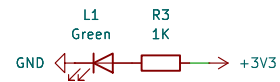
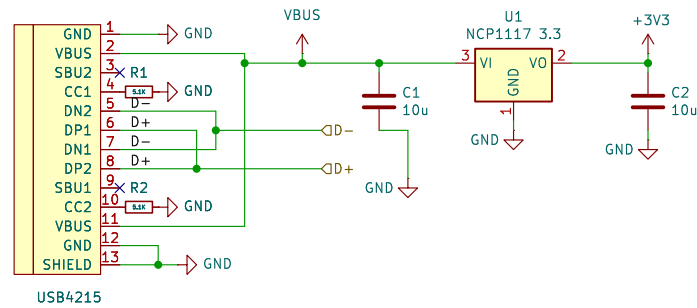


The power source is USB-C connector.
The NCP1117 transforms +5V to +3V3.



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: 2025-03-16

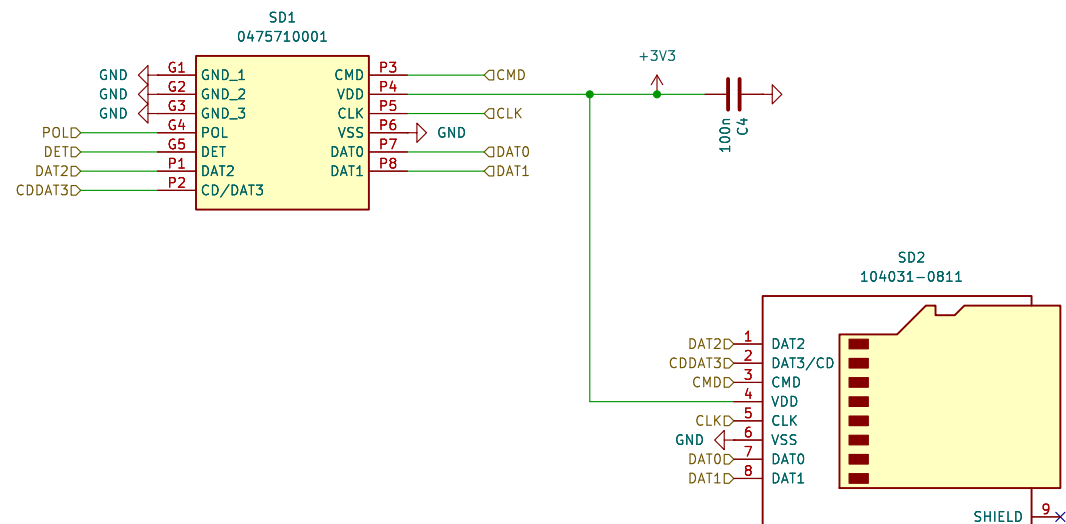
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Rev: 1.15

Id: 3/18

Id: 4/18

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



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Mikhail Matveev

Sheet: /Micro SD/

File: sd.kicad_sch

Title: FRANK M1

Size: A4

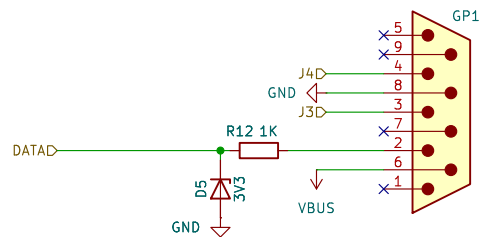
Date: 2025-03-16

Rev: 1.15

KiCad E.D.A. 9.0.0

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

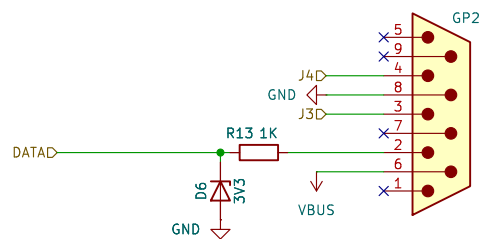
Date: 2025-03-16

Rev: 1.15

KiCad E.D.A. 9.0.0

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

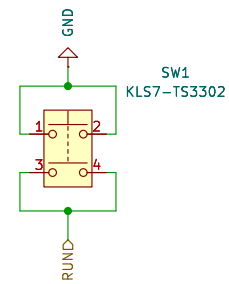
Date: 2025-03-16

Rev: 1.15

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Id: 8/18

This button connects RUN pin of RP2040
and GND.



