



Experimental USB 3 adapter for GMM-7550 Module

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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
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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)
0.9.1	2025-08-06	Change U12 and U13 to AP7330 Change jumper block to a DIP-switch Bridge I2C buses (R89/R90)
0.9.2	2025-08-17	Change U14 (RP2040 SPI FLASH)
0.9.3	2025-09-02	Add USB Type-C orientation indicator
0.9.4	2025-09-18	FPGA and RP I/O rearrangement
0.9.5	2025-10-01	USB Power Delivery re-design
1.0	2025-10-10	Release to manufacturing





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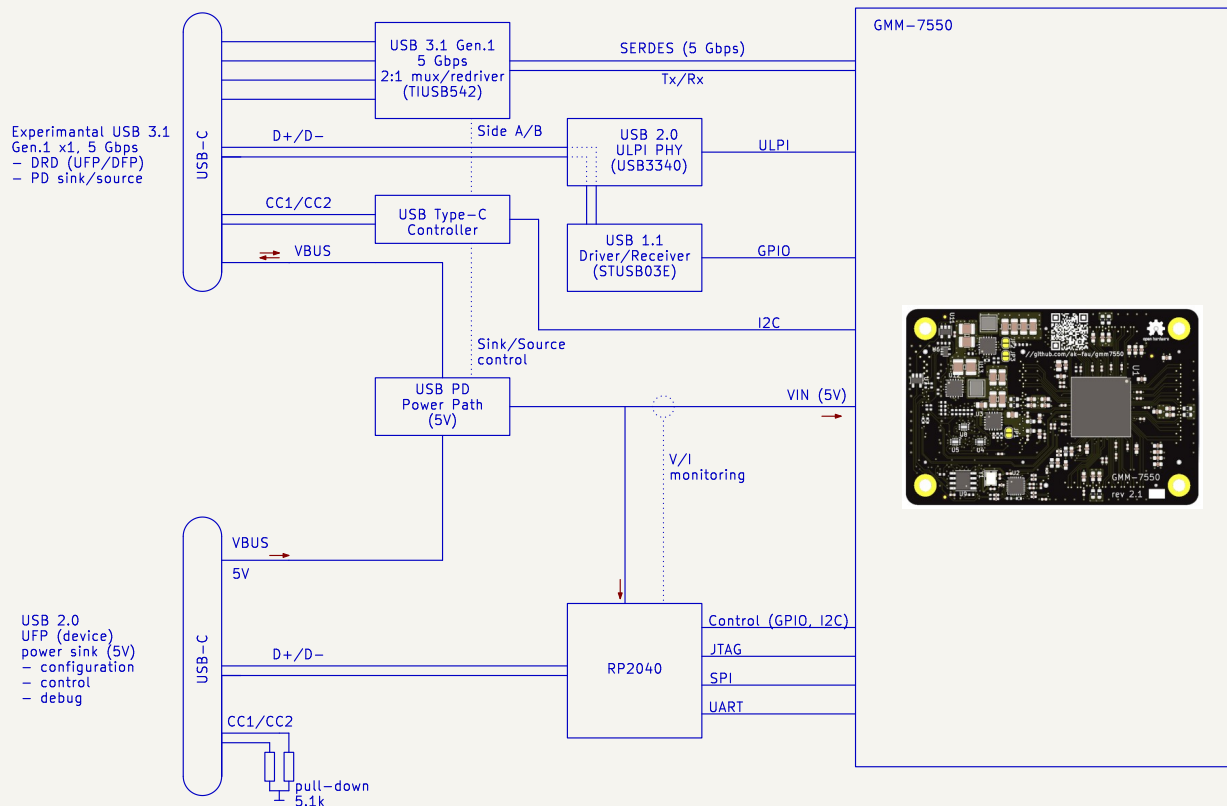
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File: usb3-gmm7550.kicad_sch

