

Balanced Solar Charger

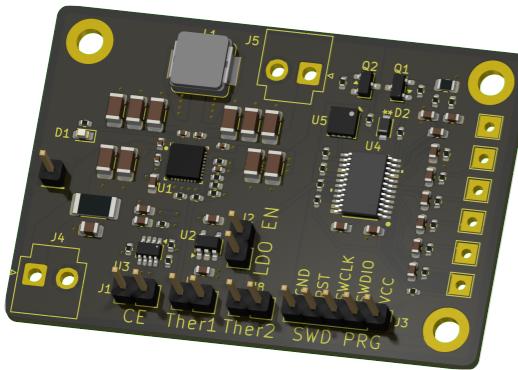
Variant: CHECKED

2026-01-09

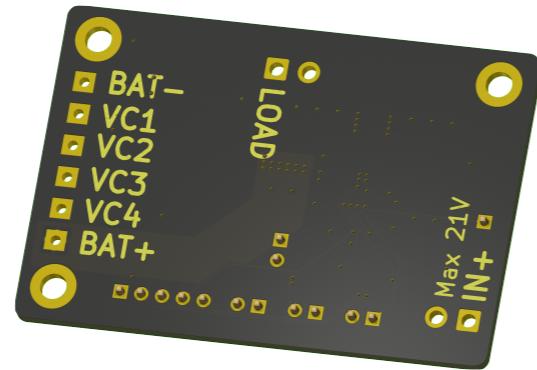
Rev + (Unreleased)

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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: 09-Jan-2026

DESIGN CONSIDERATIONS

DESIGN NOTE:
Example text for informational design notes.

DESIGN NOTE:
Example text for debug notes.

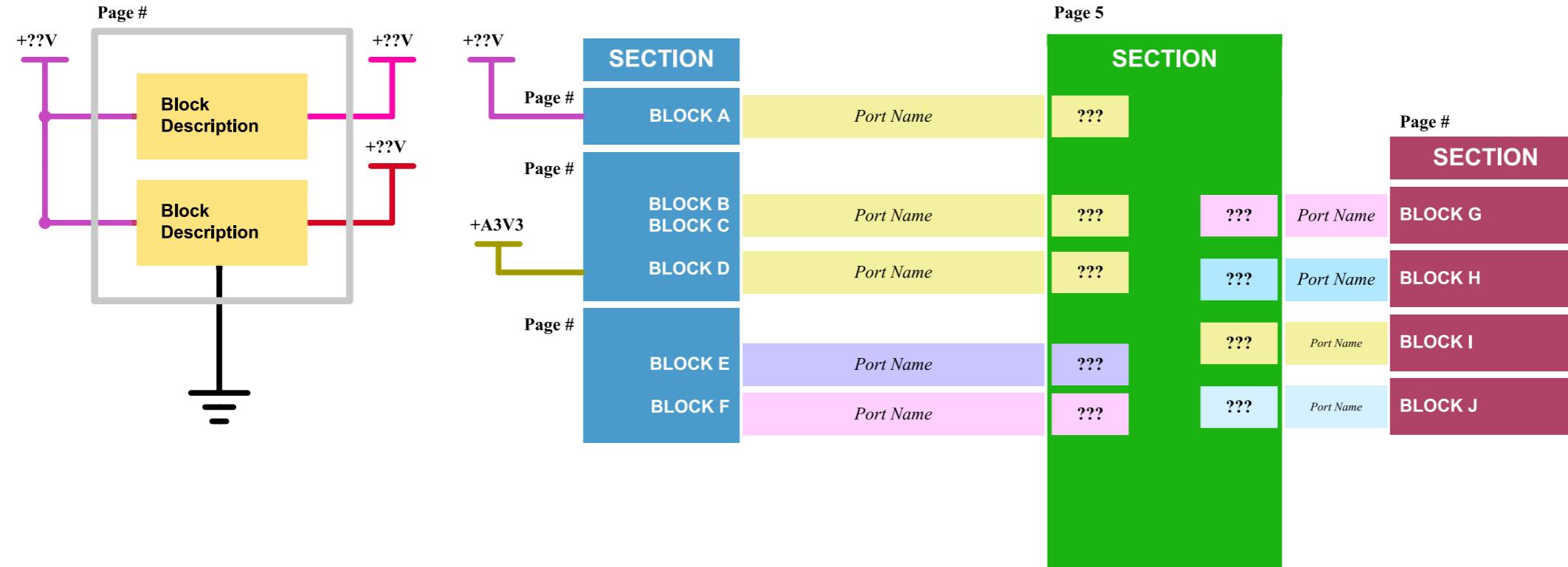
DESIGN NOTE:
Example text for cautionary design notes.