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Mikhail Matveev

Sheet: /Reset/

File: reset.kicad_sch

Title: FRANK M1

Size: A4

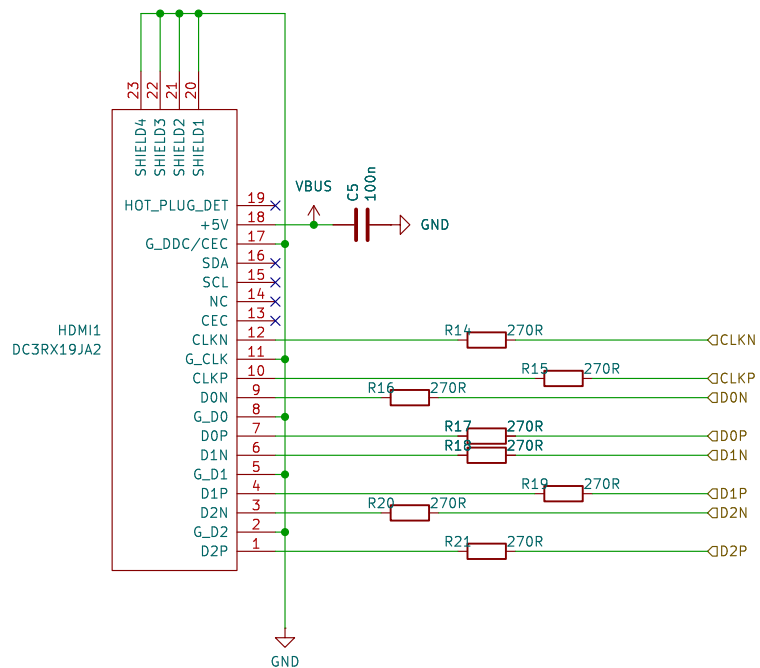
Date: 2025-03-16

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Rev: 1.15

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

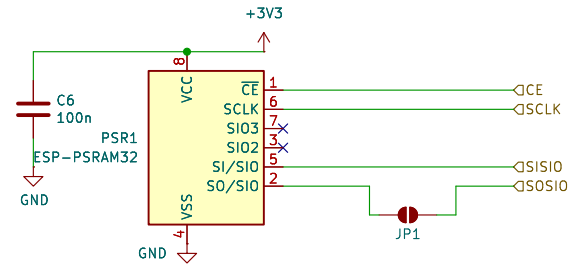
Date: 2025-03-16

Rev: 1.15

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Id: 10/18

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



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Mikhail Matveev

Sheet: /PSRAM/

File: psram.kicad_sch

Title: FRANK M1

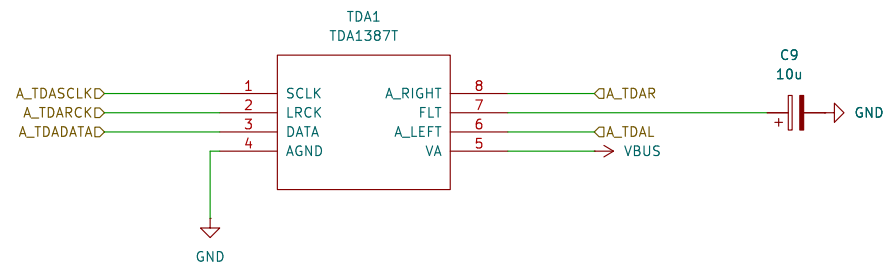
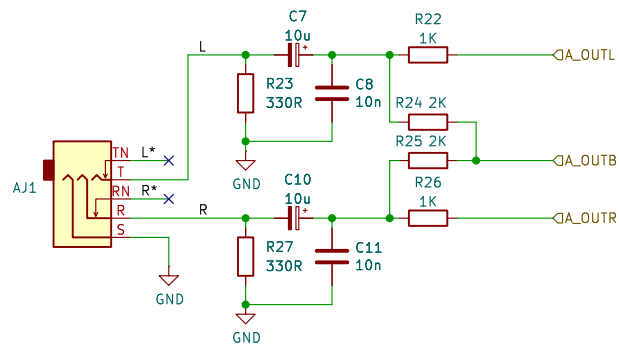
Size: A4