Title: GMM-7550 USB3 Adapter

Size: A4
KiCad E.D.A. 9.0.3

Date: 2025-10-10

Rev: 1.0
Id: 1/8



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Sheet: /Block diagram/

File: block_diag.kicad_sch

Title: GMM-7550 USB3 Adapter

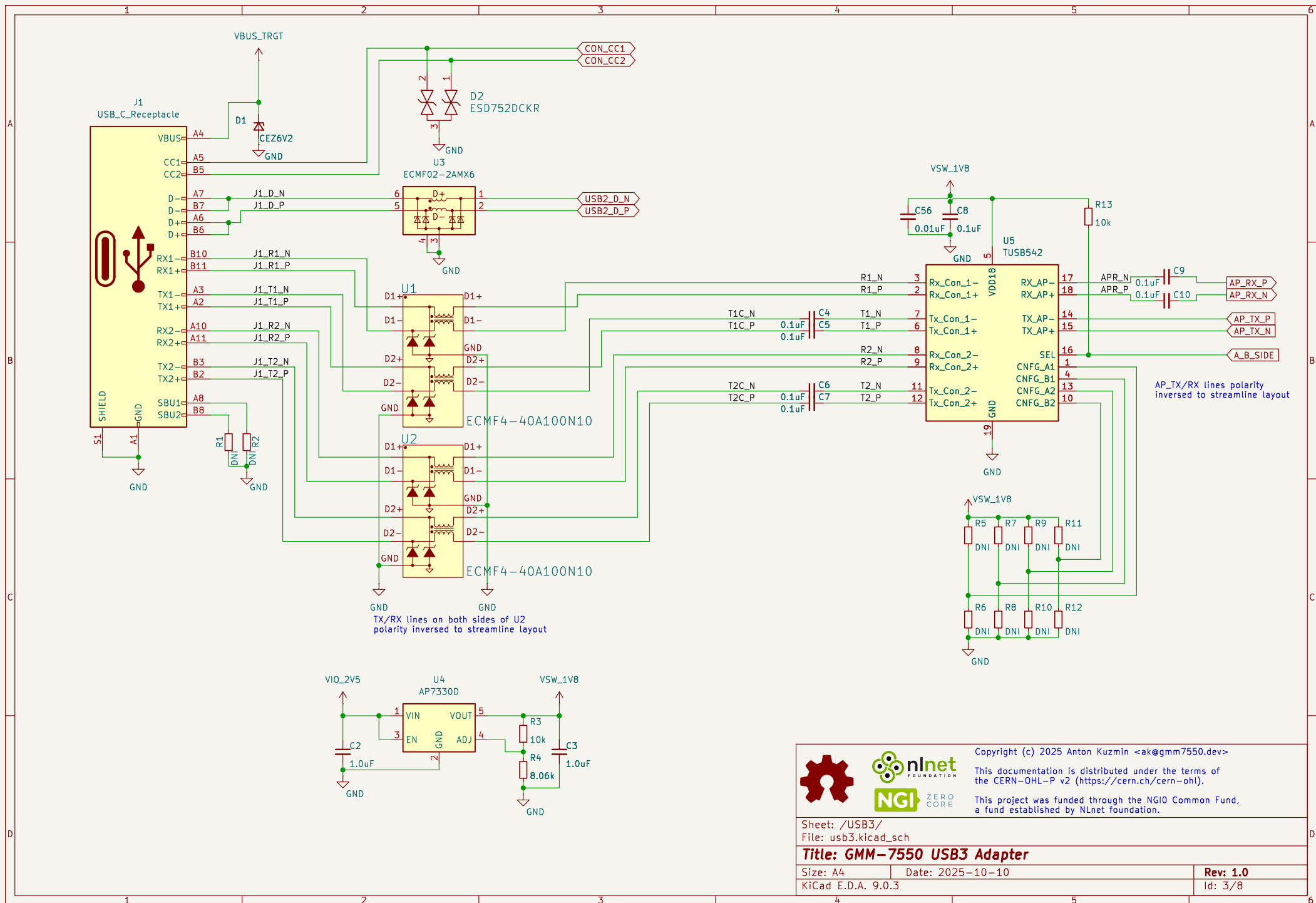
Size: A4

Date: 2025-10-10

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Sheet: /USB3/
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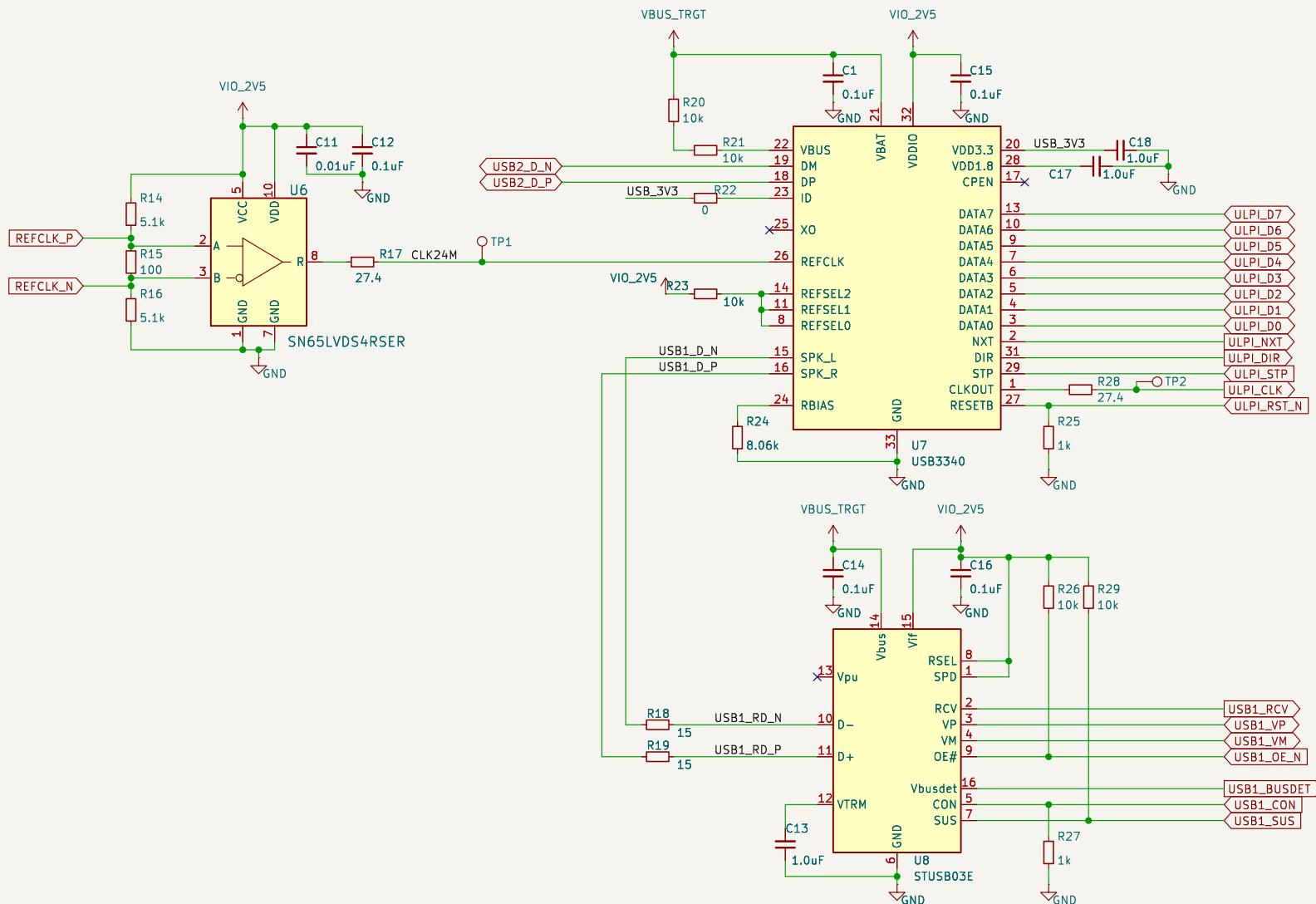
Title: GMM-7550 USB3 Adapter

