

# Balanced Solar Charger

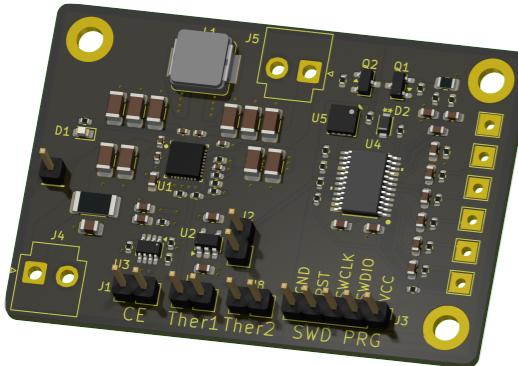
Variant: CHECKED

2026-01-09

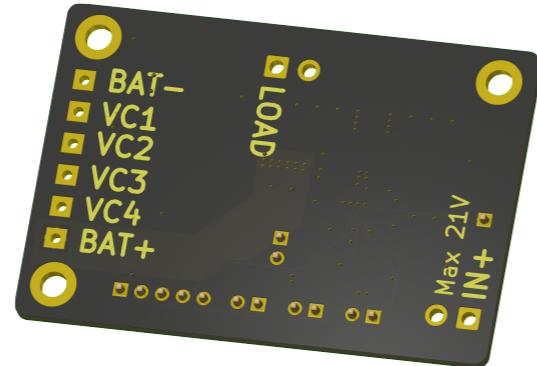
Rev + (Unreleased)

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## TOP VIEW



## BOTTOM VIEW



## NOTES

Comment

Not fitted components are marked as 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.

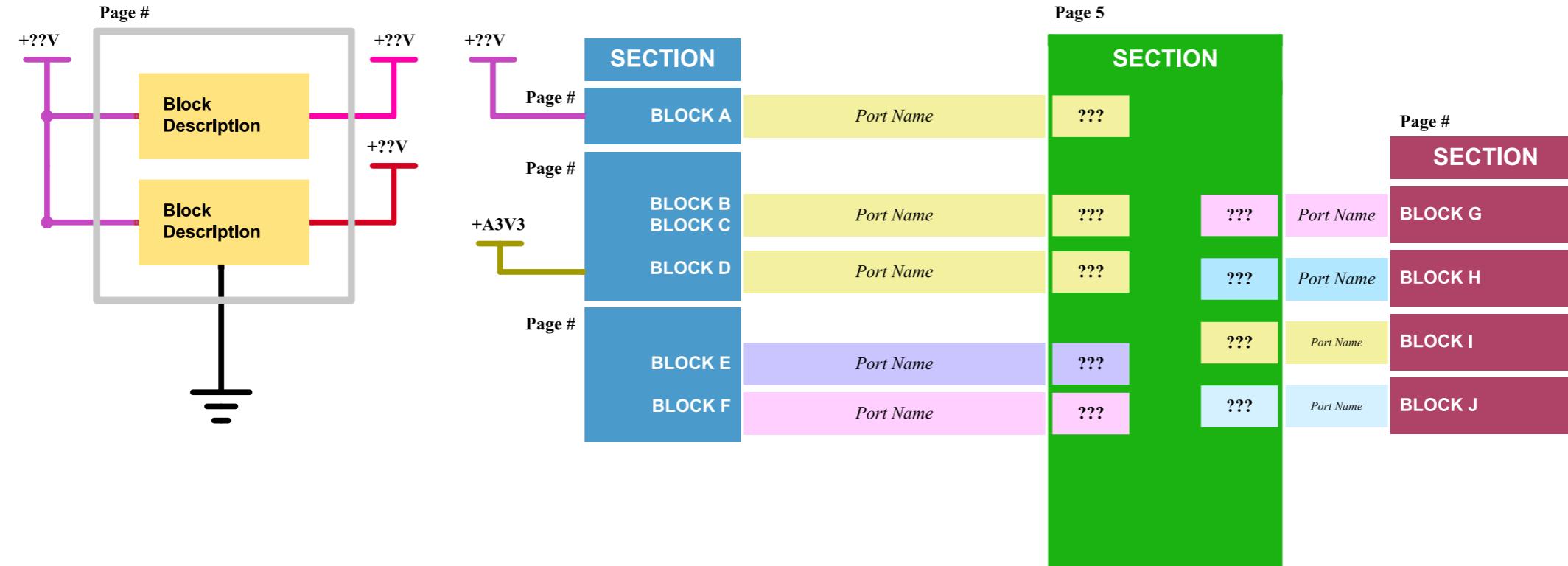
DESIGN NOTE:  
Example text for cautionary design notes.

