

Mainboard

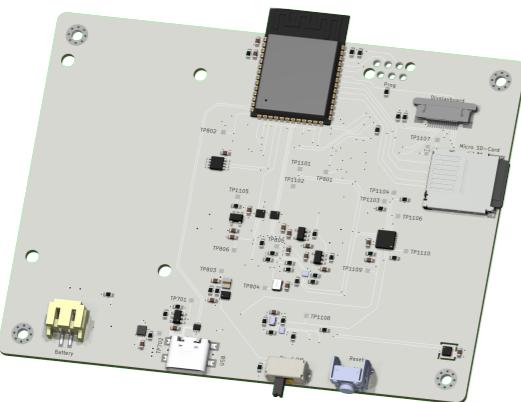
Variant: PRELIMINARY

2026-01-17

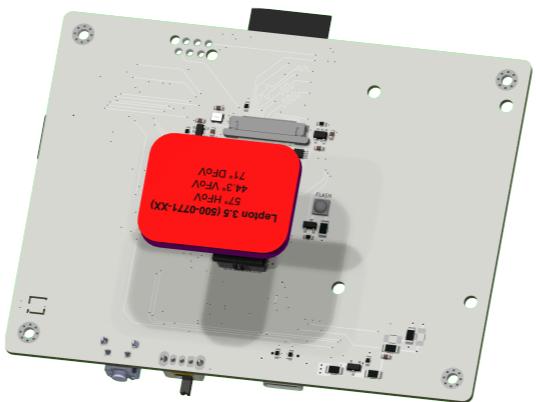
Rev 1

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TOP VIEW



BOTTOM VIEW



NOTES

Comment

Not fitted components are marked as

DRAFT - Very early stage of schematic, ignore details.

PRELIMINARY - Close to final schematic.

CHECKED - There shouldn't be any mistakes. Contact the engineer if you find any.

RELEASED - A board with this schematic has been sent to production.

Date: 17-Jan-2026

DESIGN CONSIDERATIONS

DESIGN NOTE:
Example text for informational design notes.

DESIGN NOTE:
Example text for debug notes.

DESIGN NOTE:
Example text for cautionary design notes.

DESIGN NOTE:
Example text for critical design notes.

LAYOUT NOTE:
Example text for critical layout guidelines.

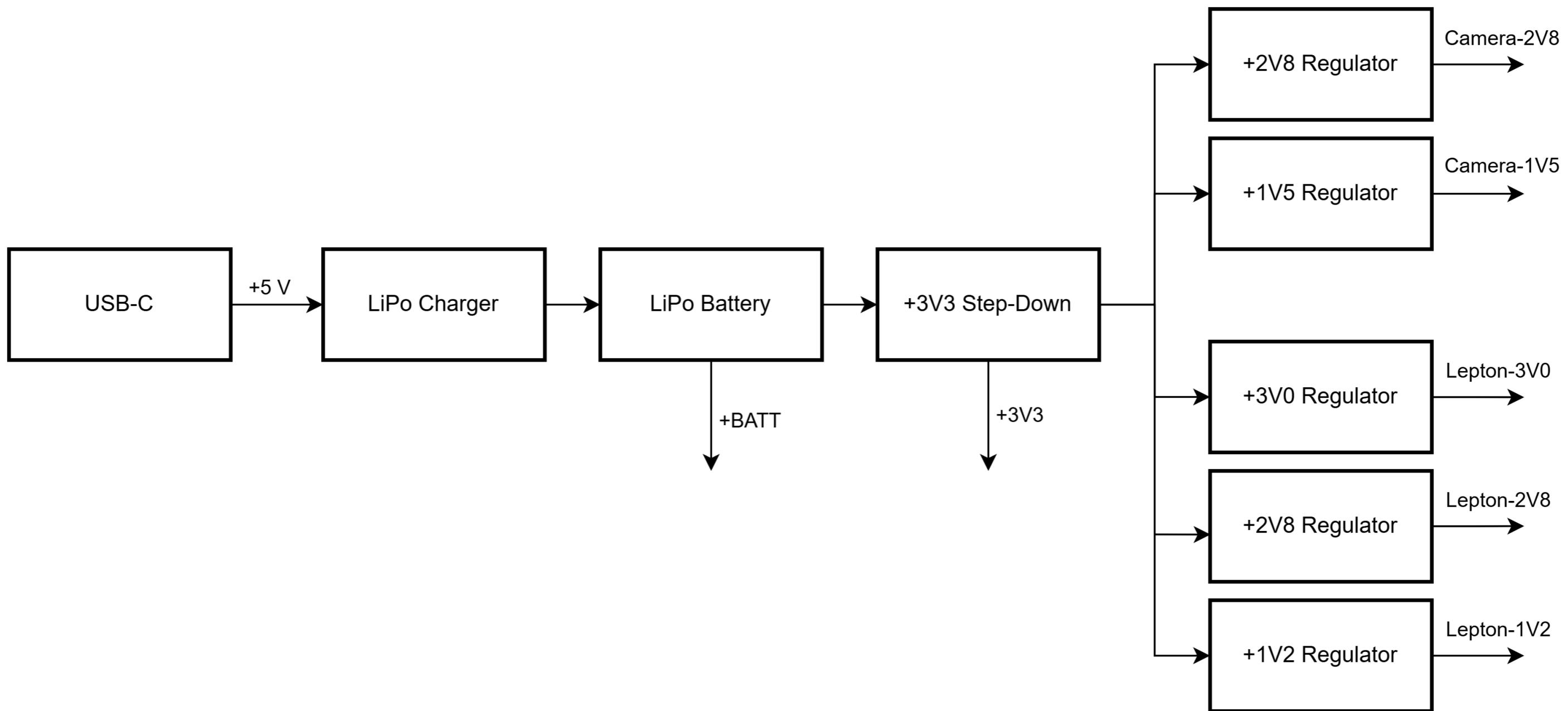
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	Board Name: Mainboard	Project Name: PyroVision		
	Sheet Title: Template	File Name: Mainboard.kicad_sch	Designer: Daniel Kampert	Date: 2025-12-19 Revision: 1
	Sheet Path: /	Reviewer:	Size: A3	Sheet: 1 of 15

