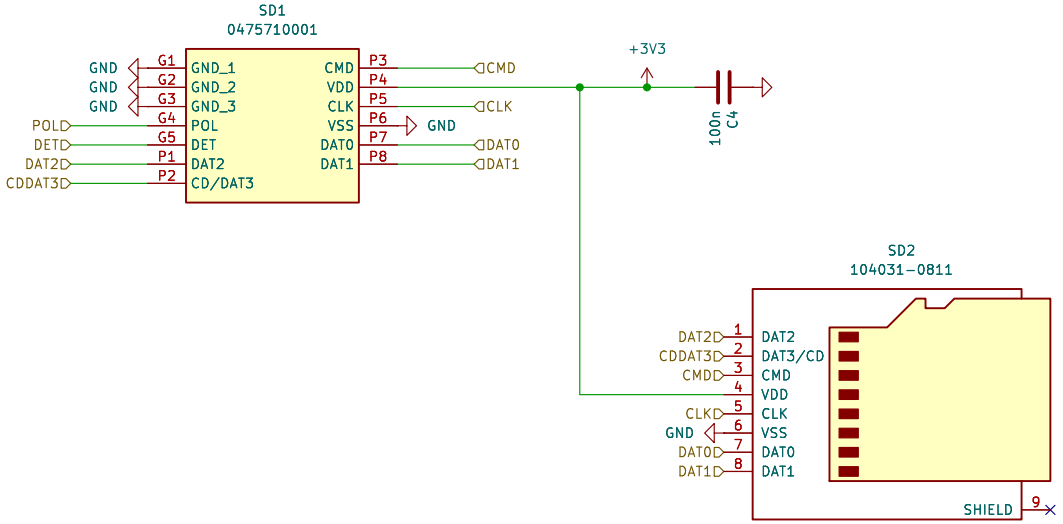
Sheet: /PS2/

File: ps2.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 4/18

Short TF Card slot is used to save some space on the PCB.



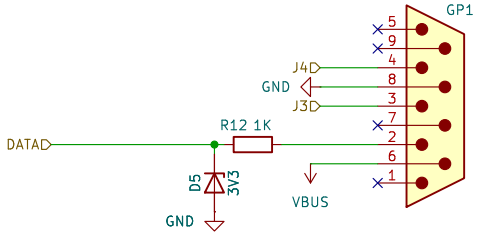
https://github.com/xtremespb/frank
Mikhail Matveev

Sheet: /Micro SD/
File: sd.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 5/18

The gamepad uses standard DB9 male socket.



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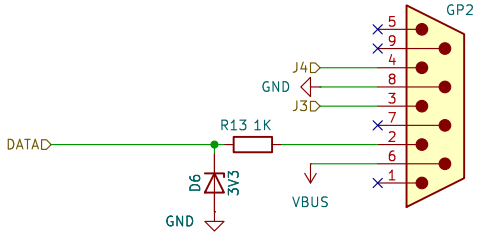
Mikhail Matveev

Sheet: /Gamepad 1/		
File: gamepad.kicad_sch		
Title: FRANK M1		
Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 7/18

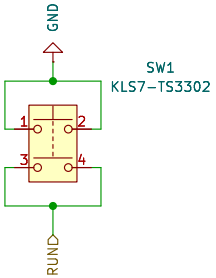
The gamepad uses standard DB9 male socket.



https://github.com/xtremespb/frank
Mikhail Matveev

Sheet: /Gamepad 2/		
File: gamepad.kicad_sch		
Title: FRANK M1		
Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 8/18

This button connects RUN pin of RP2040
and GND.



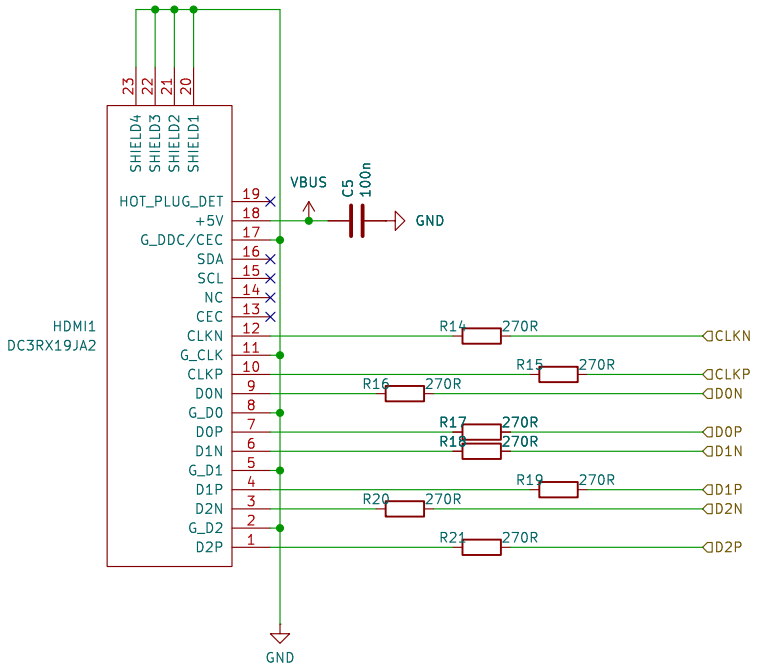
https://github.com/xtremespb/frank
Mikhail Matveev