DESIGN NOTE:
Example text for critical design notes.

LAYOUT NOTE:
Example text for critical layout guidelines.

	Comments:	Company: Electronic-Handyman	Variant: CHECKED	Git Hash: 8e341b7
	Board Name: Balanced Solar Charger	Project Name: Balanced Solar Charger		
	Sheet Title: /	File Name: solar_smart_station.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 Revision: + (Unreleased)
	Sheet Path: /	Reviewer:	Size: A3	Sheet: 1 of 9

[2] Block Diagram

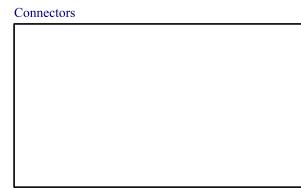
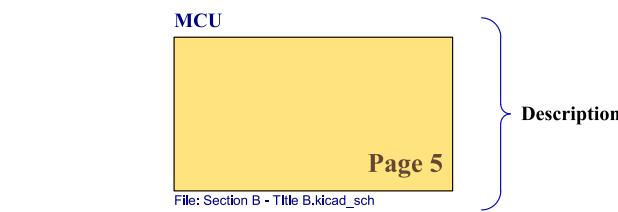
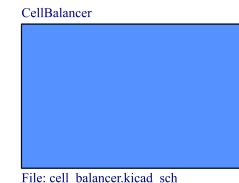
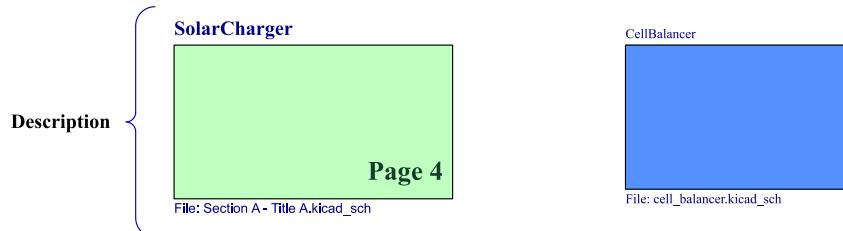


Target specifications:

Input voltage:	?? - ?? V
Spec 2	??
Spec 3	??
Spec 4	??

	Comments:	Company: Electronic-Handyman	Variant: CHECKED	Git Hash: 8e341b7
		Board Name: Balanced Solar Charger	Project Name: Balanced Solar Charger	
	Sheet Title: Block Diagram	File Name: Block Diagram.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 + (Unreleased)
	Sheet Path: /Block Diagram/		Reviewer:	Size: A3 Sheet: 2 of 9