[2] Block Diagram

1	2	3	4	5	6	7	8
A							A
B							B
C							C
D							D
E							E
F							F
1	2	3	4	5	6	7	8

Comments:	Company: PyroVision		Variant: PRELIMINARY	Git Hash: a6febc7	
	Board Name: Mainboard		Project Name: PyroVision		
	Sheet Title: Block Diagram	File Name: Block Diagram.kicad_sch	Designer: Daniel Kampert	Date: 2025-12-19	Revision: 1
	Sheet Path: /Block Diagram/	Reviewer:		Size: A3	Sheet: 2 of 15

[3] Power - Topology



Target specifications:

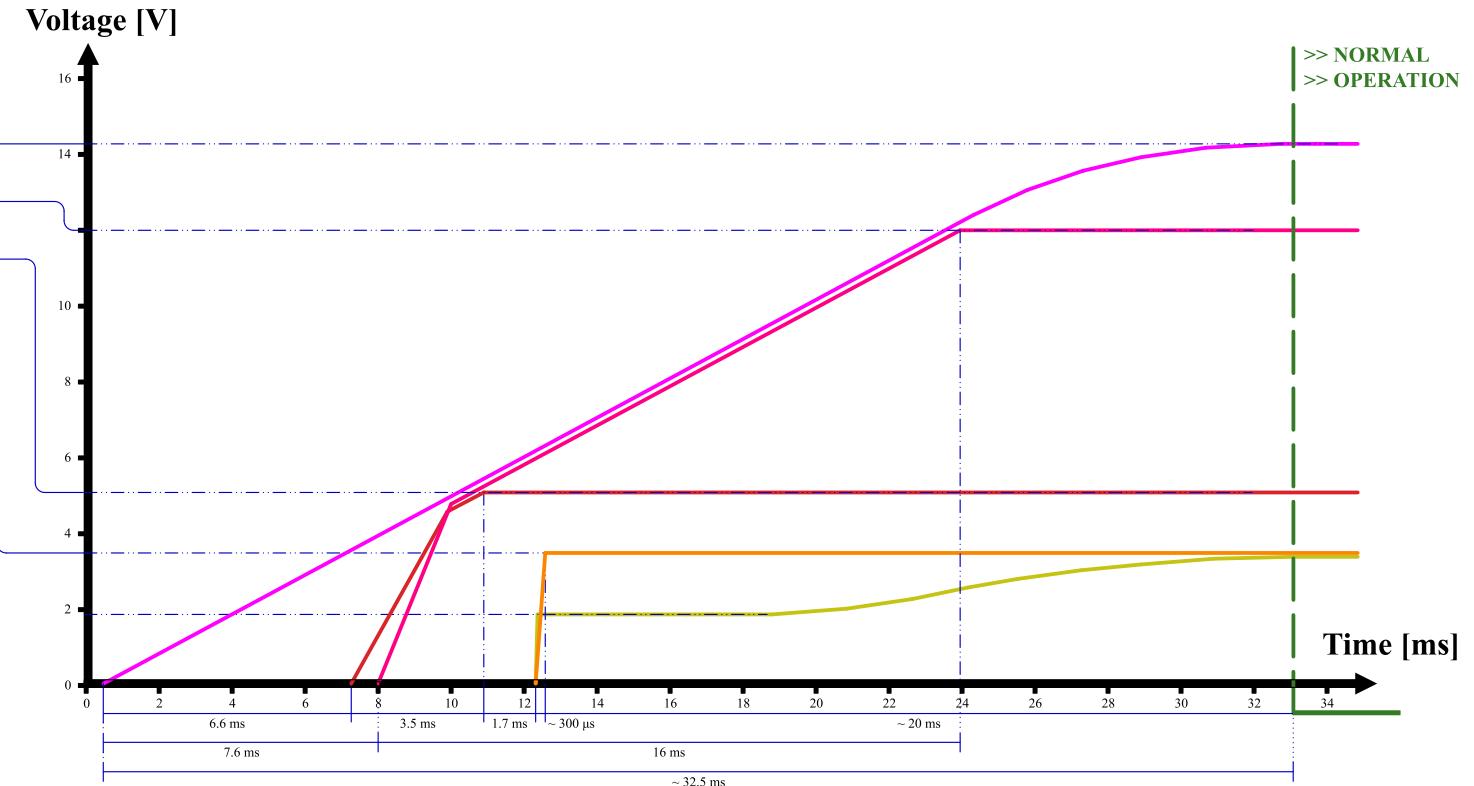
Input voltage: 5 V

Max. Input Current 540 mA

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		Board Name: Mainboard	Project Name: PyroVision	
