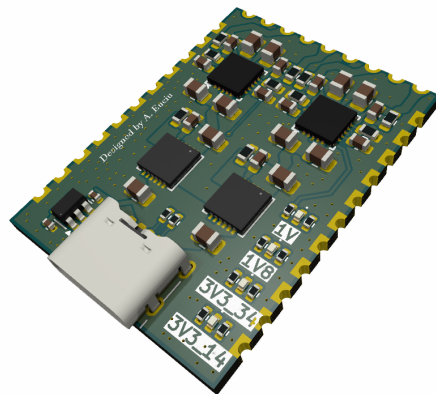
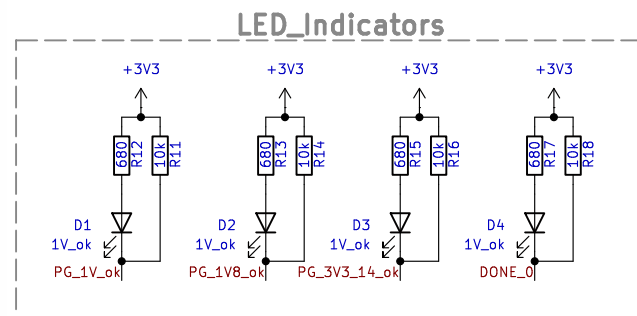
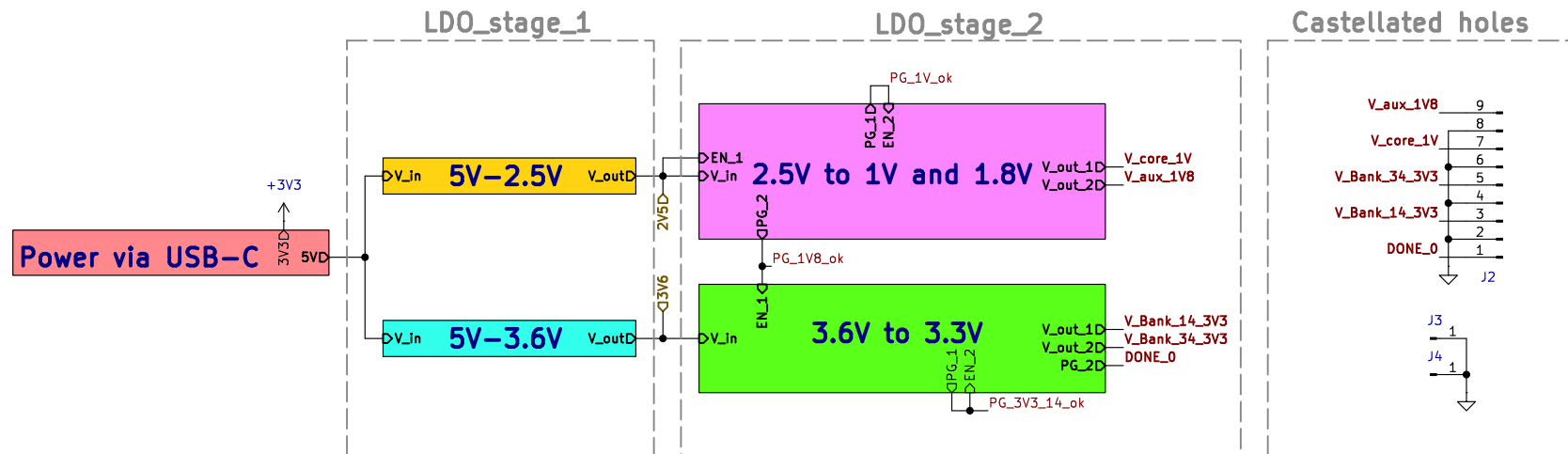


Note: FPGA Power sequence: V_core_1V -> V_aux_1V8 -> V_bank_3V3
Power regulation via LDOs cascade



Project: HYDRA TPC & Fiber Tracker
Author: Dr. Alexandru Enciu
Institution: Technische Universität Darmstadt



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File: Spartan7_PSU_Stamp_V0.kicad_sch