Sheet: /Reset/
File: reset.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 9/18

HDMI video output requires the resistors to be close to the HDMI socket in order to work properly.



https://github.com/xtremespb/frank

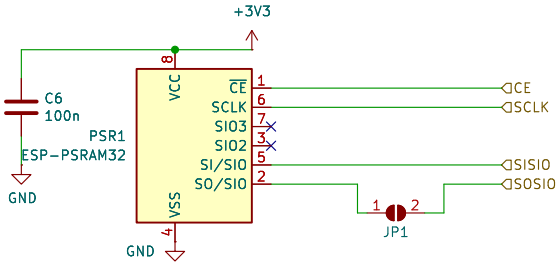
Mikhail Matveev

Sheet: /HDMI/
File: hdmi.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 10/18

As PSRAM is optional, you need to solder the jumper
if you are going to use it.



https://github.com/xtremespb/frank

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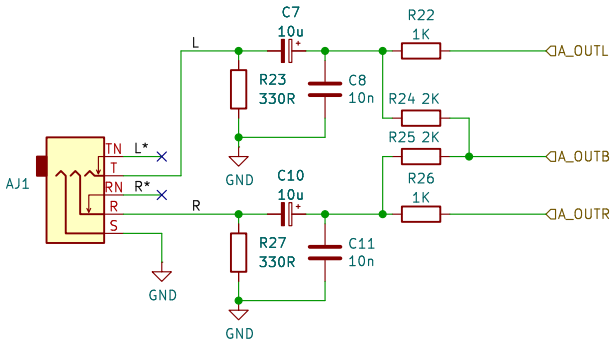
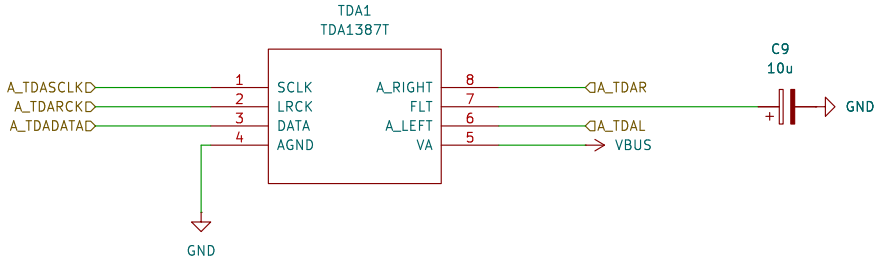
Sheet: /PSRAM/
File: psram.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 11/18





https://github.com/xtremespb/frank

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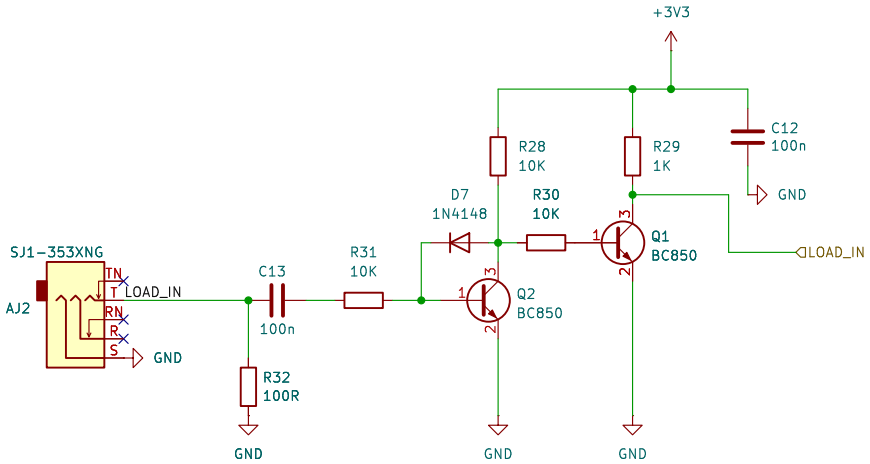
Sheet: /Audio Out/
File: audio.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 12/18

