




# Experimental USB 3 adapter for GMM-7550 Module

Sheet #	Description
1	Title page
2	Block diagram
3	USB 3 Type-C Connector and 5 Gbps switch
4	USB 1.1 and USB 2.0 transceivers
5	GMM-7550 Module Power and Control
6	GMM-7550 SA and SB IO banks
7	RP2040 MCU: control, configuration, debug
8	USB 3 Power Delivery controller and Power Path

Revision	Date	Notes
0.9	2025-07-24	Initial schematic release (pre-layout)





Copyright (c) 2025 Anton Kuzmin <ak@gmm7550.dev>

This documentation is distributed under the terms of the CERN-OHL-P v2 (<https://cern.ch/cern-ohl>).

This project was funded through the NGIO Common Fund, a fund established by NLnet foundation.

Sheet: /

File: usb3-gmm7550.kicad\_sch

Title: GMM-7550 USB3 Adapter

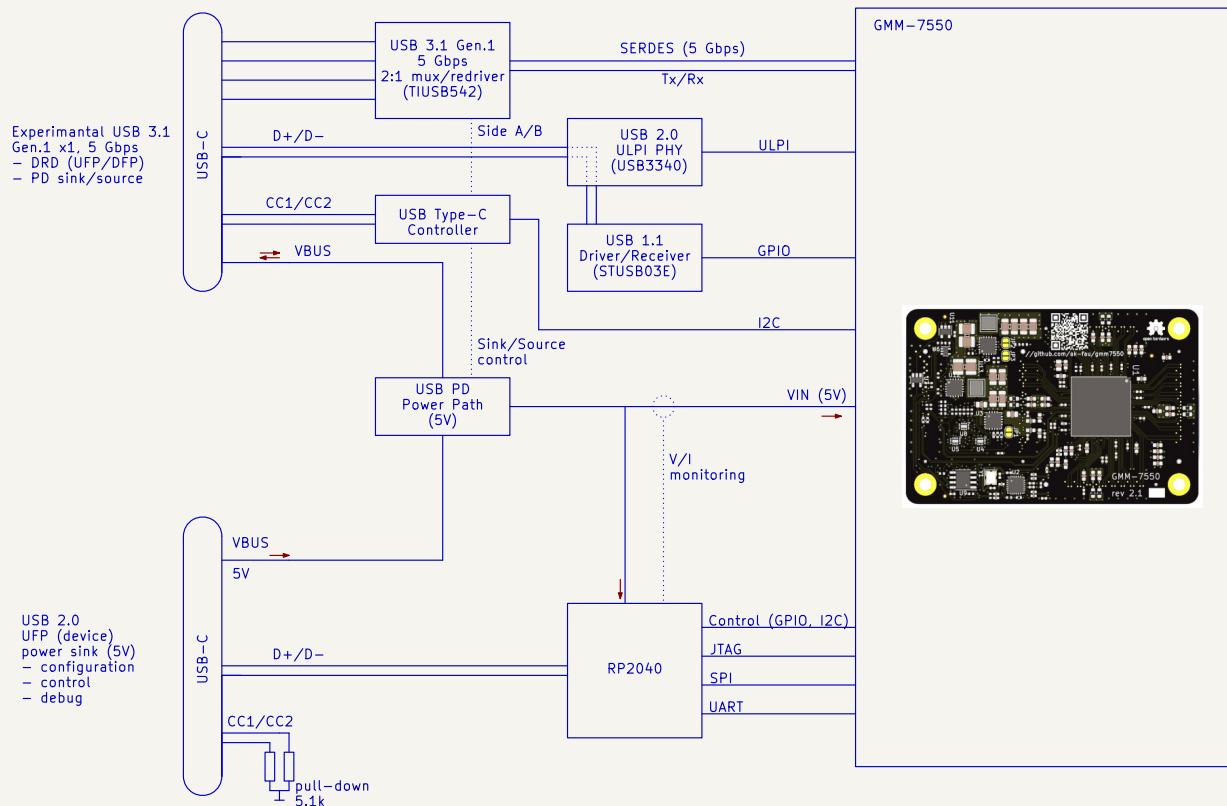
Size: A4

Date: 2025-07-24

Rev: 0.9

KiCad E.D.A. 9.0.1

Id: 1/8



Copyright (c) 2025 Anton Kuzmin <ak@gmm7550.dev>

This documentation is distributed under the terms of the CERN-OHL-P v2 (<https://cern.ch/cern-ohl>).

