

Balanced Solar Charger

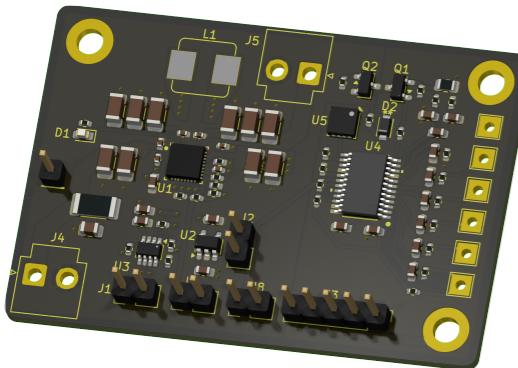
Variant: PRELIMINARY

2026-01-09

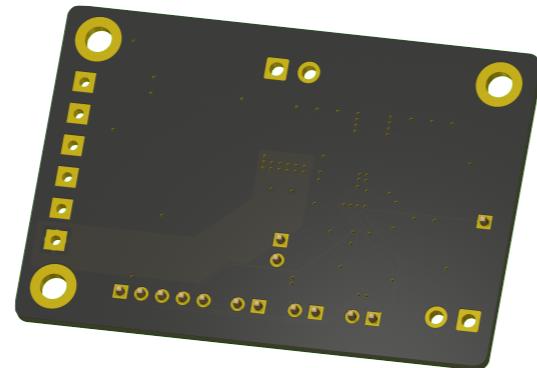
Rev + (Unreleased)

Page	Index	Page	Index	Page	Index	Page	Index
1	Cover Page	11	21	31
2	Block Diagram	12	22	32
3	Project Architecture	13	23	33
4	SolarCharger	14	24	34
5	MCU	15	25	35
6	CellBalancer	16	26	36
7	Connectors	17	27	37
8	Revision History	18	28	38
9	Power - Sequencing	19	29	39
10	20	30	40

TOP VIEW



BOTTOM VIEW



NOTES

Comment

Not fitted components are marked as X

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.

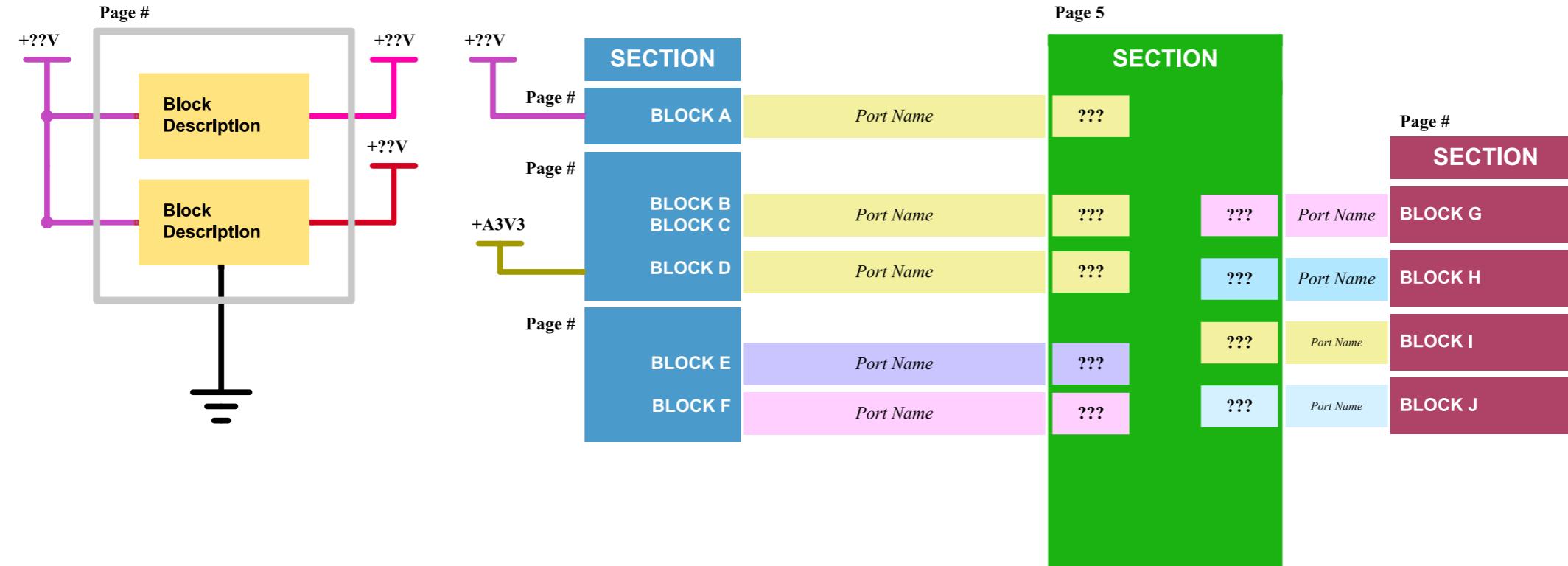
DESIGN NOTE:
Example text for cautionary design notes.