This schematics is used to load data from external audio source, e.g. tape.



https://github.com/xtremespb/frank

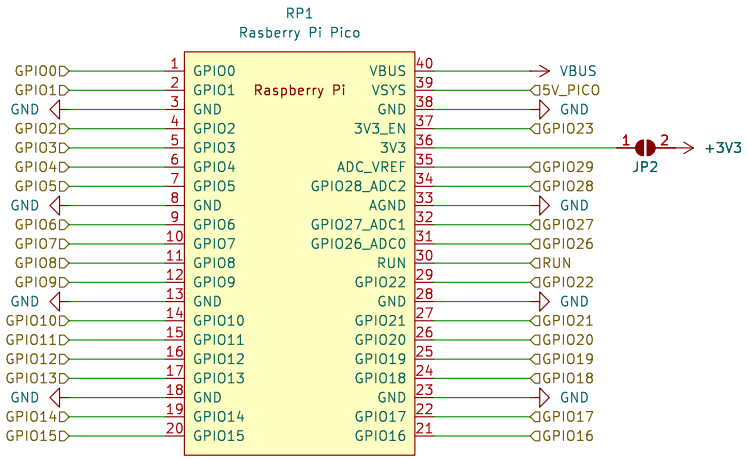
Mikhail Matveev

Sheet: /Tape In/

File: tape.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 12/18



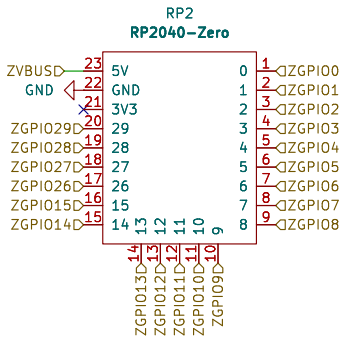
https://github.com/xtremespb/frank

Mikhail Matveev

Sheet: /Pico/
File: pico.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 12/18



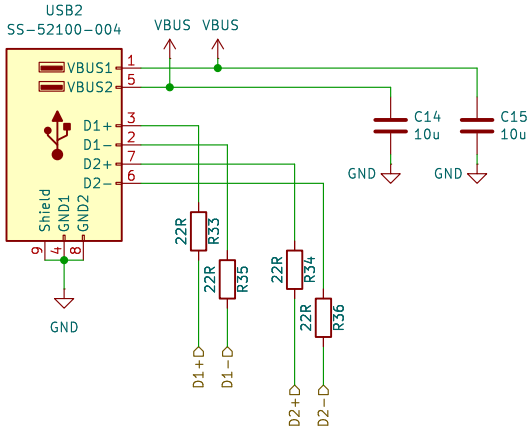
https://github.com/xtremespb/frank

Mikhail Matveev

Sheet: /Zero/
File: zero.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 14/18



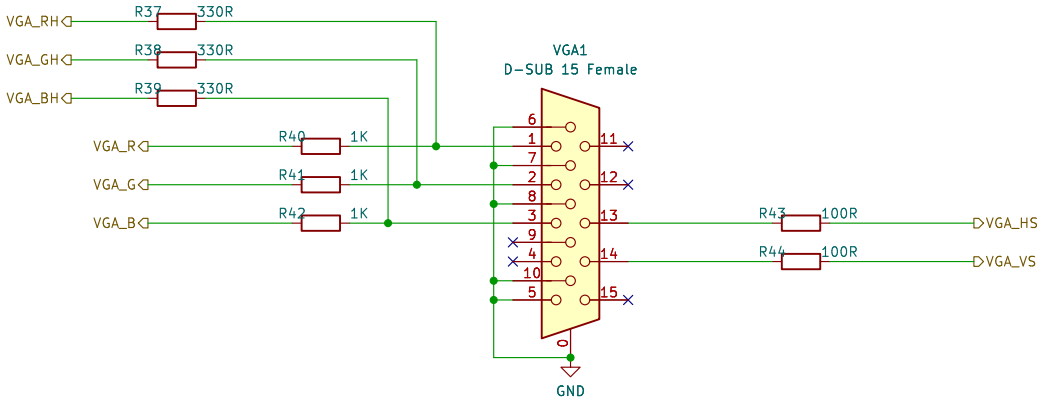
https://github.com/xtremespb/frank

Mikhail Matveev

Sheet: /USB Stacked/
File: usbstack.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 15/18