	Sheet Title: Power - Topology	File Name: Power - Topology.kicad_sch	Designer: Daniel Kampert	Date: 2025-12-19 Revision: 1
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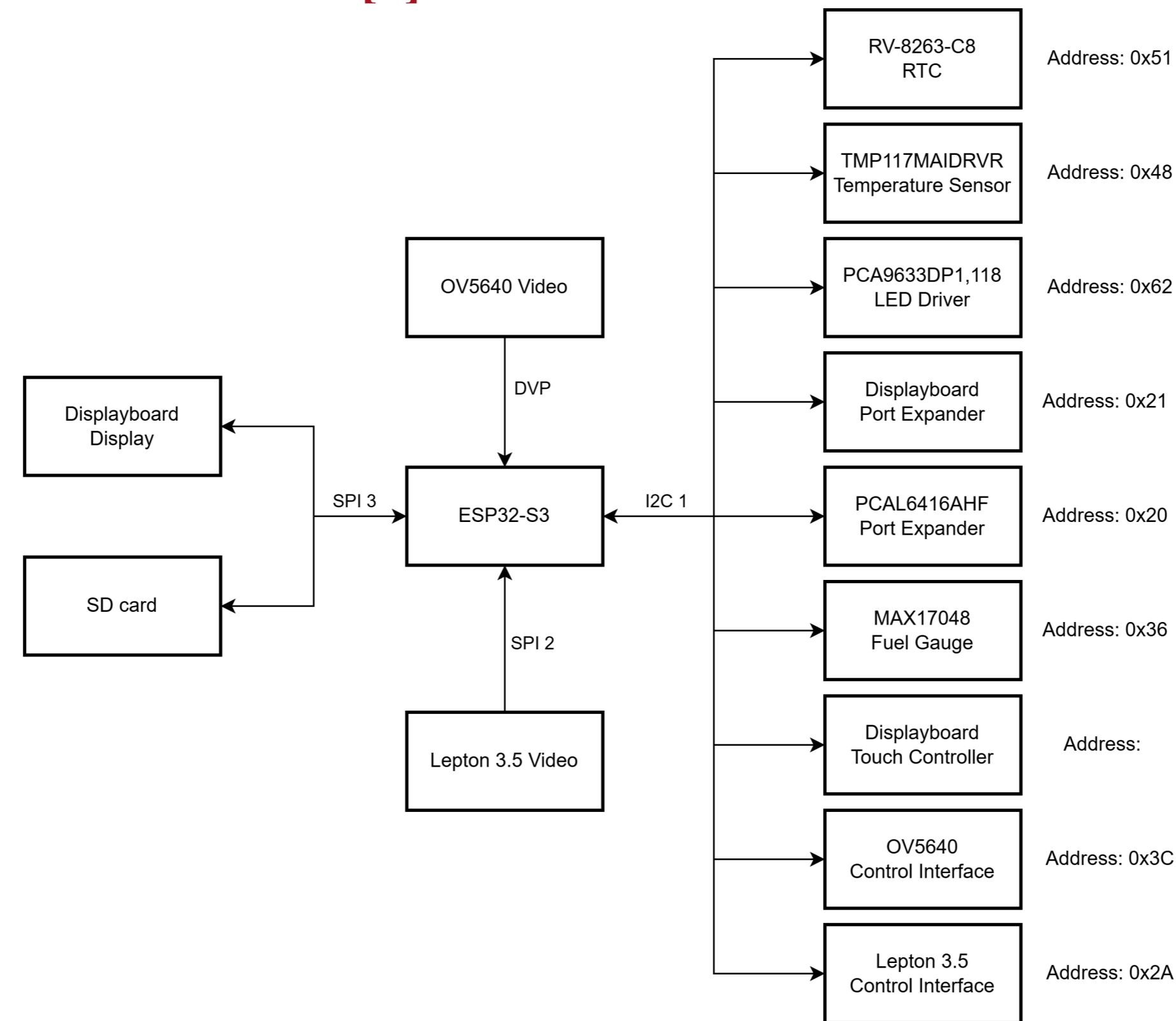
[4] Power - Sequencing

NAME	SOURCE	LEVEL
+V??	??	? - ? ± ??%
+V??	??	? - ? ± ??%
+V??	??	? - ? ± ??%
+V??	??	? - ? ± ??%
+V??	??	? - ? ± ??%



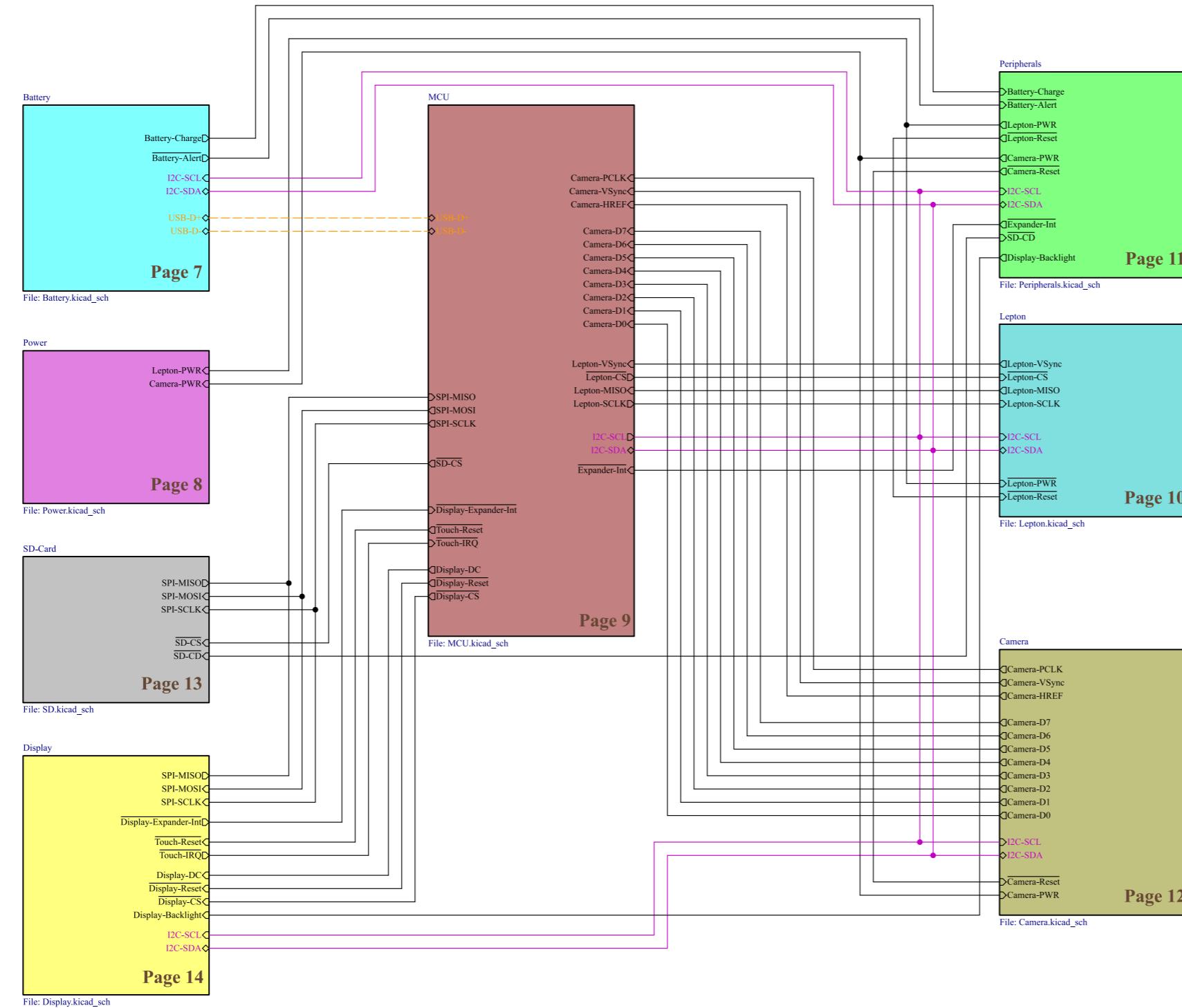
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Power - Sequencing			Power - Sequencing.kicad_sch	Daniel Kampert	2025-12-19 1	
Sheet Path: /Power - Sequencing/		Reviewer:	Size:	Sheet:	A4 4 of 15	