Size: A4 Date: 2025-10-10

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Sheet: /USB1_2/
File: usb1_2.kicad_sch

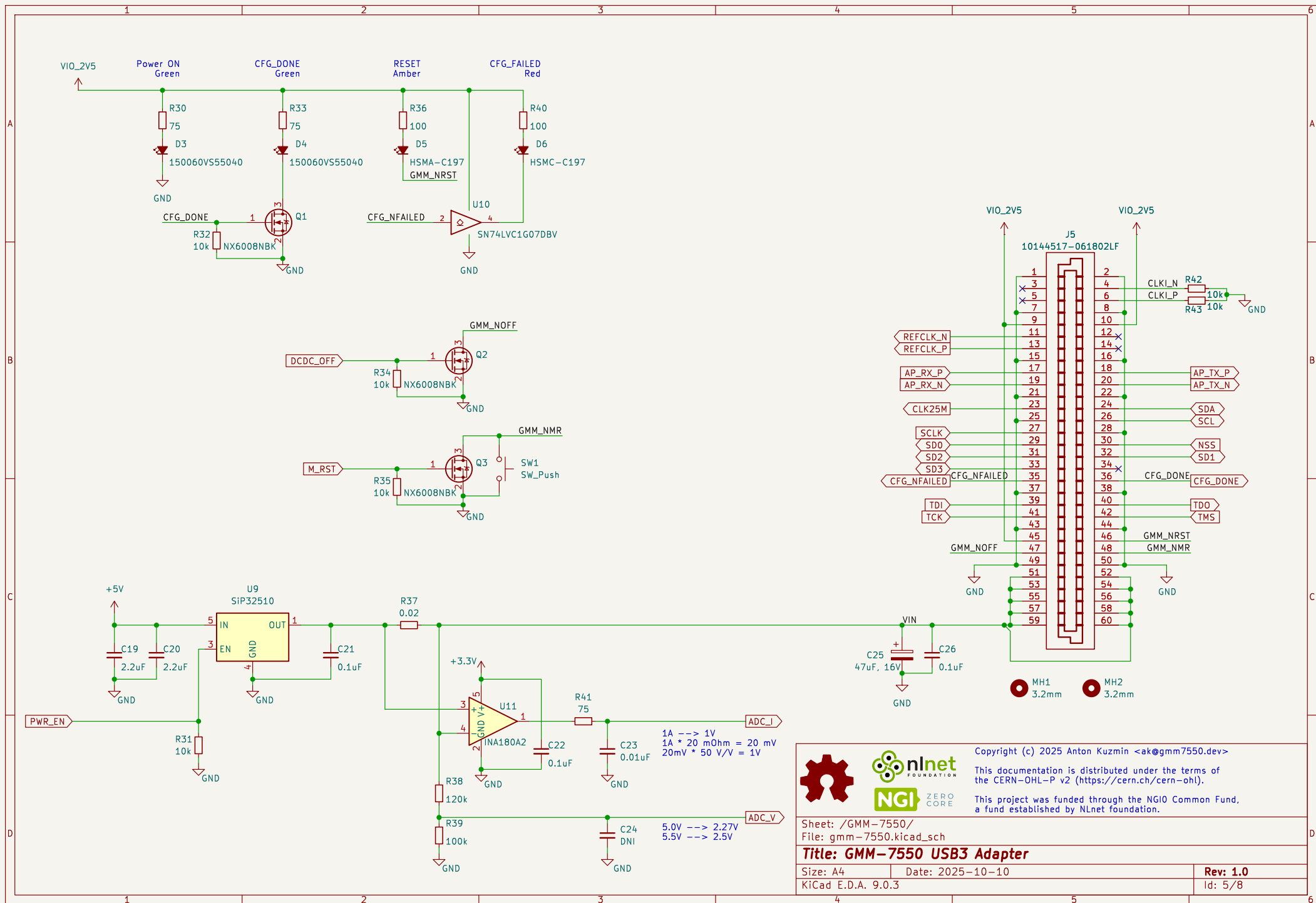
Title: GMM-7550 USB3 Adapter

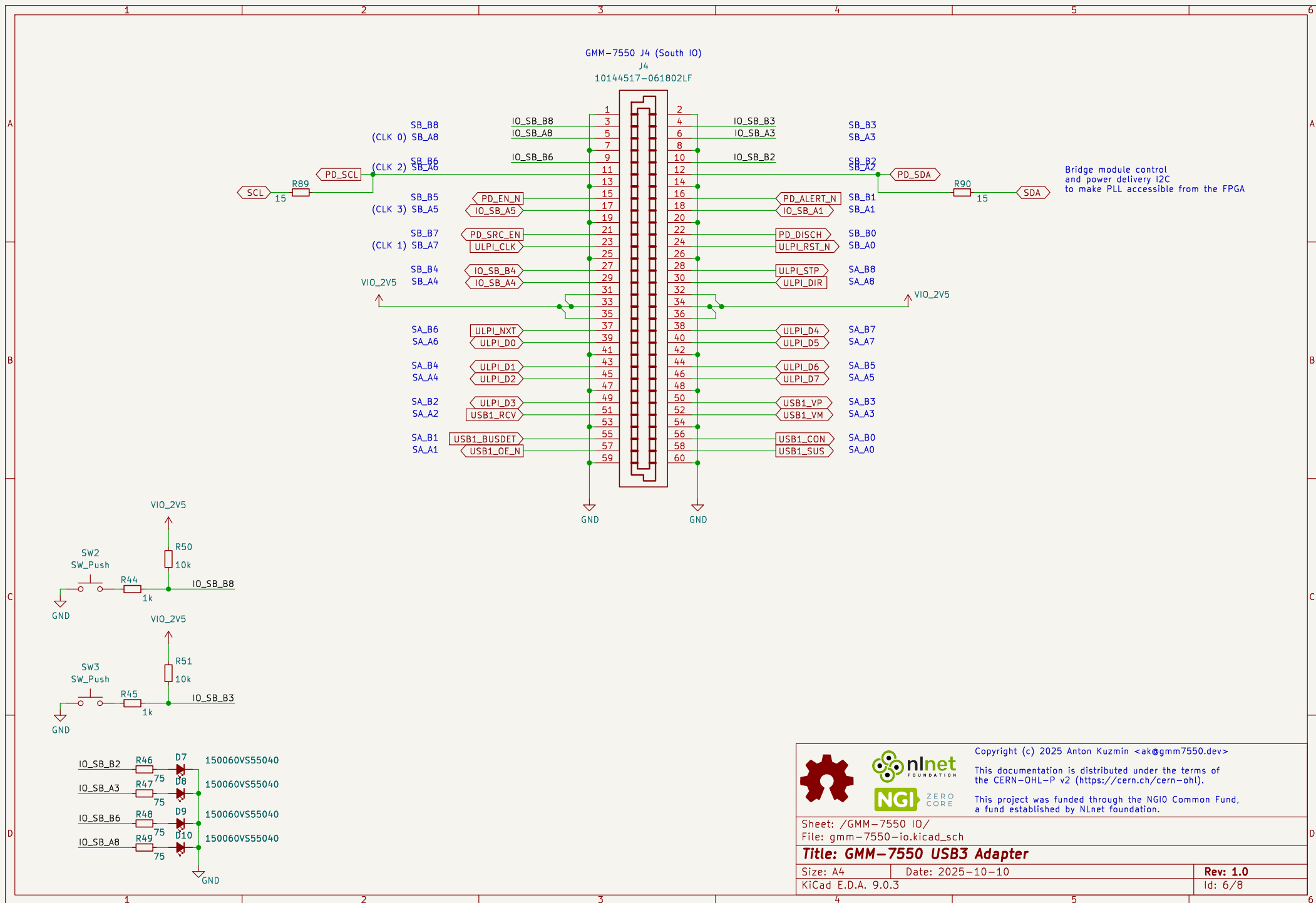
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