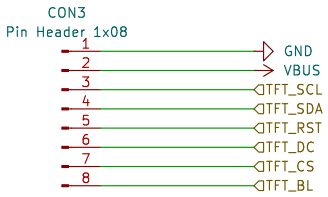
https://github.com/xtremespb/frank

Mikhail Matveev

Sheet: /VGA/
File: vga.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 16/18



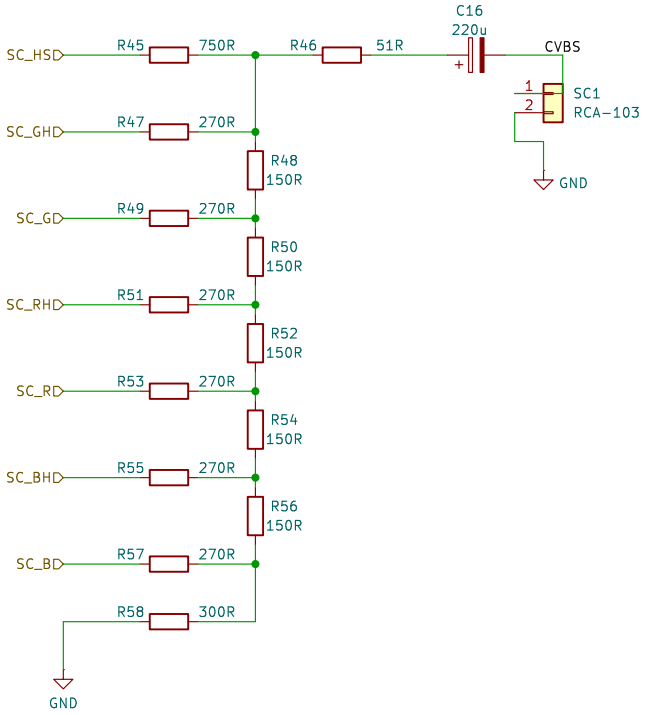
https://github.com/xtremespb/frank

Mikhail Matveev

Sheet: /Display/
File: display.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 17/18



https://github.com/xtremespb/frank

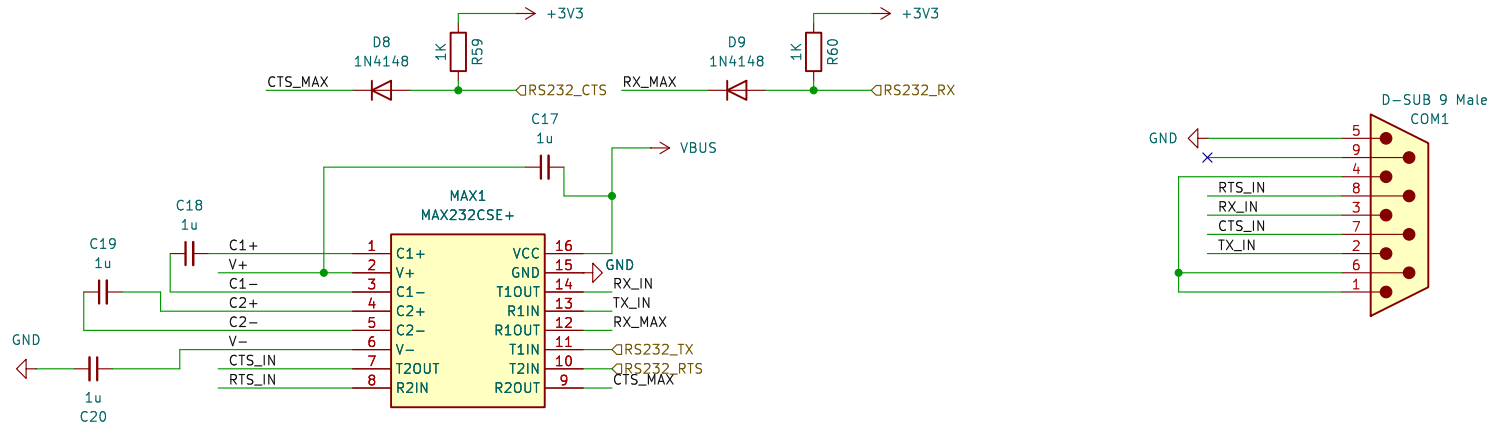
Mikhail Matveev

Sheet: /Composite/

File: composite.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025-02-18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 18/18



https://github.com/xtremespb/frank

Mikhail Matveev

Sheet: /RS232/
File: rs232.kicad_sch

Title: FRANK M1

Size: A4	Date: 2025−02−18	**Rev: 1.13**
KiCad E.D.A. 8.0.7		Id: 19/18