[5] Interface - Tree



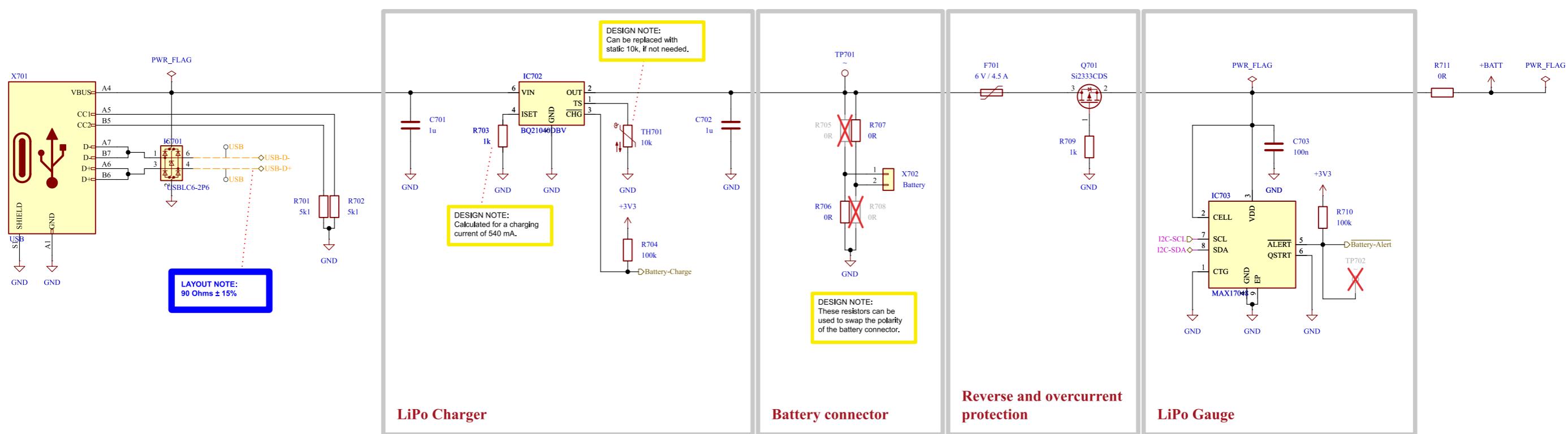
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[6] Project Architecture



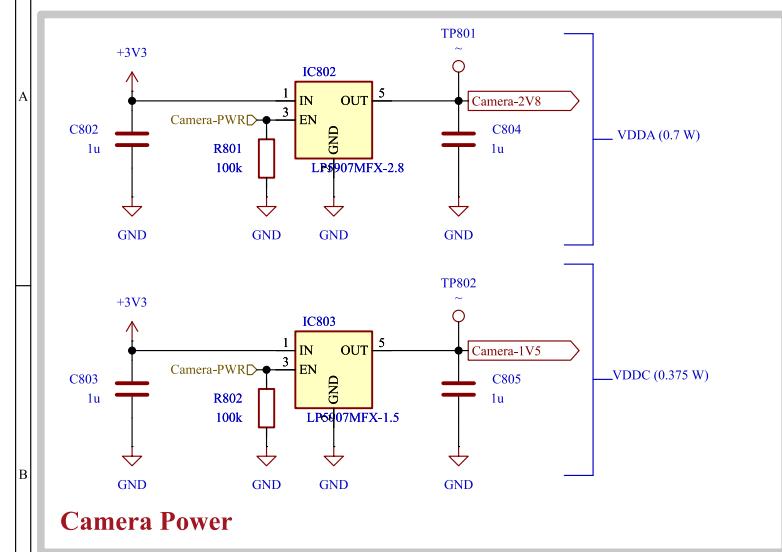
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[7] Battery

