

# Balanced Solar Charger

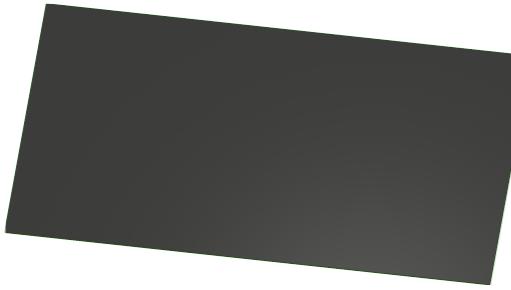
Variant: DRAFT

2026-01-08

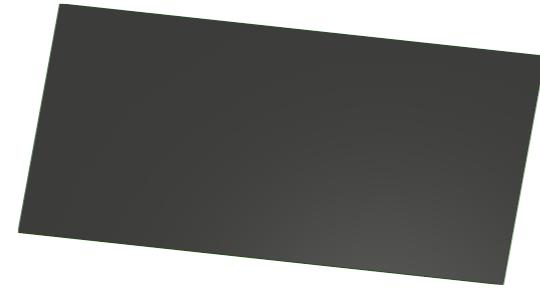
Rev + (Unreleased)

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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: 08-Jan-2026

## DESIGN CONSIDERATIONS

DESIGN NOTE:  
Example text for informational design notes.

DESIGN NOTE:  
Example text for debug notes.

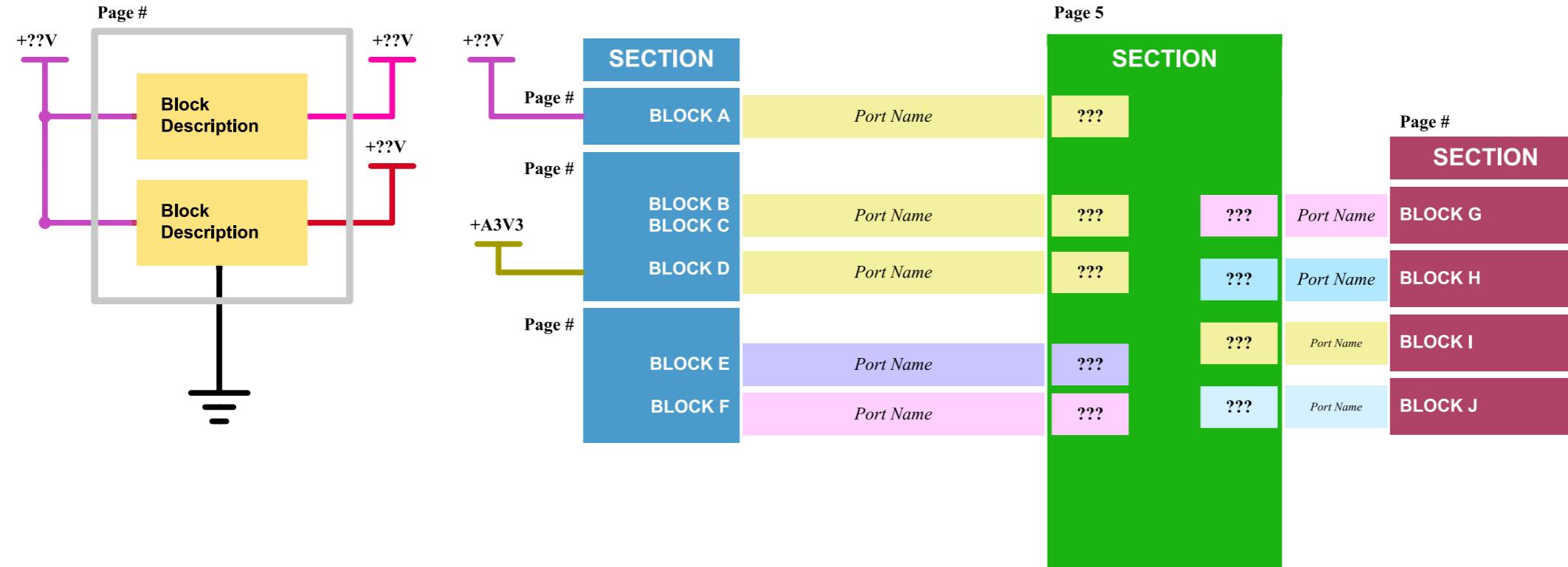
DESIGN NOTE:  
Example text for cautionary design notes.

DESIGN NOTE:  
Example text for critical design notes.

LAYOUT NOTE:  
Example text for critical layout guidelines.