DESIGN NOTE:  
Example text for critical design notes.

LAYOUT NOTE:  
Example text for critical layout guidelines.

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

## [2] Block Diagram

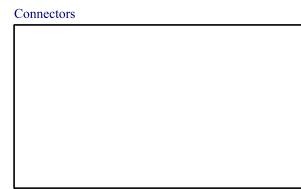
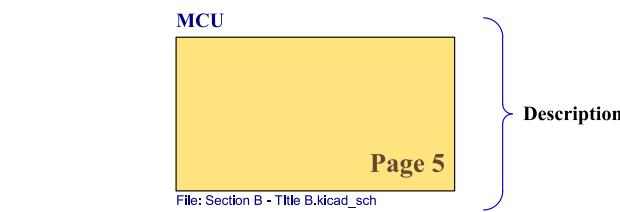
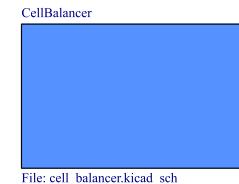
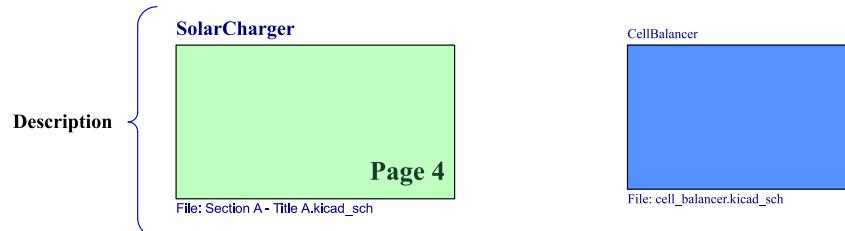


### Target specifications:

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

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		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>