Date: 2025-03-16

Rev: 1.15

KiCad E.D.A. 9.0.0

Id: 11/18



<https://github.com/xtremespb/frank>

Mikhail Matveev

Sheet: /Audio Out/

File: audio.kicad_sch

Title: FRANK M1

Size: A4

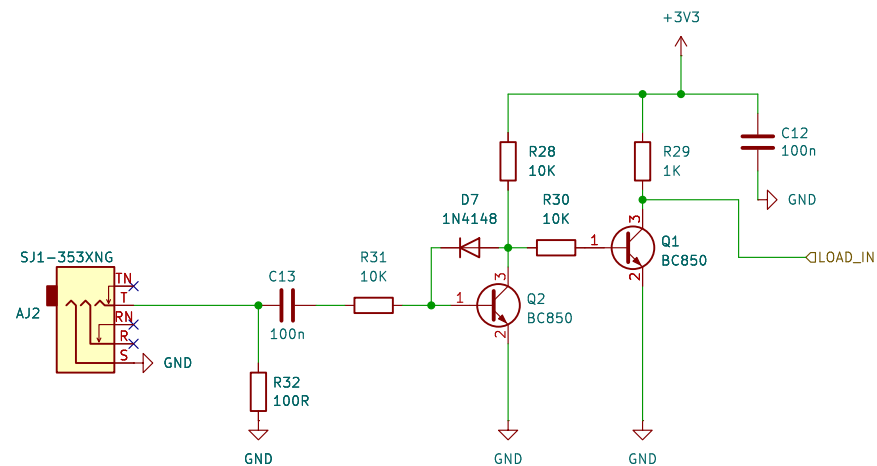
Date: 2025-03-16

Rev: 1.15

KiCad E.D.A. 9.0.0

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