	Comments:	Company: Electronic-Handyman		Variant: DRAFT	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

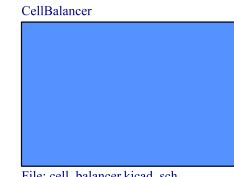
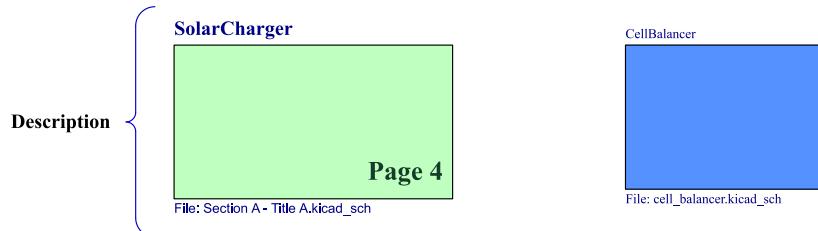


## Target specifications:

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

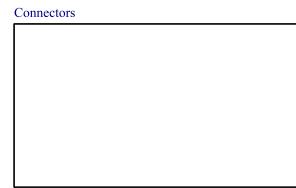
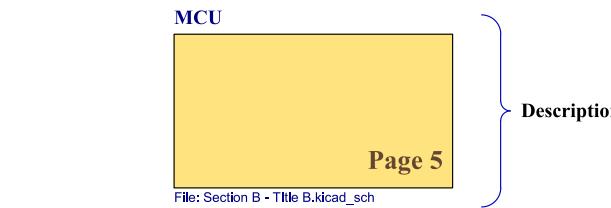
	Comments:	Company: Electronic-Handyman	Variant: DRAFT	Git Hash: 8e341b7
		Board Name: <b>Balanced Solar Charger</b>	Project Name: <b>LiPo Battery Charger with CI/CD</b>	
	Sheet Title: Block Diagram	File Name: Block Diagram.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 + (Unreleased)
	Sheet Path: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