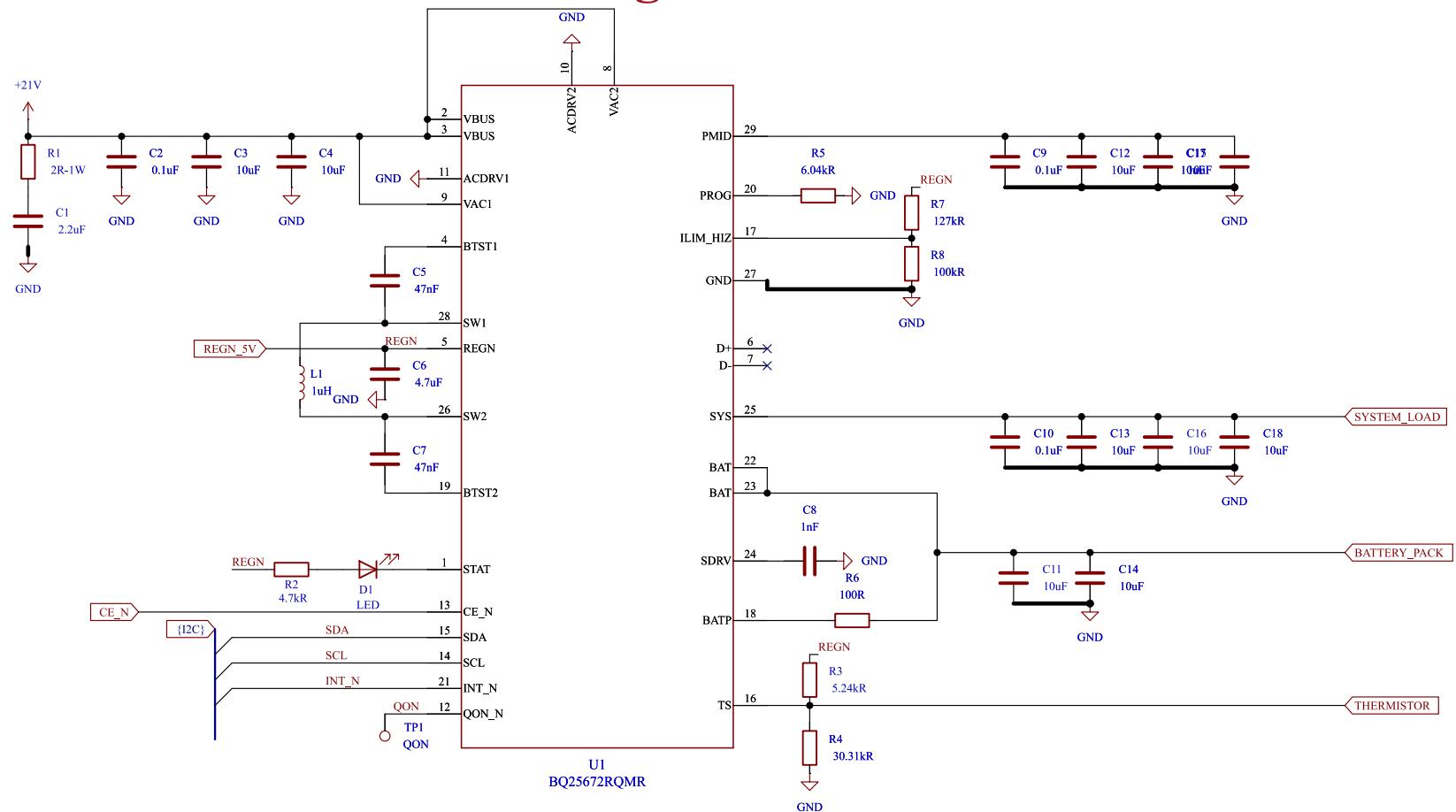
[3] Project Architecture



File: connectors.kicad_sch

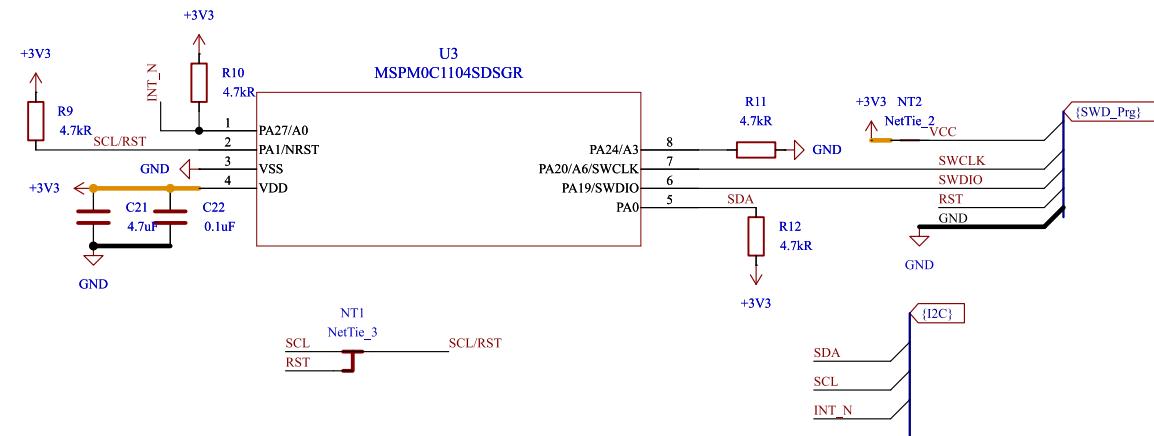
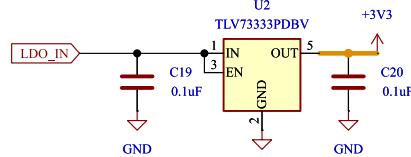
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	Board Name: Balanced Solar Charger			Project Name: Balanced Solar Charger
	Sheet Title: Project Architecture	File Name: Project Architecture.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 Revision: + (Unreleased)
	Sheet Path: /Project Architecture/		Reviewer:	Size: A4 Sheet: 3 of 9