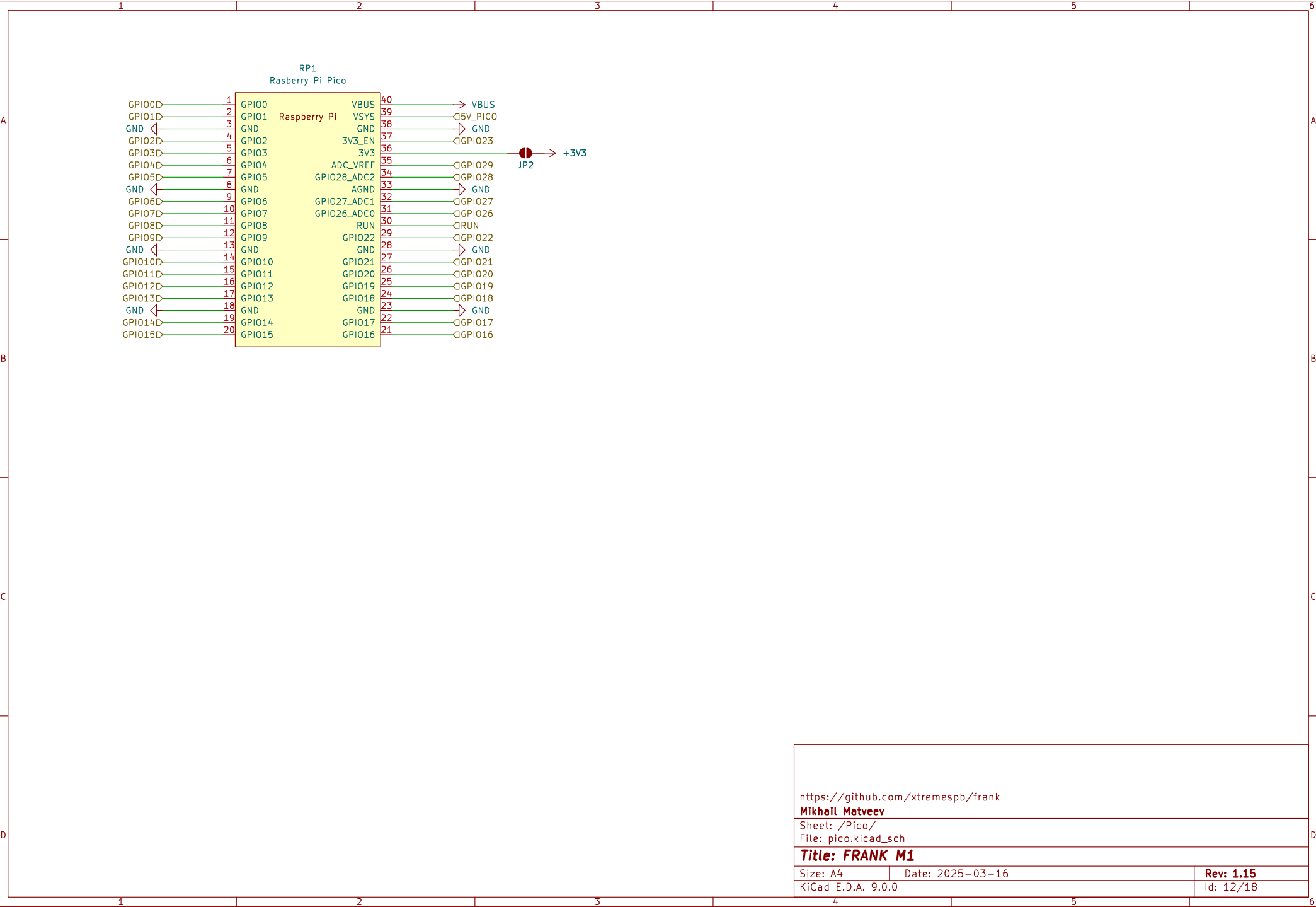
Size: A4

Date: 2025-03-16

Rev: 1.15

KiCad E.D.A. 9.0.0

Id: 12/18



<https://github.com/xtremespb/frank>

Mikhail Matveev

Sheet: /Pico/

File: pico.kicad_sch

Title: FRANK M1

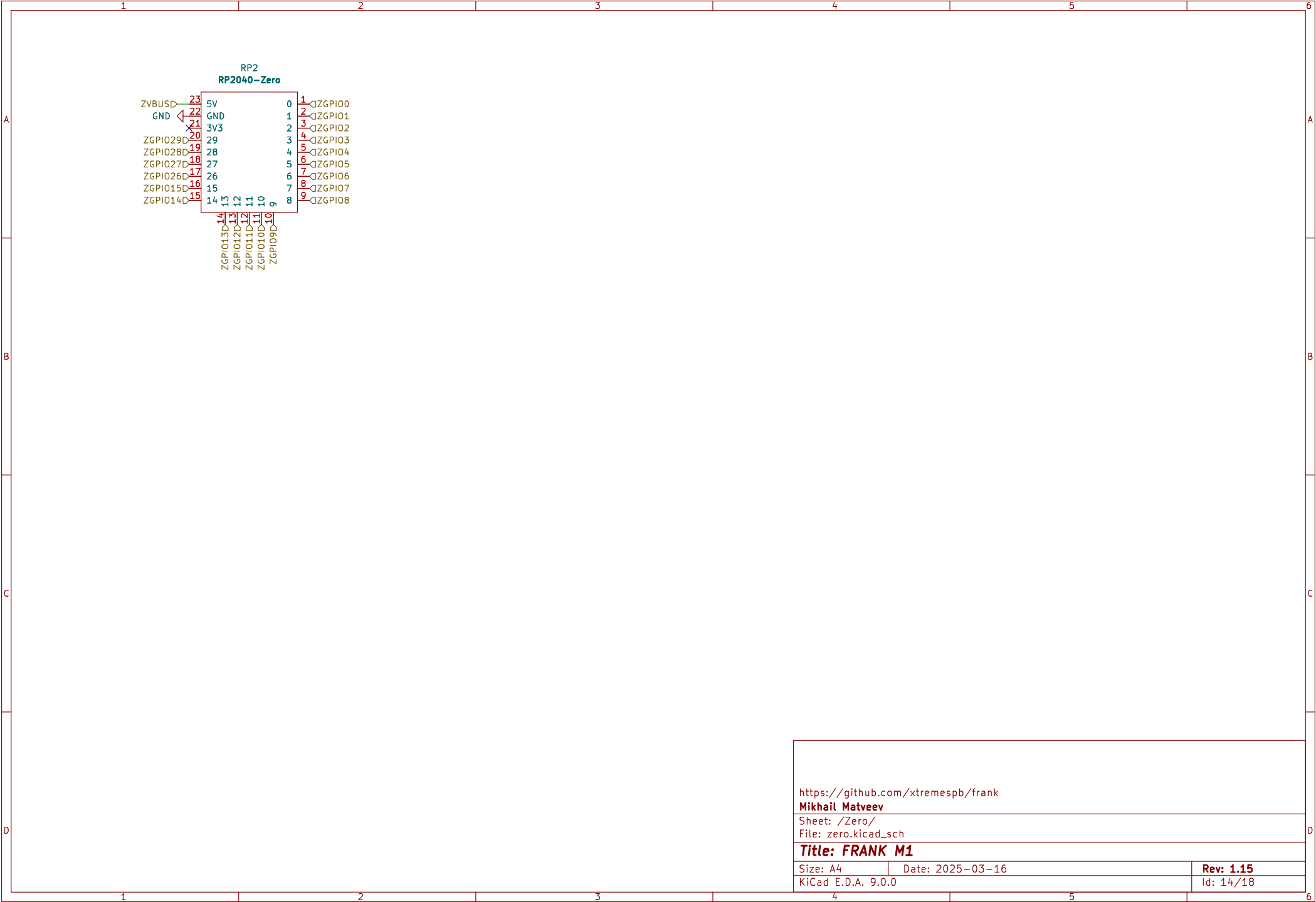
Size: A4

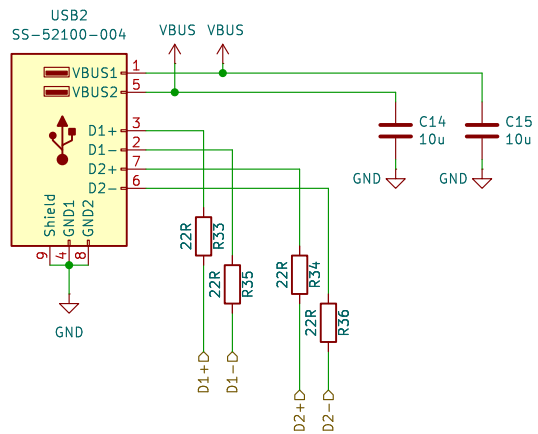