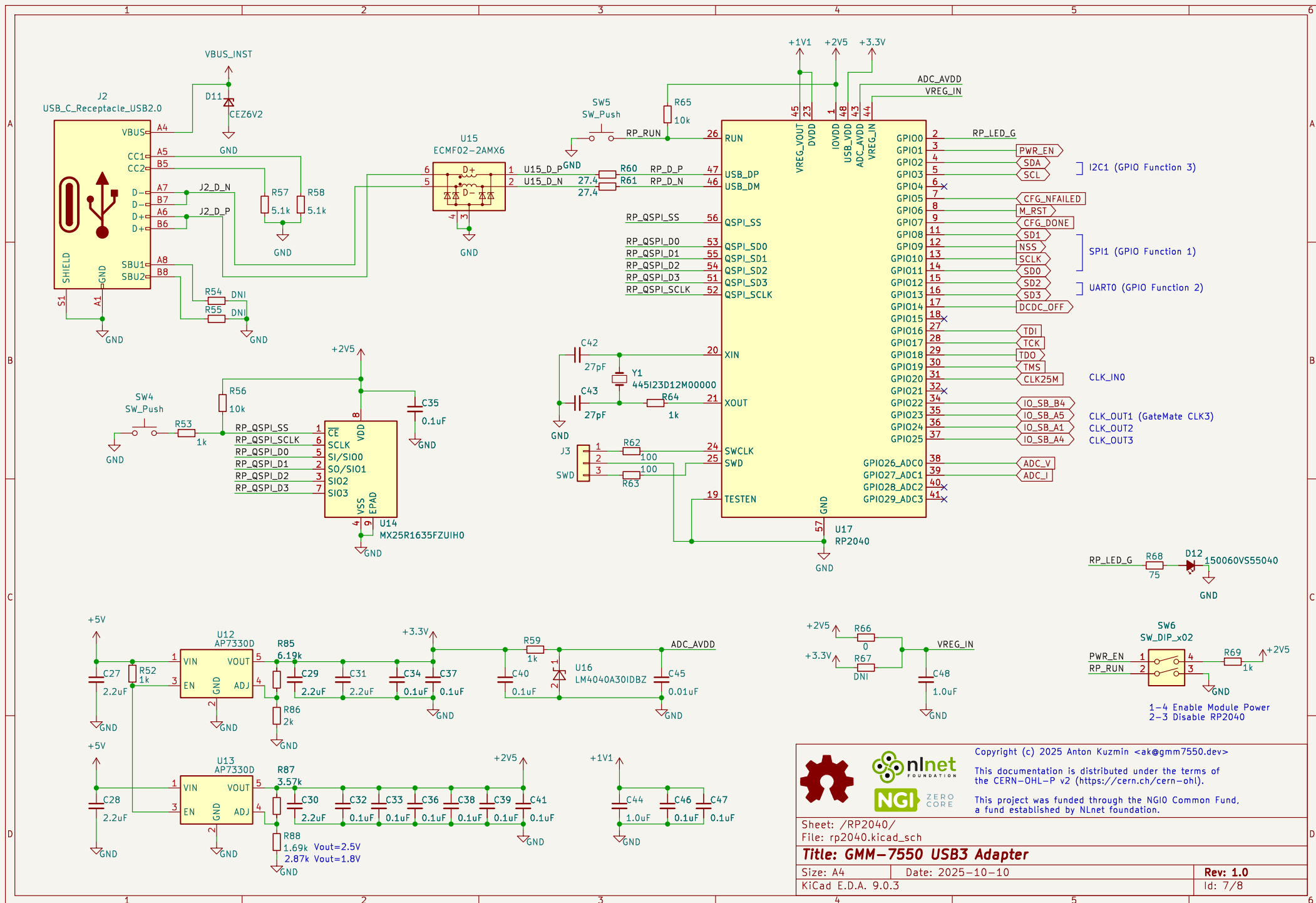
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Sheet: /RP2040/
File: rp2040.kicad_sch