[4] Solar Charger

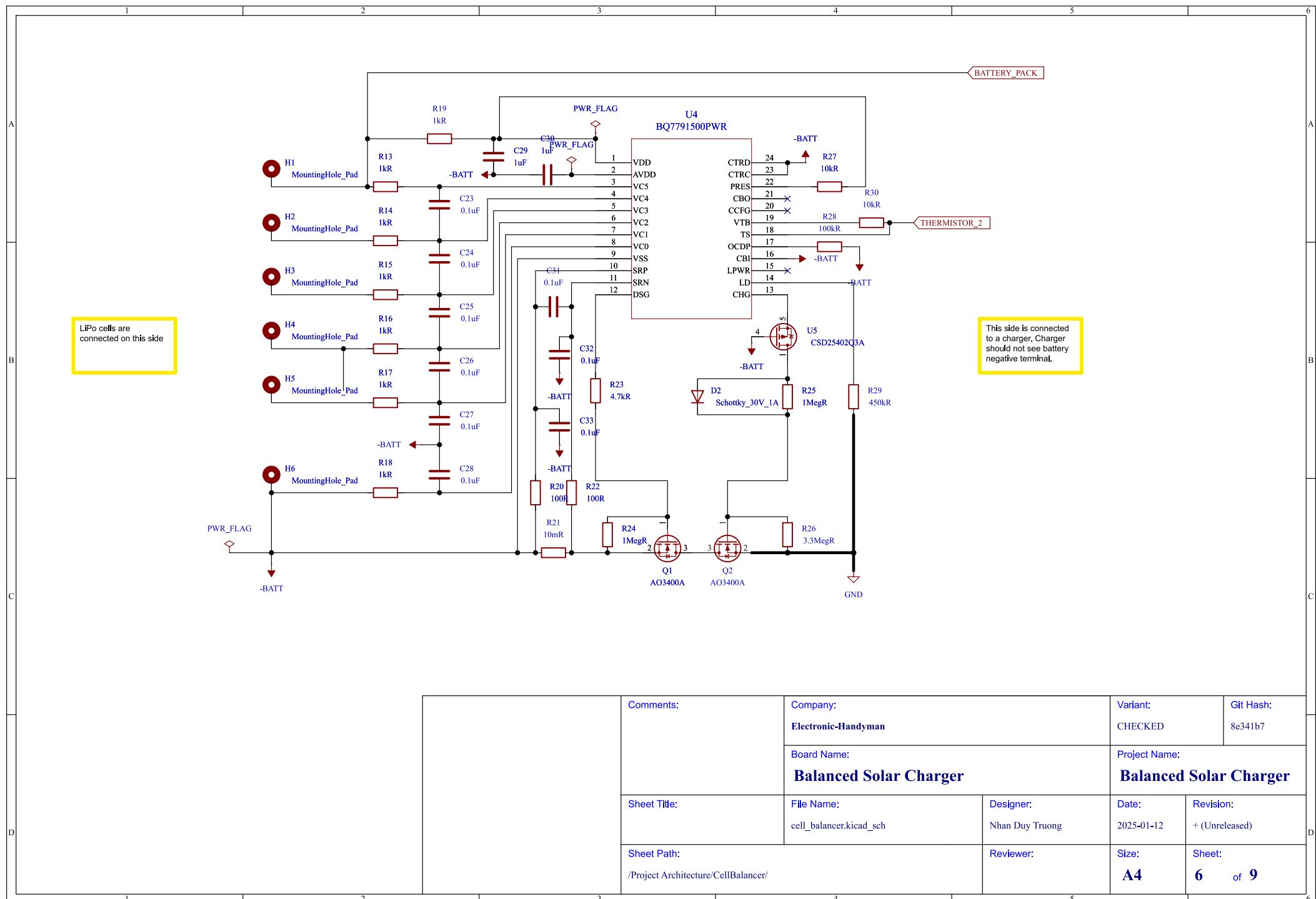


	Comments:	Company: Electronic-Handyman	Variant: CHECKED	Git Hash: 8e341b7
	Board Name: Balanced Solar Charger	Project Name: Balanced Solar Charger		
	Sheet Title: Solar Charger	File Name: Section A - Title A.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 Revision: + (Unreleased)
	Sheet Path: /Project Architecture/SolarCharger/		Reviewer:	Size: A4
			Sheet: 4 of 9	

[5] MCU



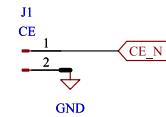
	Comments:	Company: Electronic-Handyman	Variant: CHECKED	Git Hash: 8e341b7
	Board Name: Balanced Solar Charger	Project Name: Balanced Solar Charger		
	Sheet Title: MCU	File Name: Section B - Title B.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 Revision: + (Unreleased)
	Sheet Path: /Project Architecture/MCU/		Reviewer:	Size: A4 Sheet: 5 of 9