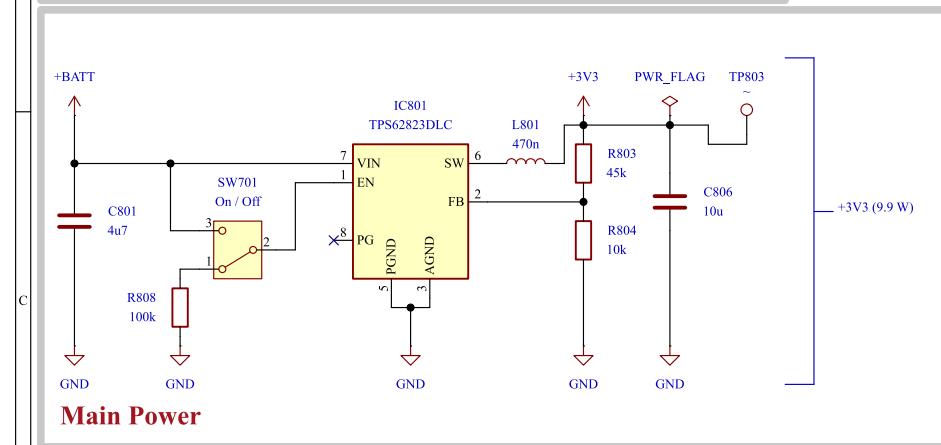


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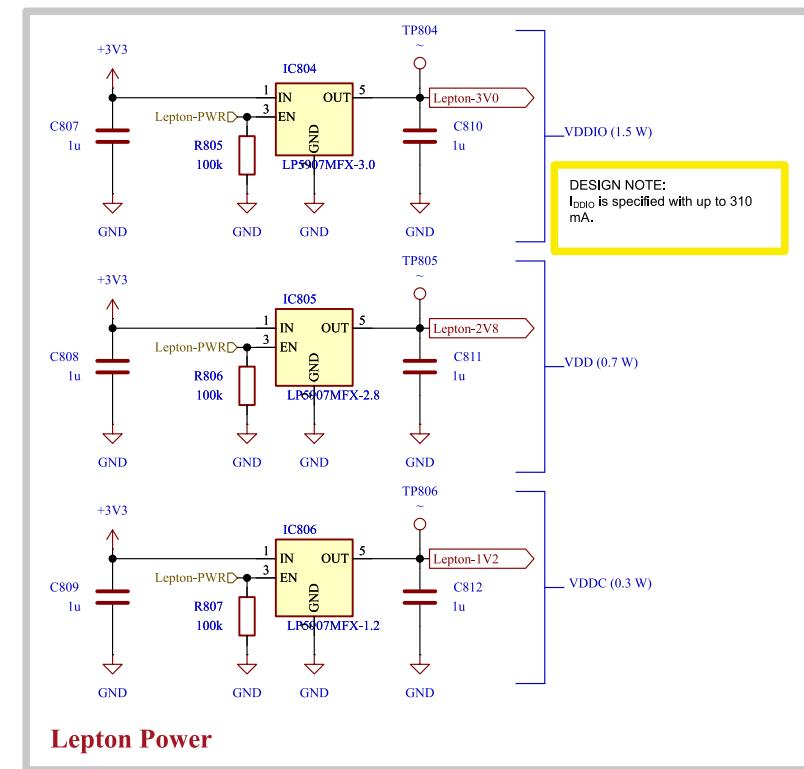
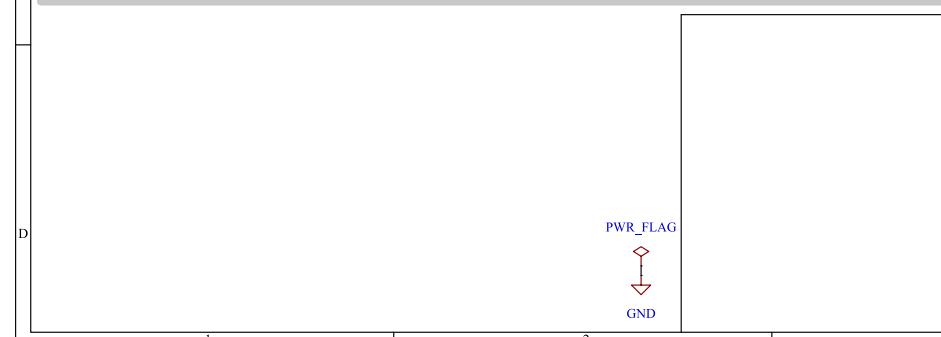
[8] Power



Camera Power

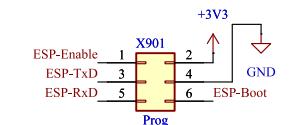
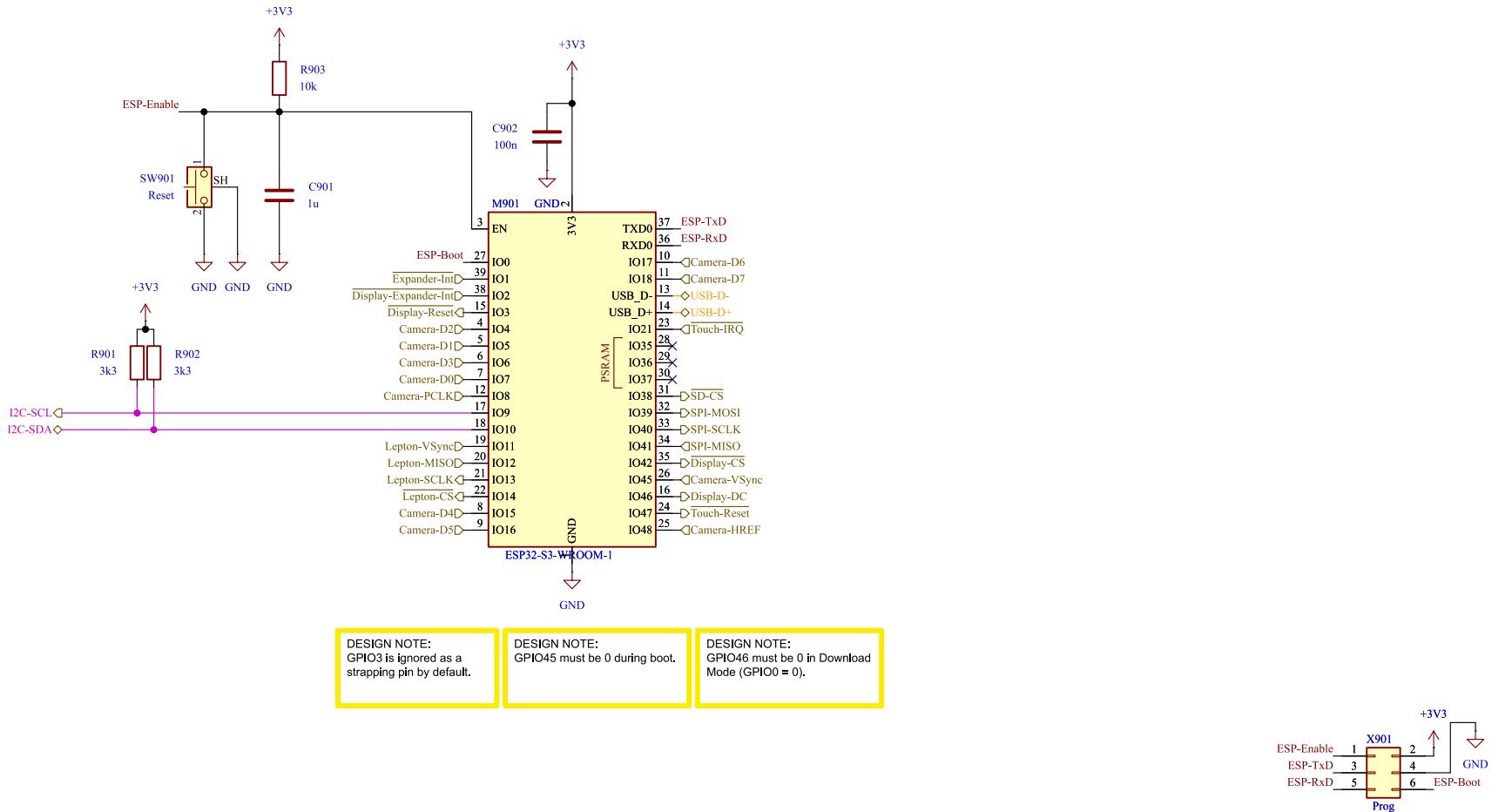