This project was funded through the NGI0 Common Fund, a fund established by NLnet foundation.

Sheet: /Block diagram/

File: block\_diag.kicad\_sch

**Title: GMM-7550 USB3 Adapter**

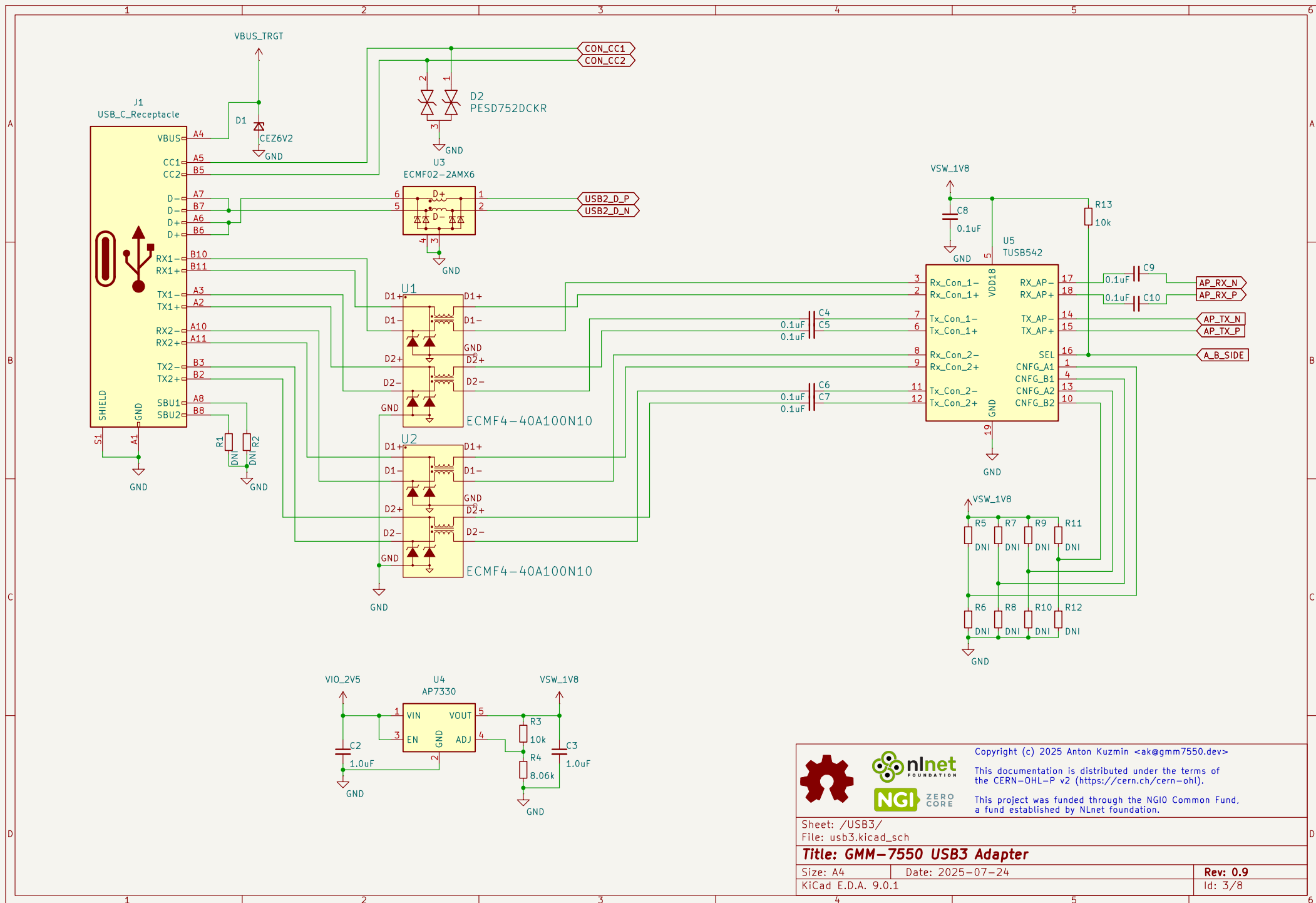
Size: A4