DESIGN NOTE:
Example text for critical design notes.

LAYOUT NOTE:
Example text for critical layout guidelines.

	Comments:	Company: Electronic-Handyman	Variant: PRELIMINARY	Git Hash: 8e341b7
	Board Name: Balanced Solar Charger	Project Name: LiPo Battery Charger with CI/CD		
	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

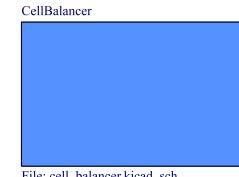
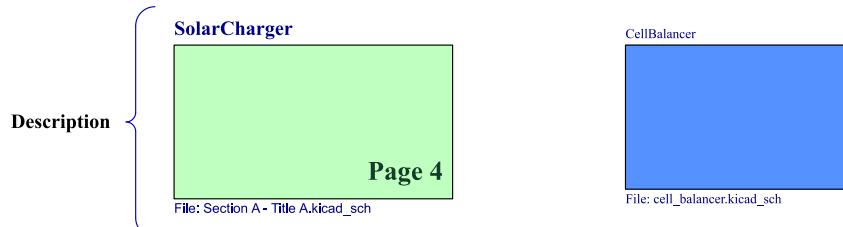


Target specifications:

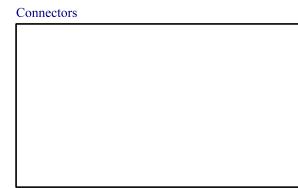
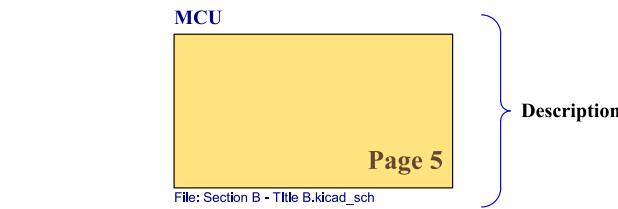
Input voltage:	?? - ?? V
Spec 2	??
Spec 3	??
Spec 4	??

	Comments:	Company: Electronic-Handyman	Variant: PRELIMINARY	Git Hash: 8e341b7
		Board Name: Balanced Solar Charger	Project Name: LiPo Battery Charger with CI/CD	
	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: cell_balancer.kicad_sch