Date: 2025-03-16

Rev: 1.15

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Id: 12/18





<https://github.com/xtremespb/frank>

Mikhail Matveev

Sheet: /USB Stacked/
File: usbstack.kicad_sch

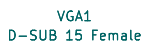
Title: FRANK M1

Size: A4 Date: 2025-03-16

KiCad E.D.A. 9.0.0

Rev: 1.15

Id: 15/18

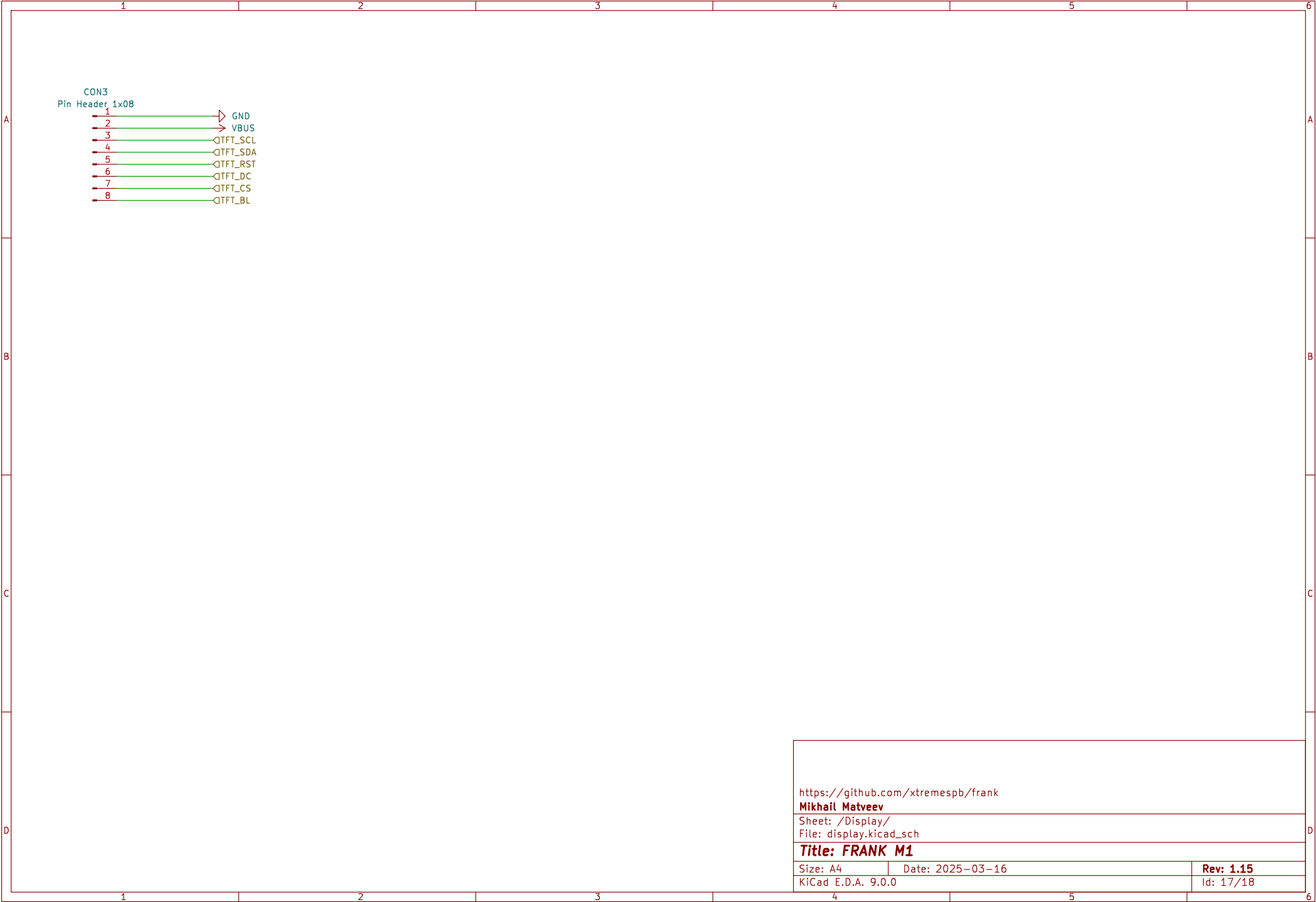


Mikhail Matveev

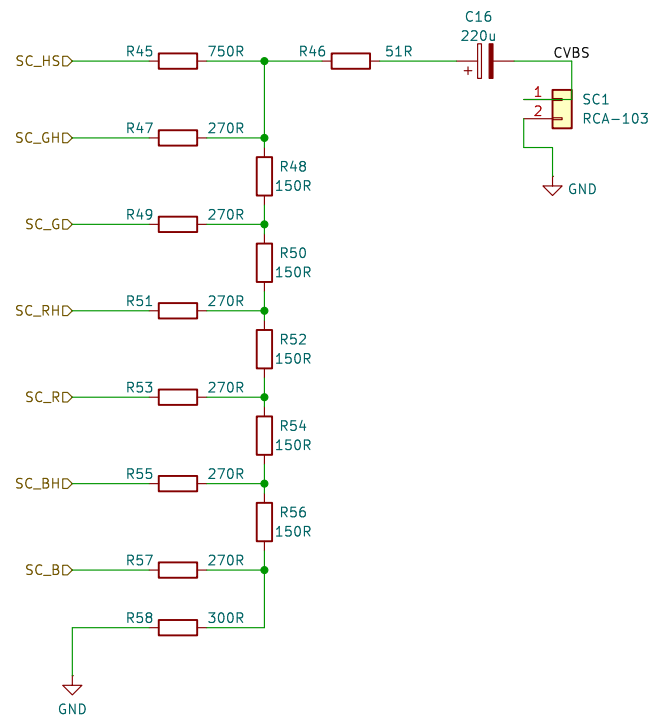
Title: FRANK M1

Rev: 1.15

Id: 16/18



https://github.com/xtremespb/frank		
Mikhail Matveev		
Sheet: /Display/ File: display.kicad_sch		
Title: FRANK M1		
Size: A4	Date: 2025-03-16	Rev: 1.15
KiCad E.D.A. 9.0.0		Id: 17/18