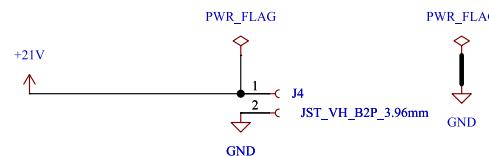
[7] Connectors

A

Connect jumper here to enable charging (normal operation).

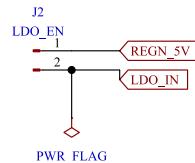


Placing input (solar) on one side and the rest on the opposite side of the PCB

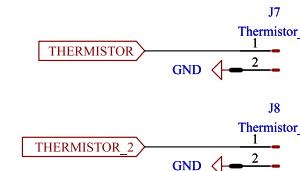
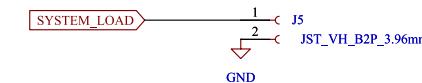


B

Connect jumper here to enable MCU VDD. REGN is 5V from SolarCharge.



Programming pins.



C



Comments:

Company:
Electronic-Handyman

Variant:
CHECKED
Git Hash:
8e341b7

Board Name:

Balanced Solar Charger

Project Name:
Balanced Solar Charger

Sheet Title:

Connectors

File Name:

connectors.kicad_sch

Designer:

Nhan Duy Truong

Date:

2025-01-12
+ (Unreleased)

Revision:

Sheet Path:
/Project Architecture/Connectors/

Reviewer:

Size:

A4

Sheet:
7 of **9**

D

3

4

5

6

1

2

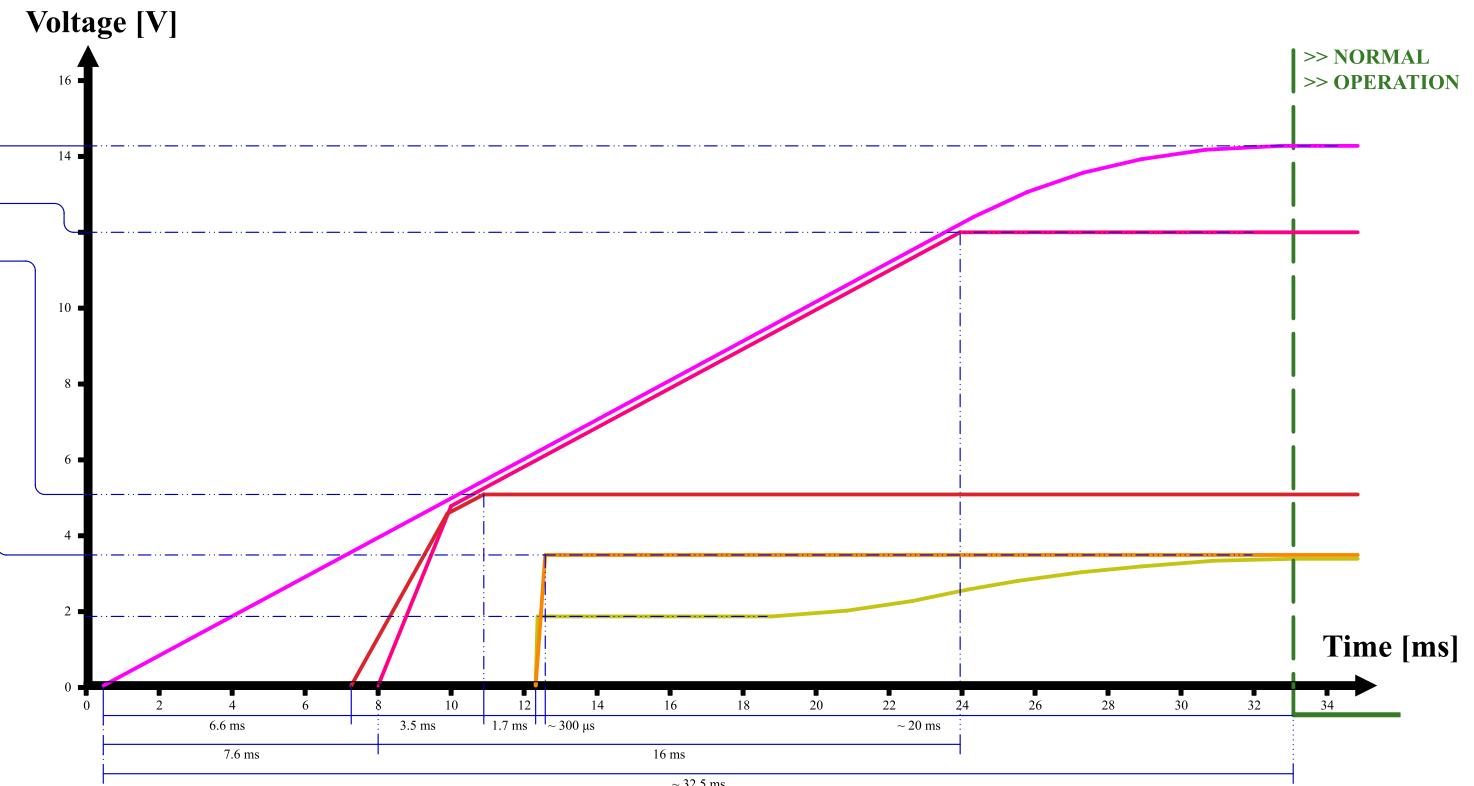
6

[8] Revision History

A					A
B					B
C					C
D					D
		Comments:	Company: Electronic-Handyman	Variant: CHECKED	Git Hash: 8e341b7
			Board Name: Balanced Solar Charger	Project Name: Balanced Solar Charger	
		Sheet Title: Revision History	File Name: Revision History.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 Revision: + (Unreleased)
		Sheet Path: /Revision History/	Reviewer:	Size: A4	Sheet: 8 of 9

[9] Power - Sequencing

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



			Comments:	Company:	Variant:	Git Hash:		
				Electronic-Handyman				
			Board Name:	Balanced Solar Charger		Project Name:		
			Sheet Title:	File Name:	Designer:	Revision:		
Power - Sequencing				Power - Sequencing.kicad_sch	Nhan Duy Truong	2025-01-12 + (Unreleased)		
Sheet Path:				Reviewer:	Size:	Sheet:		
/Power - Sequencing/					A4	9 of 9		