File: connectors.kicad_sch

A

A

B

B

C

C

D

D

1

2

3

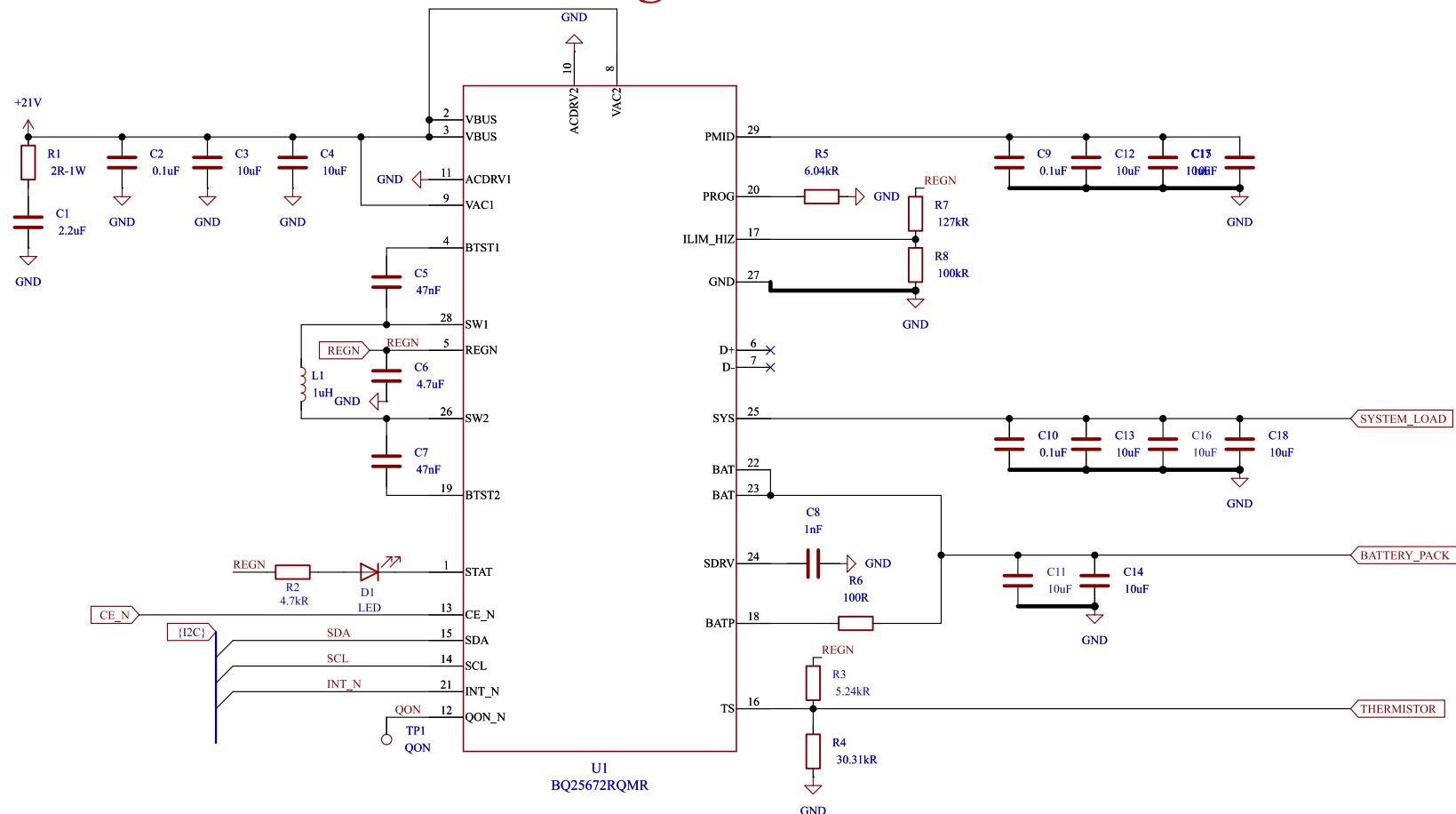
4

5

6

		Comments:	Company: Electronic-Handyman	Variant: PRELIMINARY	Git Hash: 8c341b7
		Board 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:
PRELIMINARY

Git Hash:
8c341b7

Board Name:

Balanced Solar Charger

Project Name:

LiPo Battery Charger with CI/CD

Sheet Title:

Solar Charger

File Name:

Section A - Title A.kicad_sch

Designer:

Nhan Duy Truong

Date:

2025-01-12
+ (Unreleased)

Revision:

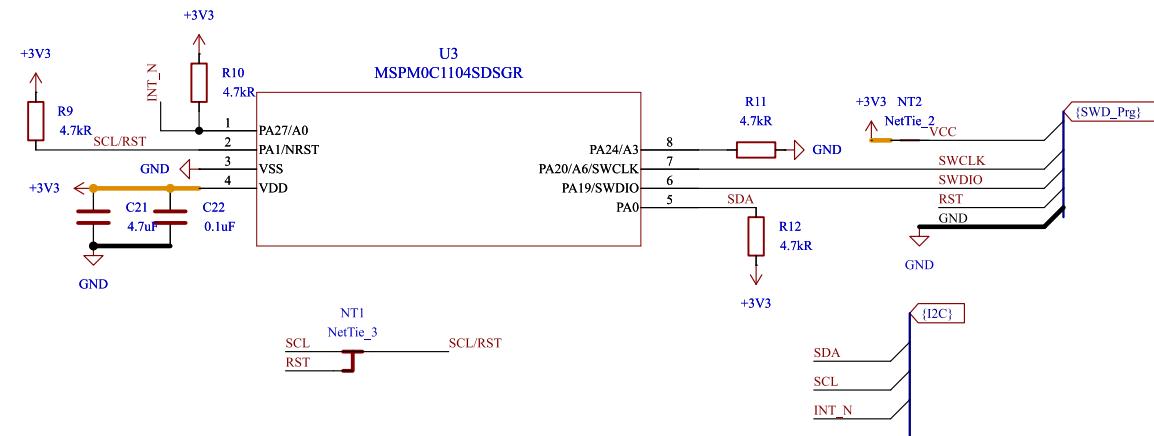
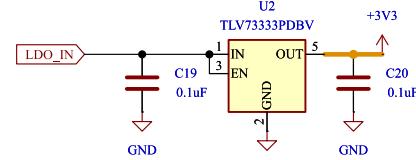
Sheet Path:
/Project Architecture/SolarCharger/

Reviewer:

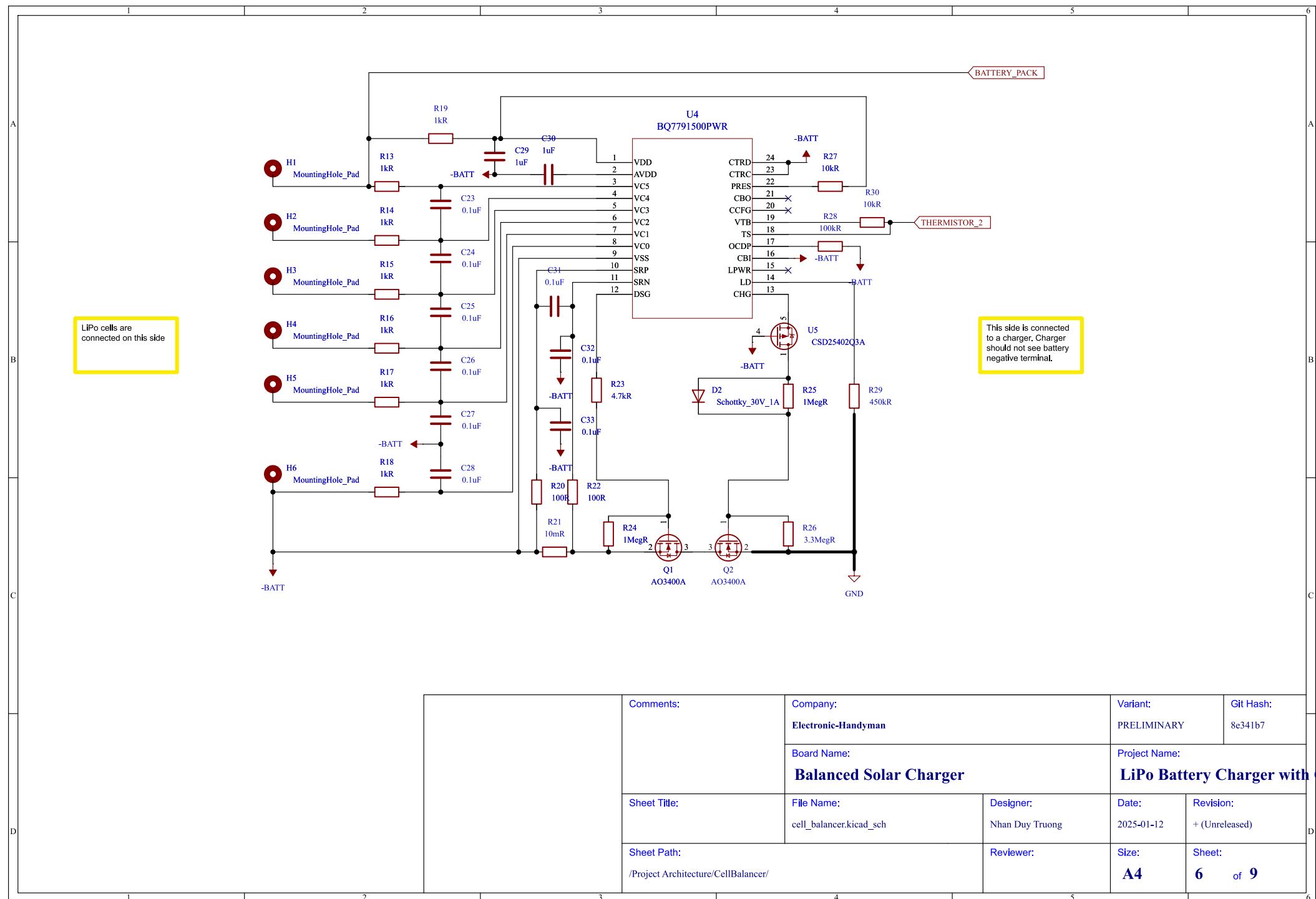
Size:

A4 **4** of **9**

[5] MCU



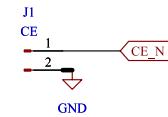
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	Board Name: Balanced Solar Charger	Project Name: LiPo Battery Charger with CI/CD		
	Sheet Title: MCU	File Name: Section B - Title B.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 Revision: + (Unreleased)
	Sheet Path: /Project Architecture/MCU/	Reviewer:	Size: A4	Sheet: 5 of 9



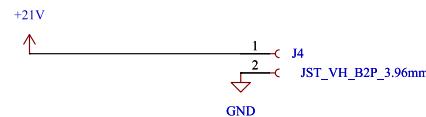
[7] Connectors

A

Connect jumper here to enable charging (normal operation).

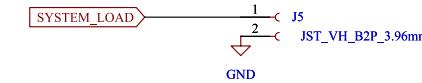
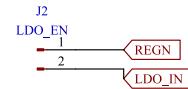


Placing input (solar) on one side and the rest on the opposite side of the PCB

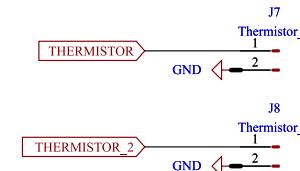
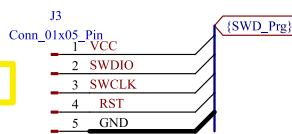
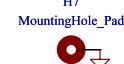