Main Power



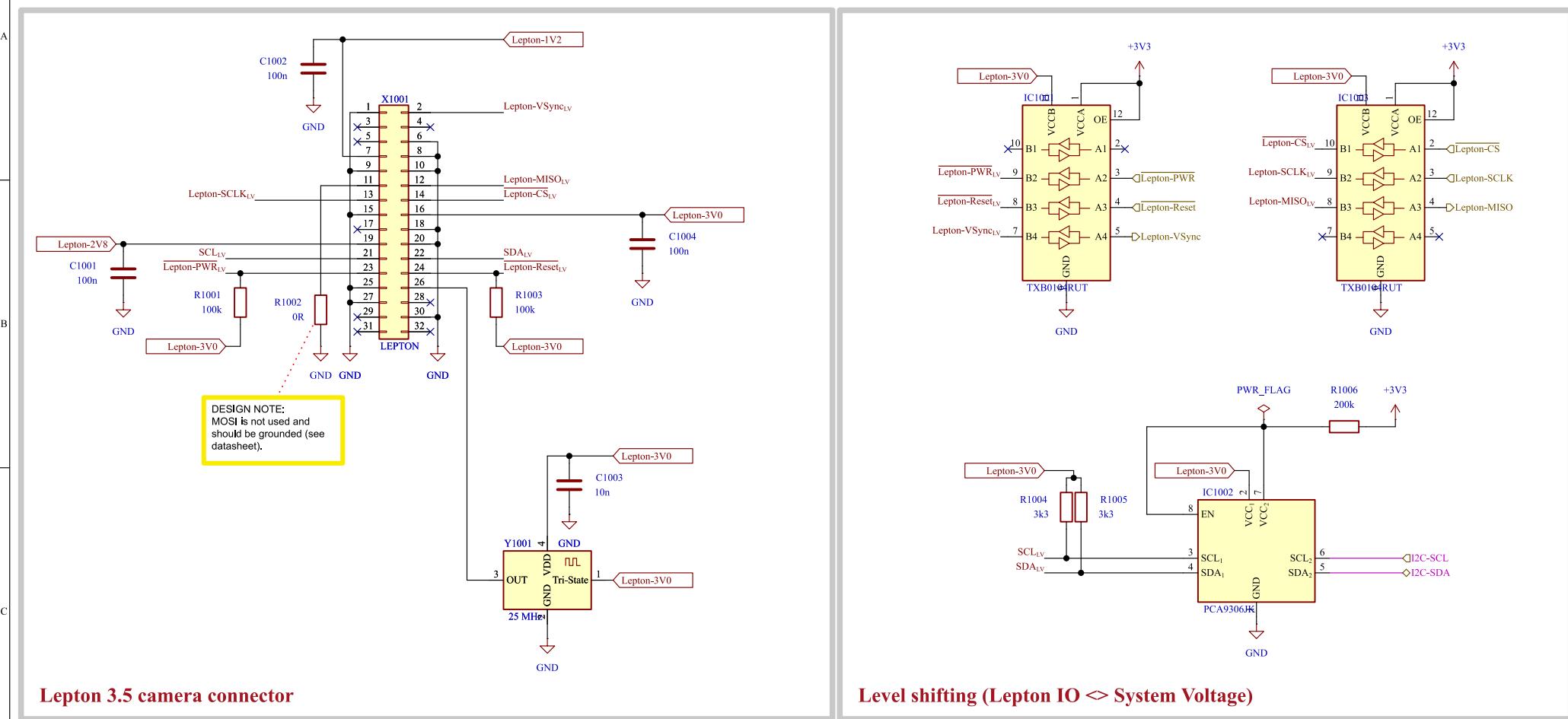
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Sheet Title:	File Name: Power.kicad_sch	Designer: Daniel Kampert	Date: 2025-12-19	Revision: 1
Sheet Path:	/Project Architecture/Power/		Reviewer:	Size: A4 Sheet: 8 of 15