Date: 2025-07-24

Rev: 0.9

KiCad E.D.A. 9.0.1

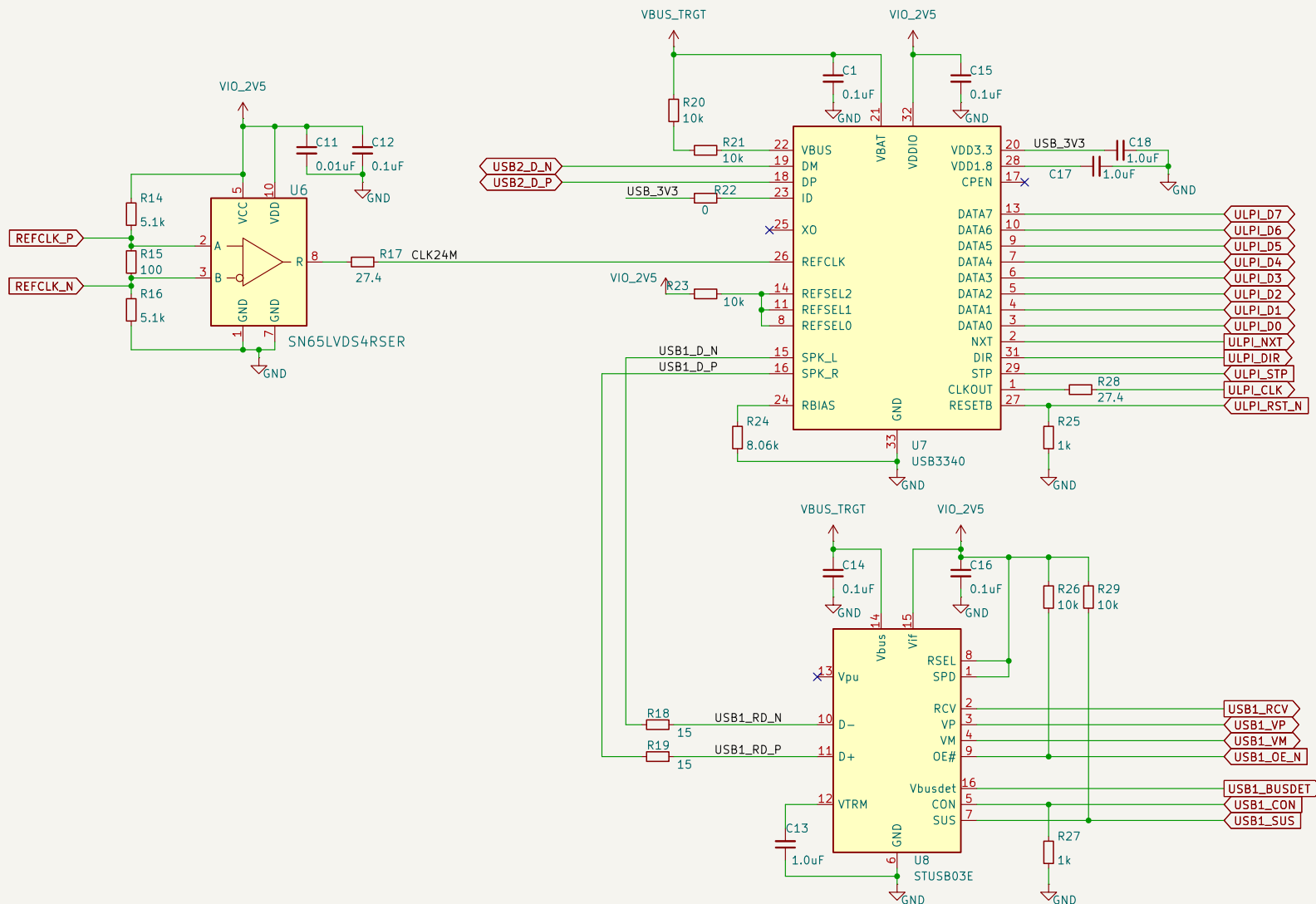
Id: 2/8



Copyright (c) 2025 Anton Kuzmin <ak@gmm7550.dev>

This documentation is distributed under the terms of the CERN-OHL-P v2 (<https://cern.ch/cern-ohl>).