# [3] Project Architecture

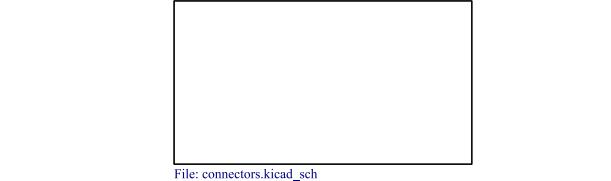


A

A



File: connectors.kicad\_sch



B

B

C

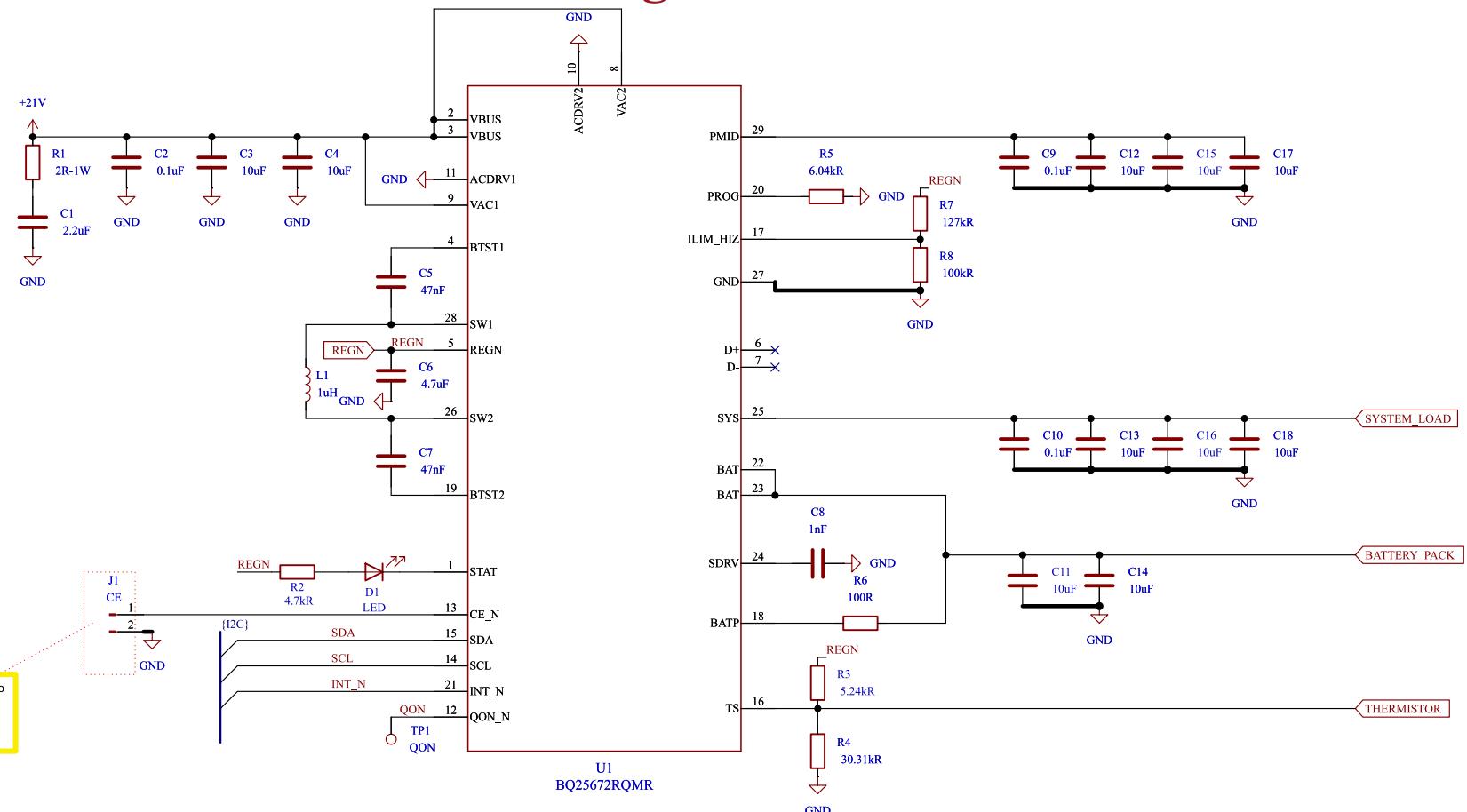
C

D

D

		Comments:	Company: Electronic-Handyman	Variant: DRAFT	Git Hash: 8c341b7
		Board Name: <b>Balanced Solar Charger</b>			Project Name: <b>LiPo Battery Charger with CI/CD</b>
		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: <b>A4</b> Sheet: <b>3 of 9</b>

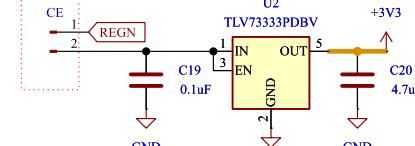
# [4] Solar Charger



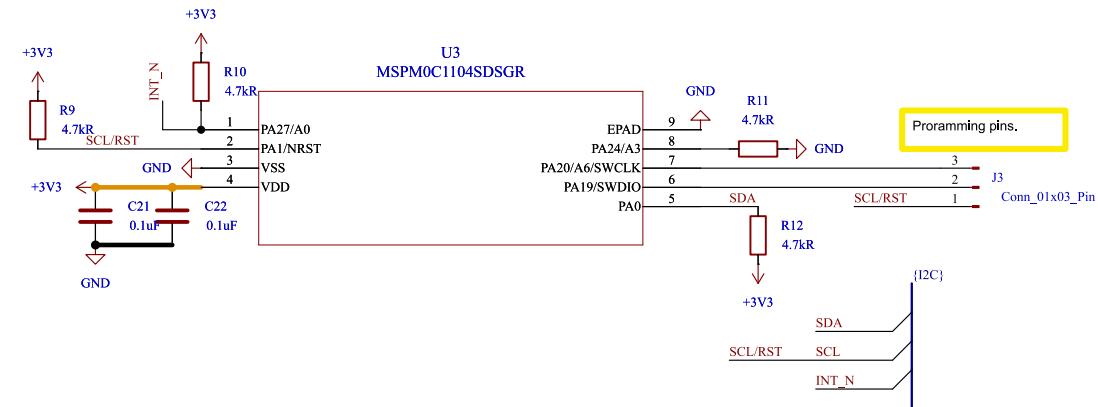
		Comments:	Company: Electronic-Handyman	Variant: DRAFT	Git Hash: 8c341b7
		Board Name: <b>Balanced Solar Charger</b>	Project Name: <b>LiPo Battery Charger with CI/CD</b>		
		Sheet Title: Solar Charger	File Name: Section A - Title A.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12
		Sheet Path: /Project Architecture/SolarCharger/	Reviewer:	Size: <b>A4</b>	Sheet: <b>4</b> of <b>9</b>