[9] MCU



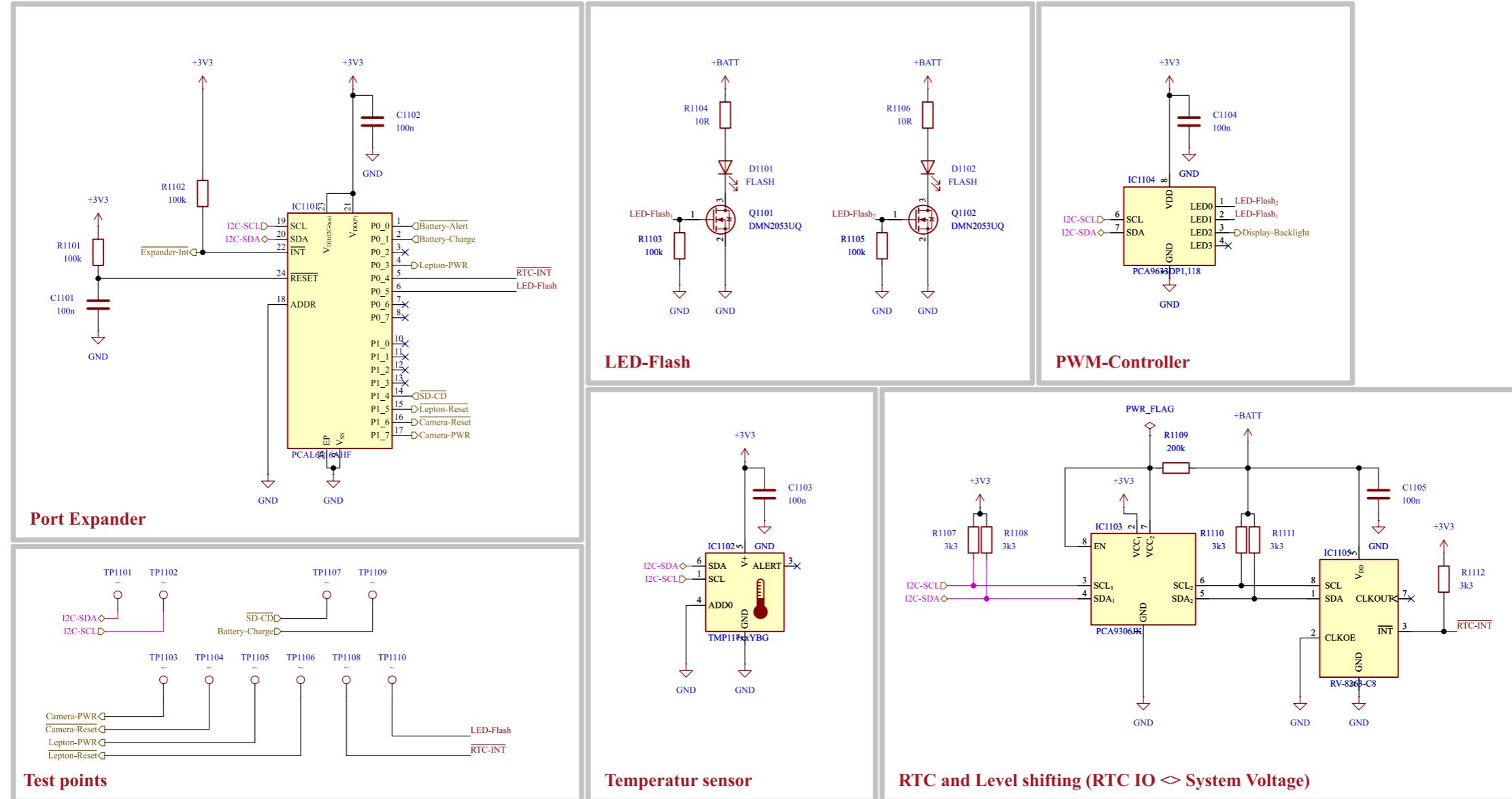
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[10] Lepton