This project was funded through the NGI0 Common Fund, a fund established by NLnet foundation.



Copyright (c) 2025 Anton Kuzmin <ak@mmm7550.dev>

This documentation is distributed under the terms of the CERN-OHL-P v2 (<https://cern.ch/cern-ohl>).

This project was funded through the NGIO Common Fund, a fund established by NLnet foundation.

Sheet: /USB1\_2/  
File: usb1\_2.kicad\_sch

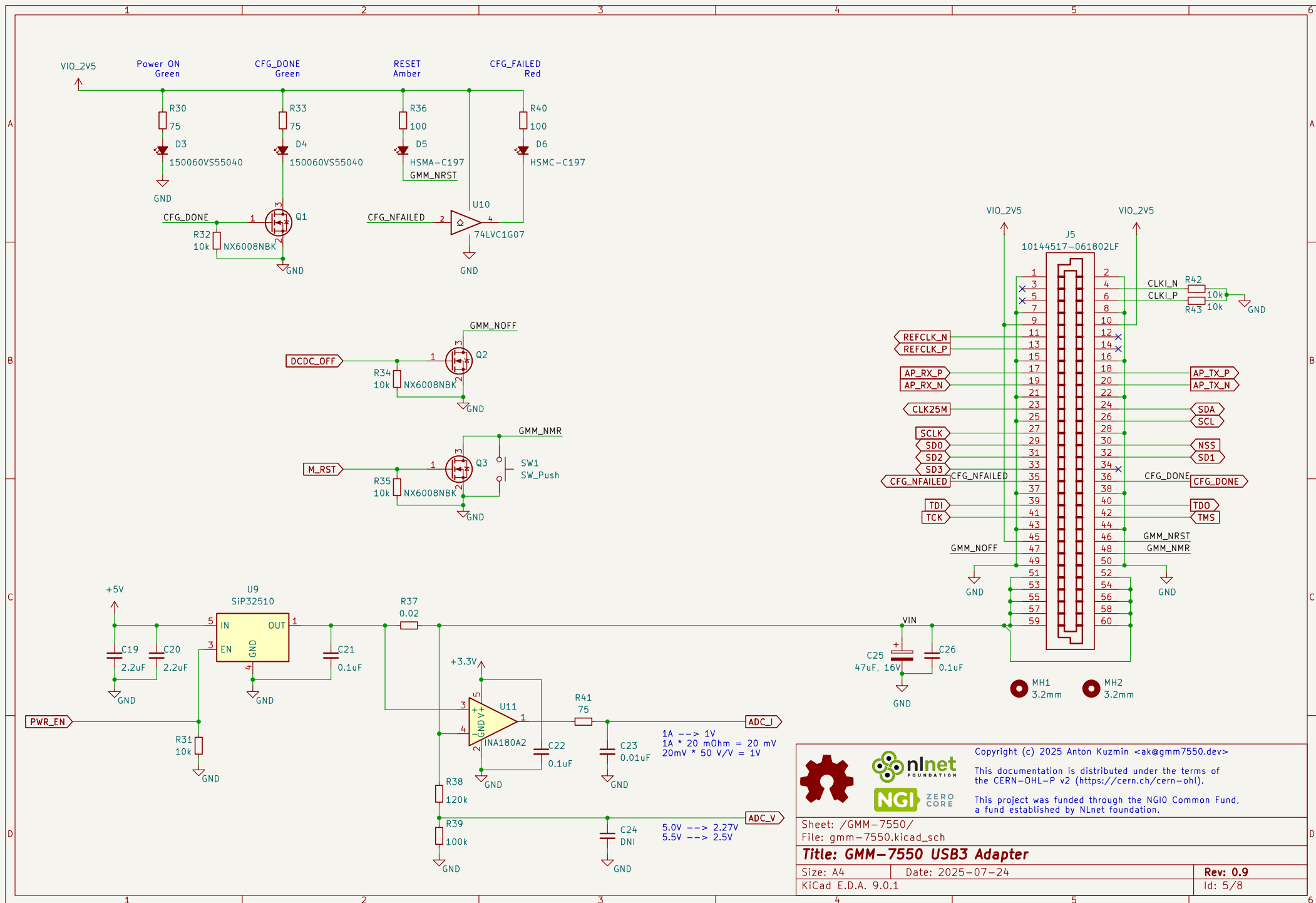