# [5] MCU

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

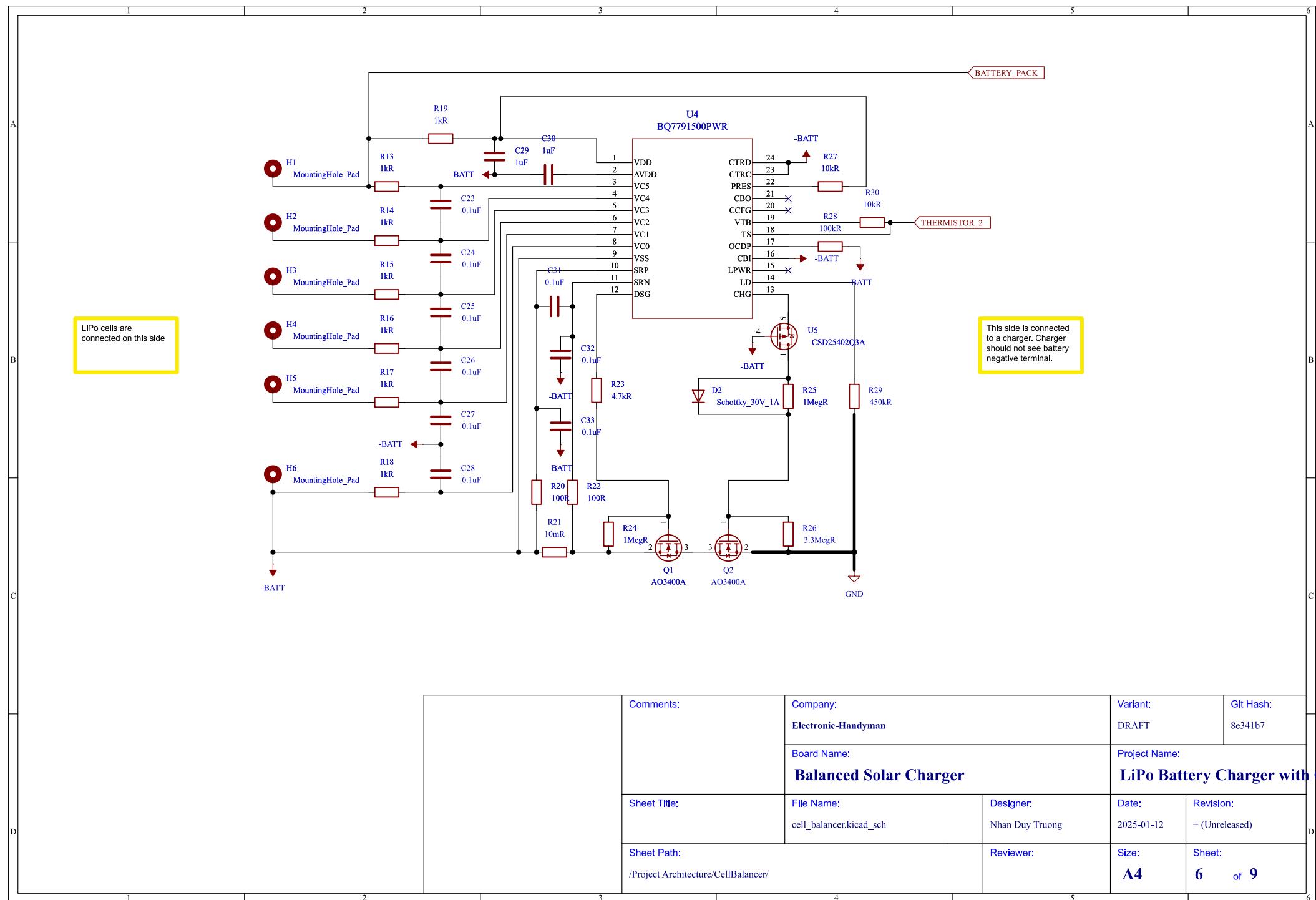


**3V3 LDO**



**MCU Charger Control**

	Comments:	Company: Electronic-Handyman	Variant: DRAFT	Git Hash: 8c341b7
	Board Name: <b>Balanced Solar Charger</b>			Project Name: <b>LiPo Battery Charger with CI/CD</b>
	Sheet Title: MCU	File Name: Section B - Title B.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 Revision: + (Unreleased)
	Sheet Path: <a href="#">/Project Architecture/MCU/</a>		Reviewer:	Size: <b>A4</b> Sheet: <b>5</b> of <b>9</b>