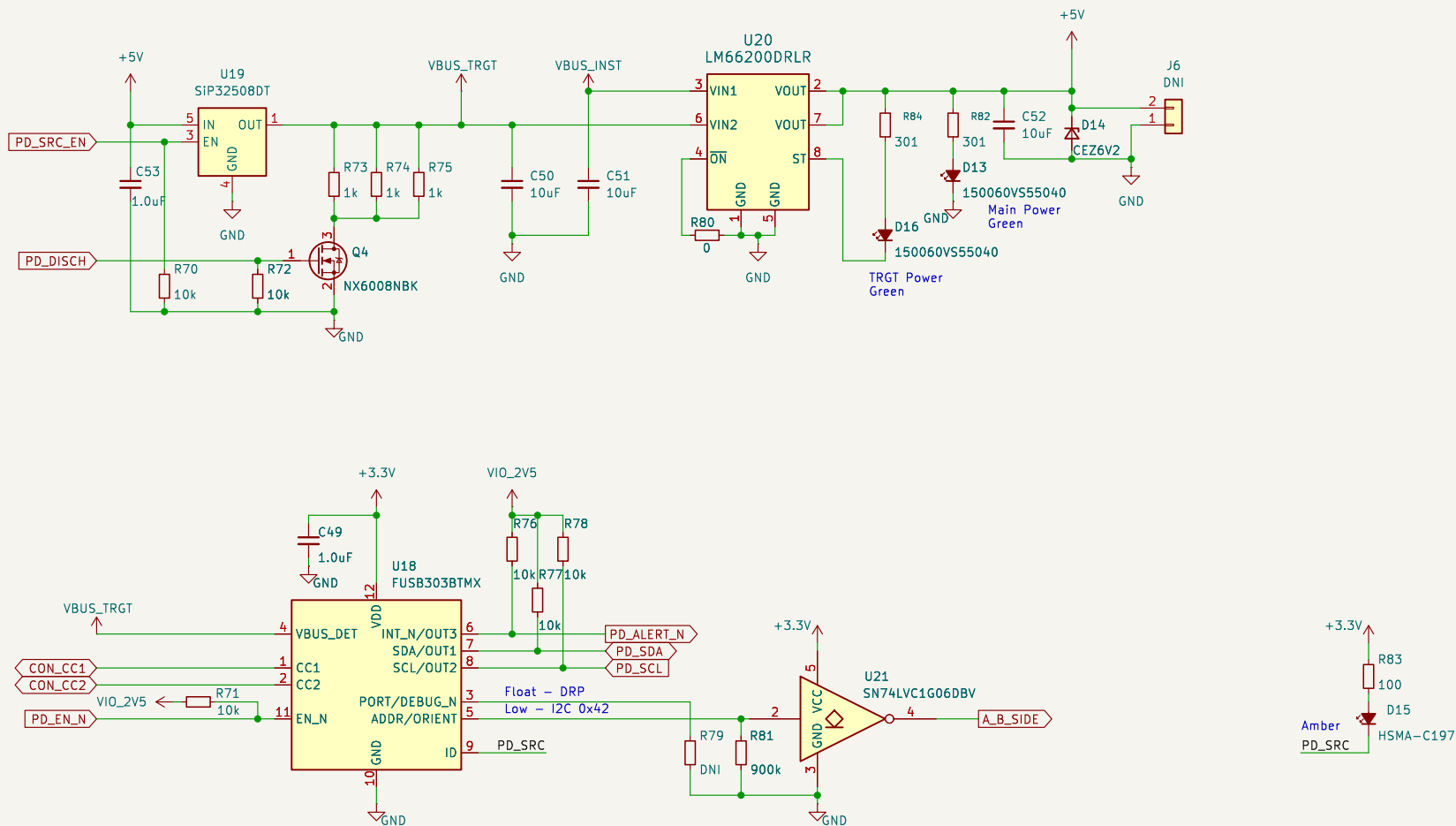
Title: GMM-7550 USB3 Adapter

Size: A4 Date: 2025-10-10

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Sheet: /USB PD/
File: usb3-pd.kicad_sch

Title: GMM-7550 USB3 Adapter

Size: A4 Date: 2025-10-10

KiCad E.D.A. 9.0.3

Rev: 1.0

Id: 8/8