**Title: GMM-7550 USB3 Adapter**

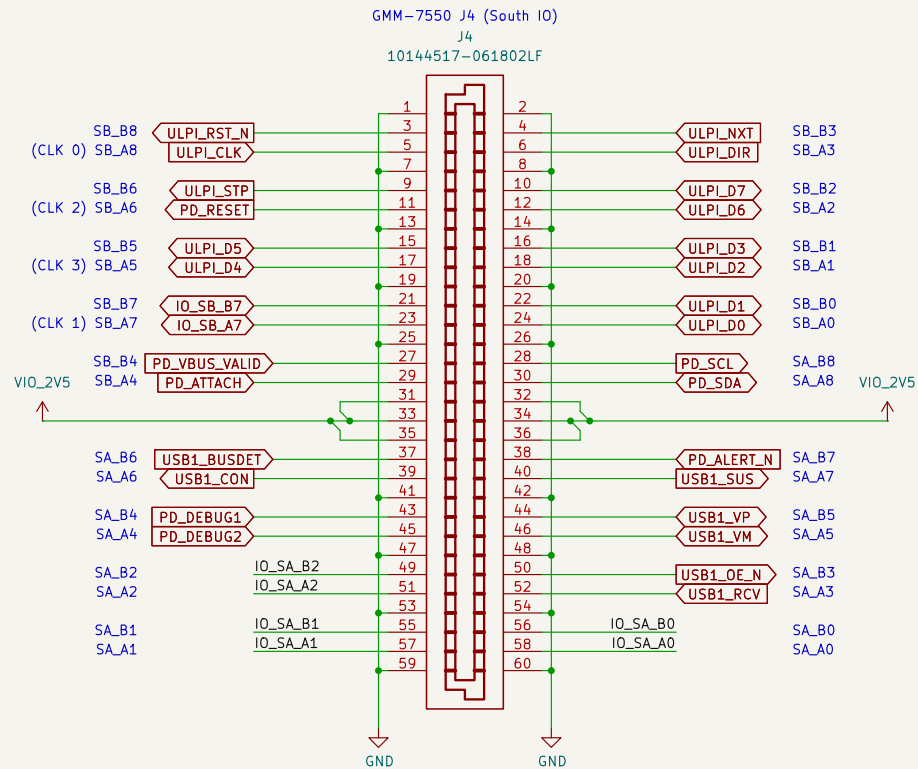
Size: A4 Date: 2025-07-24

KiCad E.D.A. 9.0.1

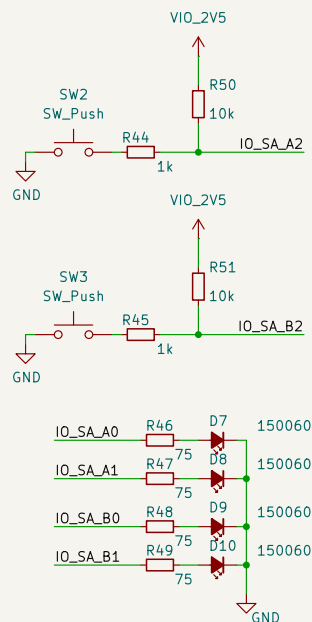
Rev: 0.9

Id: 4/8





NOTE: IO pin assignment may be changed to facilitate layout



Copyright (c) 2025 Anton Kuzmin <ak@gmm7550.dev>

This documentation is distributed under the terms of the CERN-OHL-P v2 (<https://cern.ch/cern-ohl>).

This project was funded through the NGIO Common Fund, a fund established by NLnet foundation.