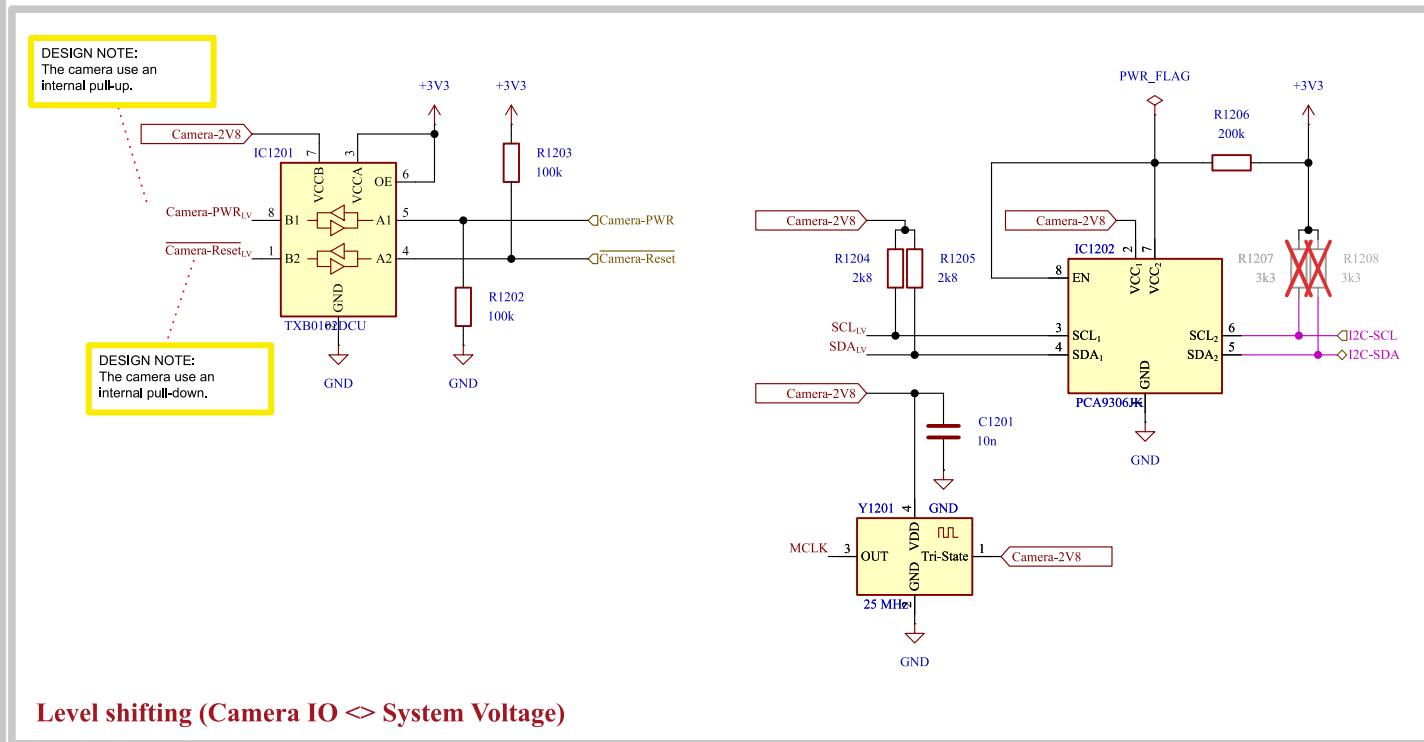
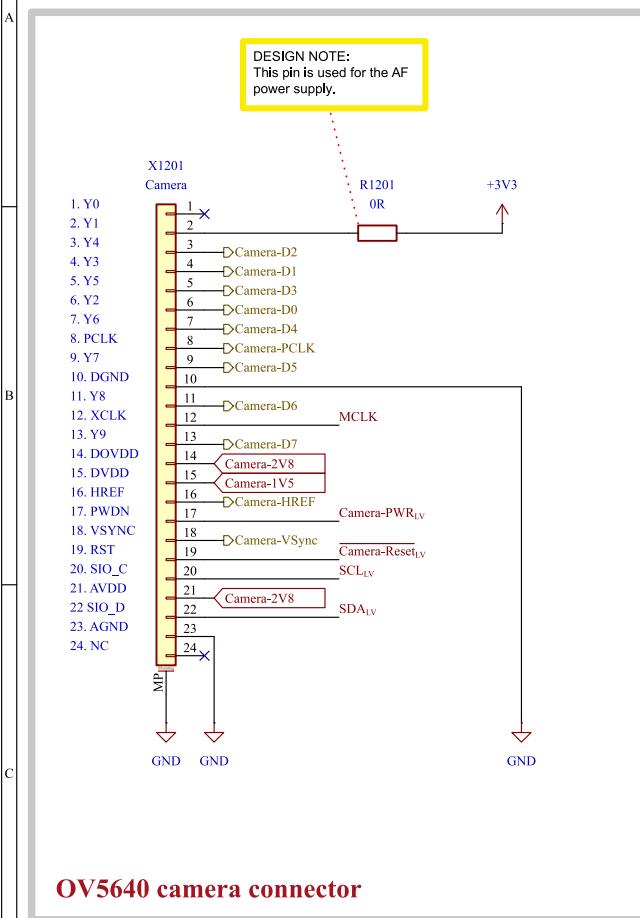
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[11] Peripherals



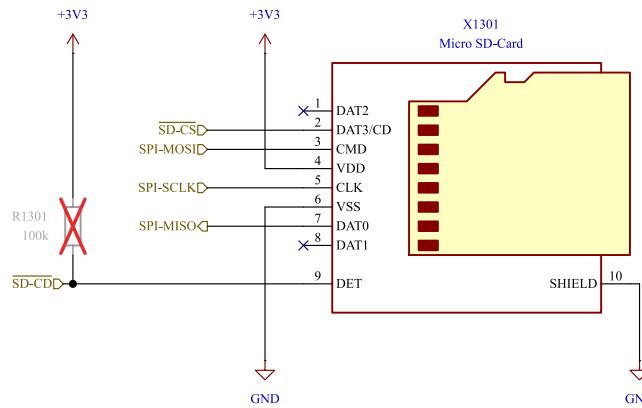
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[12] Camera



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	Sheet Title: Camera	File Name: Camera.kicad_sch	Designer: Daniel Kampert	Date: 2025-12-19
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	Reviewer:			Size: A4
	Sheet: 12 of 15			

[13] SD-Card



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	Sheet Title: SD-Card	File Name: SD.kicad_sch	Designer: Daniel Kampert	Date: 2025-12-19 Revision: 1
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[14] Display

A

A

B

B

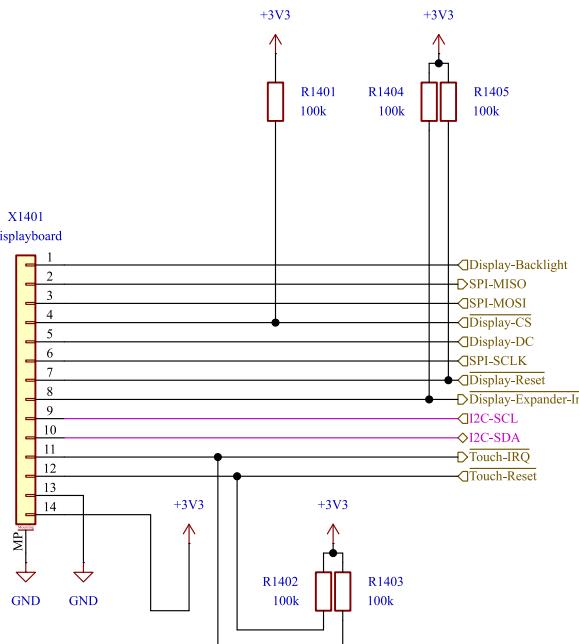
C

C

D

D

1. +3V3
 2. GND
 3. Touch-Reset
 4. Touch-IRQ
 5. SDA
 6. SCL
 7. Expander-Int
 8. Display-Reset
 9. SPI-SCLK
 10. Display-DC
 11. Display-CS
 12. SPI-MOSI
 13. SPI-MISO
 14. Display-Backlight

X1401
Displayboard

	Comments:	Company: PyroVision	Variant: PRELIMINARY	Git Hash: a6febc7
	Board Name: Mainboard			Project Name: PyroVision
	Sheet Title: Display	File Name: Display.kicad_sch	Designer: Daniel Kampert	Date: 2025-12-19 Revision: 1
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[15] Revision History

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B					B
C					C
D					D
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