B

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



C



D

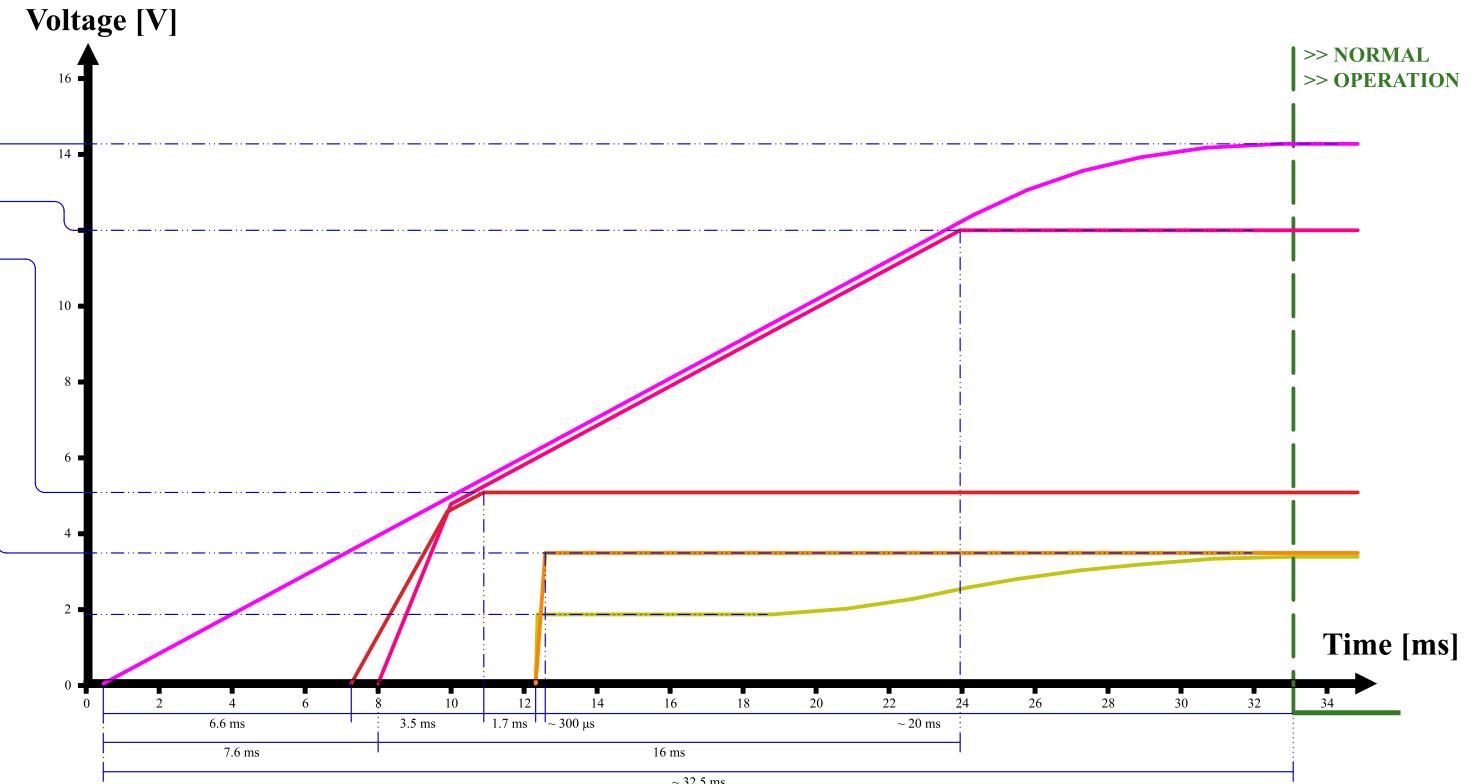
	Comments:	Company: Electronic-Handyman	Variant: PRELIMINARY	Git Hash: 8c341b7
	Board Name: Balanced Solar Charger			Project Name: LiPo Battery Charger with CI/CD
	Sheet Title: Connectors	File Name: connectors.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12
	Revision: + (Unreleased)		Reviewer:	Size: A4
	Sheet Path: /Project Architecture/Connectors/		Sheet: 7 of 9	

[8] Revision History

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