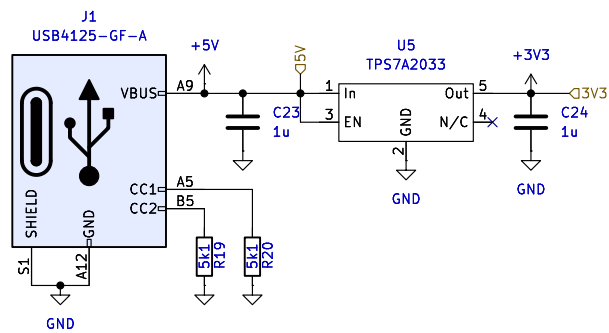
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Size: A4 Date: 2025-07-14

KiCad E.D.A. 9.0.3

Rev: 0

Id: 1/6

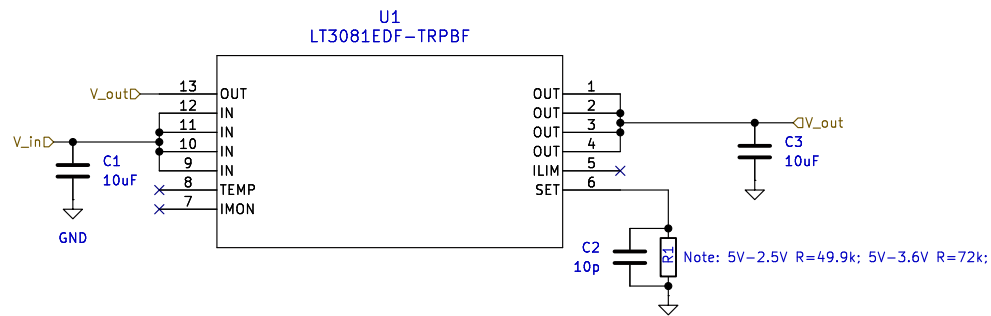


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Institution: Technische Universität Darmstadt
 Sheet: /Power via USB-C/
 File: USB_C_Power.kicad_sch



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Project: HYDRA TPC & Fiber Tracker
 Author: Dr. Alexandru Enciu
 Institution: Technische Universität Darmstadt
 Sheet: /5V-2.5V/
 File: LT3081EDF.kicad_sch



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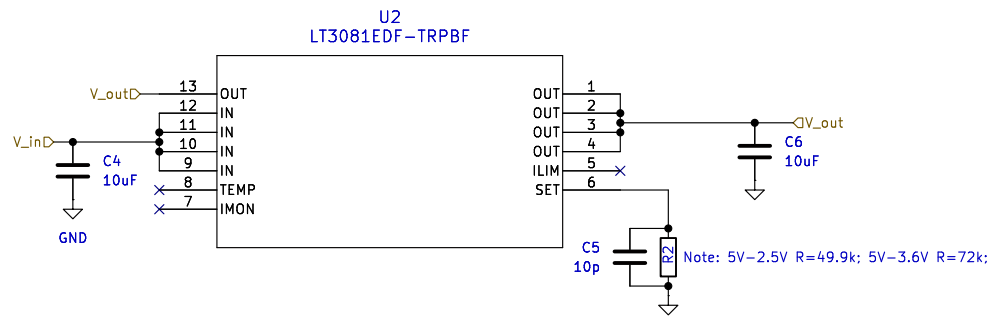
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Project: HYDRA TPC & Fiber Tracker
 Author: Dr. Alexandru Enciu
Institution: Technische Universität Darmstadt
 Sheet: /5V-3.6V/
 File: LT3081EDF.kicad_sch