<https://github.com/xtremespb/frank>

Mikhail Matveev

Sheet: /Composite/

File: composite.kicad_sch

Title: FRANK M1

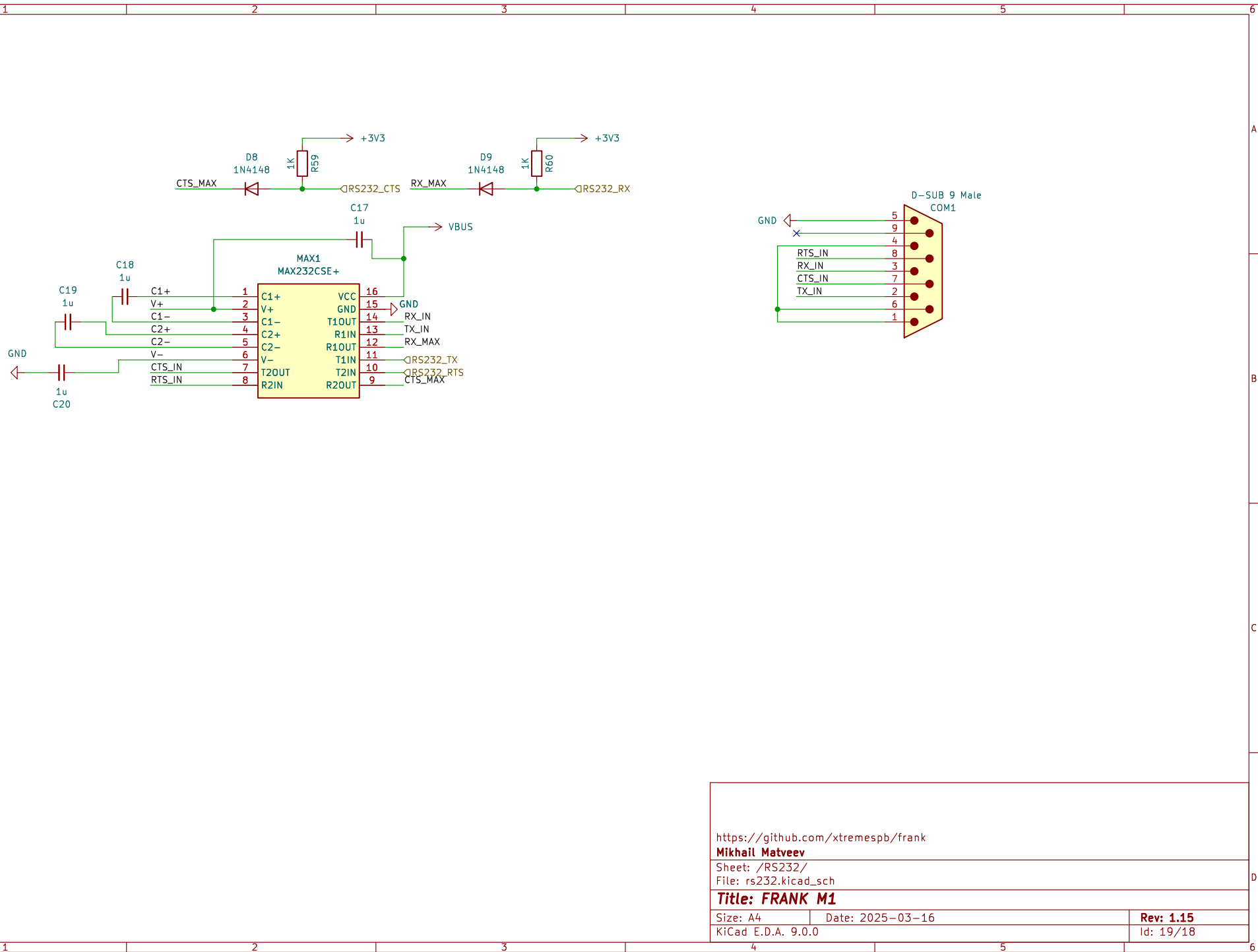
Size: A4

Date: 2025-03-16

Rev: 1.15

KiCad E.D.A. 9.0.0

Id: 18/18



<https://github.com/xtremespb/frank>

Mikhail Matveev

Sheet: /RS232/

File: rs232.kicad_sch

Title: FRANK M1

Size: A4

Date: 2025-03-16

Rev: 1.15

KiCad E.D.A. 9.0.0

Id: 19/18