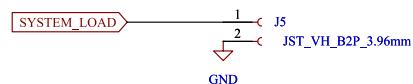
# [7] Connectors

A

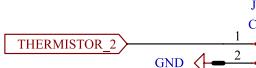


Placing Input (solar) on one side and the rest on the opposite side of the PCB

B



C



D

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

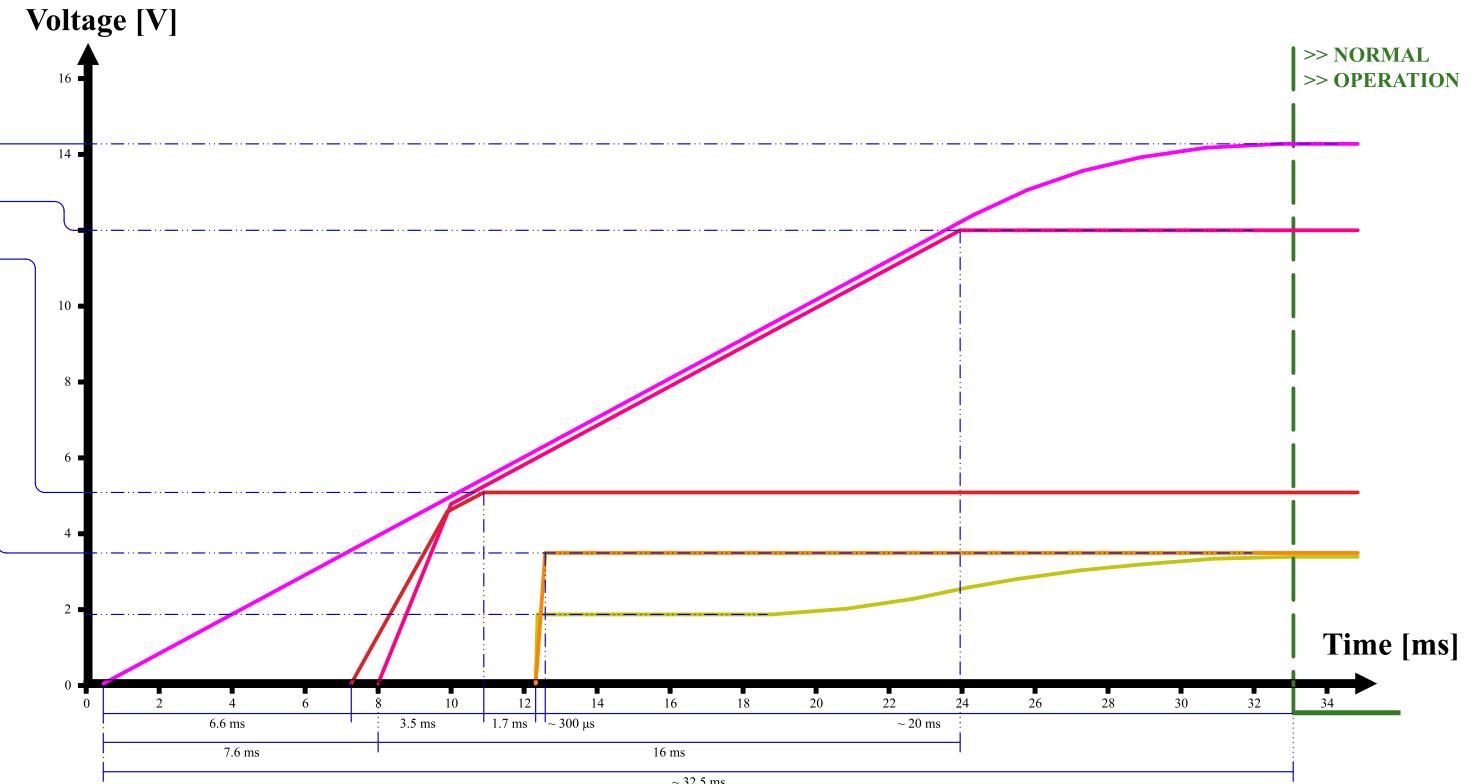
## [8] Revision History

A					A
B					B
C					C
D					D

		Comments:	Company: Electronic-Handyman	Variant: DRAFT	Git Hash: 8e341b7
			Board Name: <b>Balanced Solar Charger</b>	Project Name: <b>LiPo Battery Charger with CI/CD</b>	
		Sheet Title: Revision History	File Name: Revision History.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 Revision: + (Unreleased)
		Sheet Path: <a href="#">/Revision History/</a>		Reviewer:	Size: <b>A4</b> Sheet: <b>8 of 9</b>

# [9] Power - Sequencing

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



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		Electronic-Handyman	DRAFT	8e341b7
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	Balanced Solar Charger	LiPo Battery Charger with CI/CD		
	Sheet Title:	File Name:	Designer:	Date:
	Power - Sequencing	Power - Sequencing.kicad_sch	Nhan Duy Truong	2025-01-12
	Sheet Path:	Reviewer:	Size:	Sheet:
	/Power - Sequencing/		A4	9 of 9