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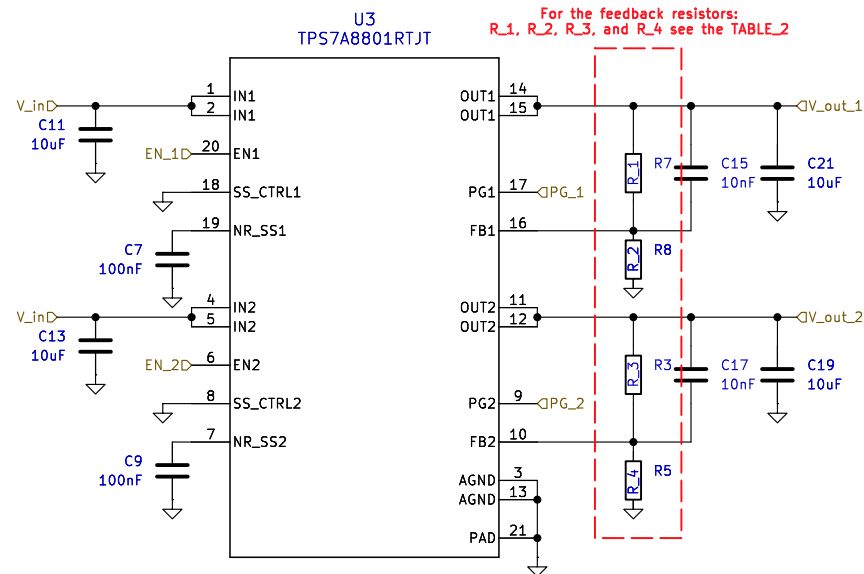


Table 2. Recommended Feedback-Resistor Values

V _{OUTx(TARGET)} (V)	FEEDBACK RESISTOR VALUES ⁽¹⁾	
	R ₁ , R ₃ (kΩ)	R ₂ , R ₄ (kΩ)
0.8	Short	Open
1.00	2.55	10.2
1.20	5.9	11.8
1.50	9.31	10.7
1.80	1.87	1.5
1.90	15.8	11.5
2.50	2.43	1.15
3.00	3.16	1.15
3.30	3.57	1.15
5.00	10.5	2

(1) R₁, R₃ are connected from OUTx to FBx; R₂, R₄ are connected from FBx to GND; see [Figure 42](#).

Project: HYDRA TPC & Fiber Tracker

Author: Dr. Alexandru Enciu

Institution: Technische Universität Darmstadt

Sheet: /2.5V to 1V and 1.8V/

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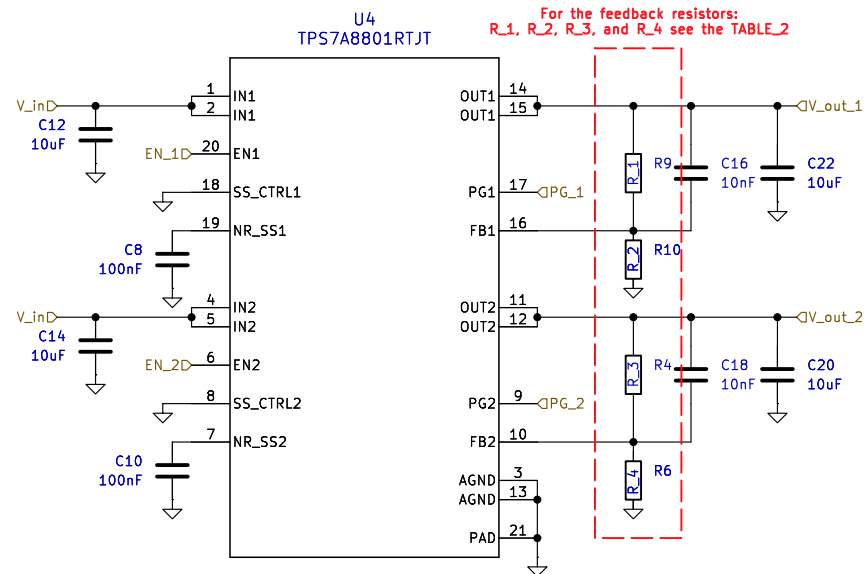


Table 2. Recommended Feedback-Resistor Values

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(1) R₁, R₃ are connected from OUTx to FBx; R₂, R₄ are connected from FBx to GND; see Figure 42.

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 Author: Dr. Alexandru Enciu
 Institution: Technische Universität Darmstadt
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