Sheet: /GMM-7550 IO/  
File: gmm-7550-io.kicad\_sch

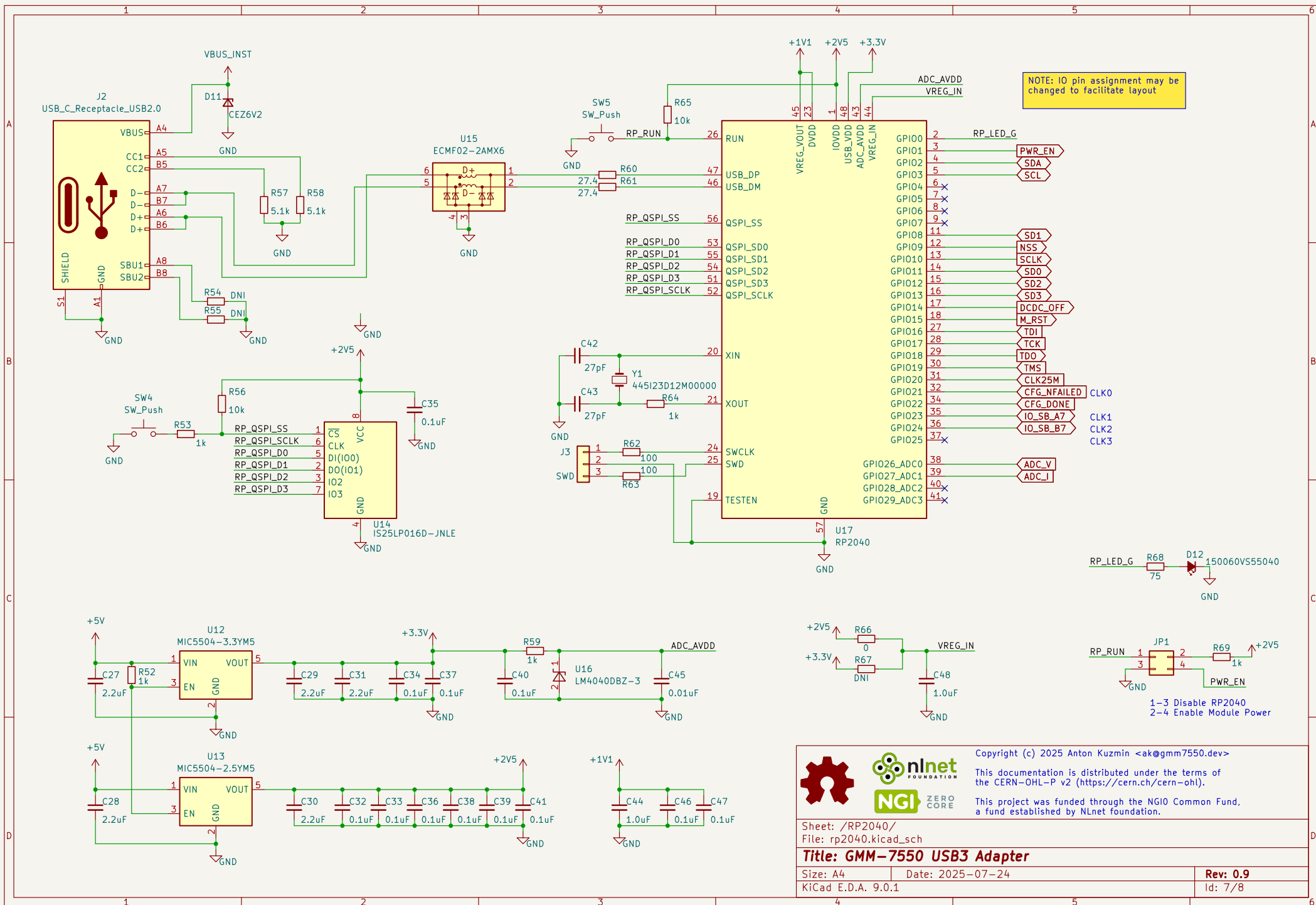
**Title: GMM-7550 USB3 Adapter**

Size: A4 Date: 2025-07-24

KiCad E.D.A. 9.0.1

Rev: 0.9

Id: 6/8



Copyright (c) 2025 Anton Kuzmin <ak@gmm7550.dev>

This documentation is distributed under the terms of the CERN-OHL-P v2 (<https://cern.ch/cern-ohl>).

This project was funded through the NGIO Common Fund, a fund established by NLnet foundation.

Sheet: /RP2040/  
File: rp2040.kicad\_sch

**Title: GMM-7550 USB3 Adapter**

Size: A4 Date: 2025-07-24

KiCad E.D.A. 9.0.1

**Rev: 0.9**

Id: 7/8