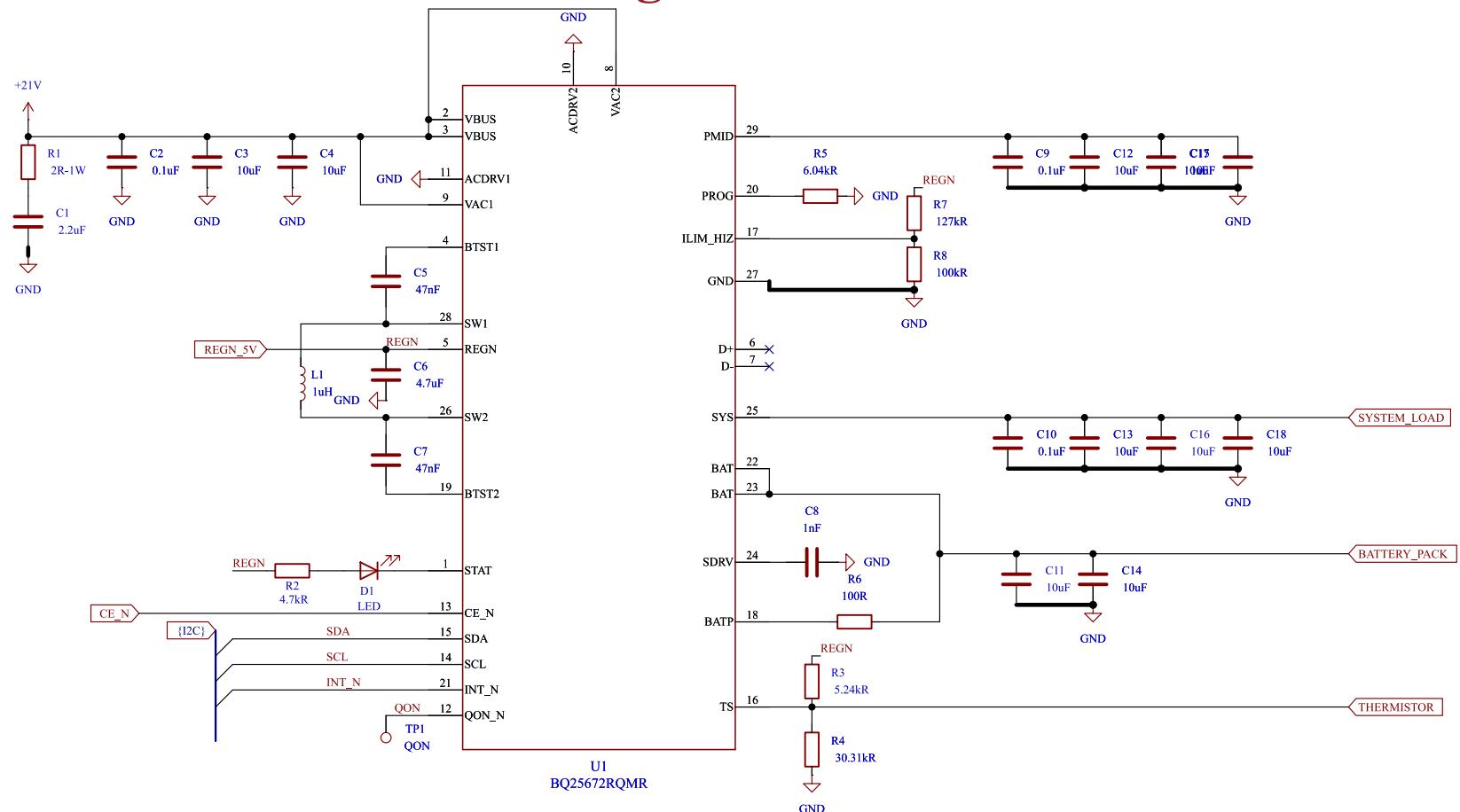
# [3] Project Architecture



File: connectors.kicad\_sch

	Comments:	Company: Electronic-Handyman	Variant: CHECKED	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:  
CHECKED

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

Revision:

+ (Unreleased)

Sheet Path:

/Project Architecture/SolarCharger/

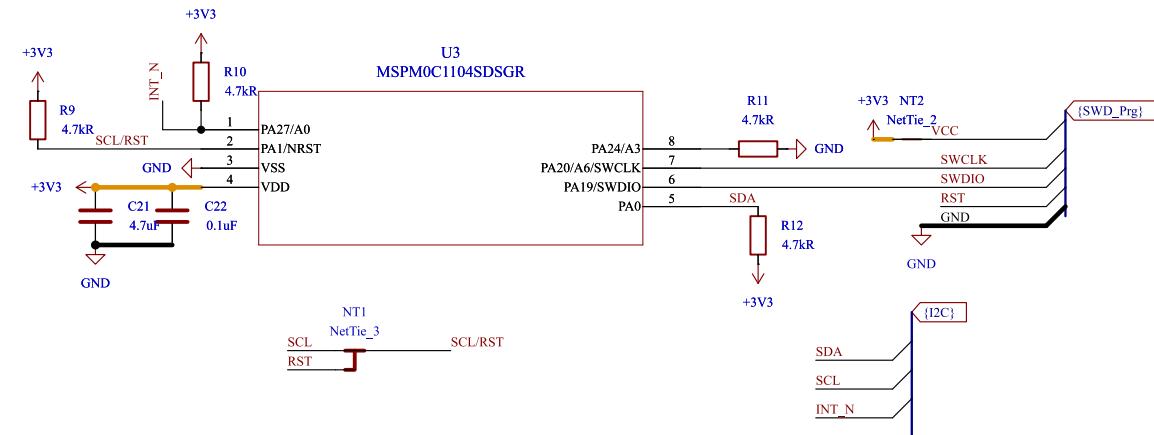
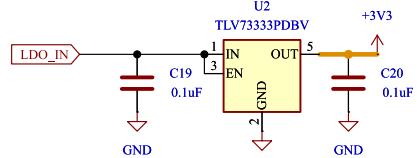
Reviewer:

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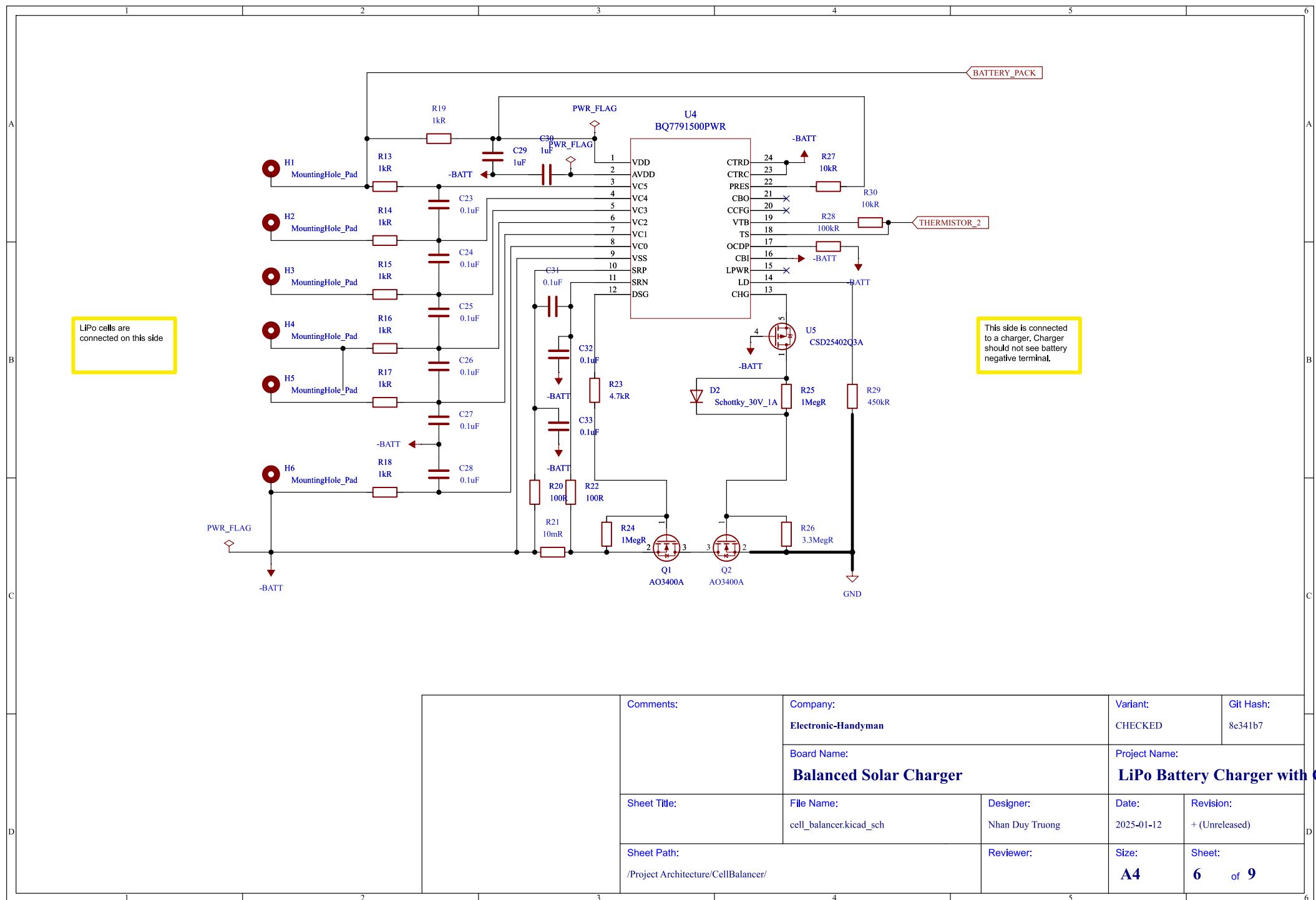
Size:

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# [5] MCU



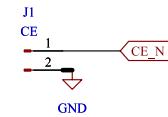
	Comments:	Company: Electronic-Handyman	Variant: CHECKED	Git Hash: 8c341b7
	Board Name: <b>Balanced Solar Charger</b>	Project Name: <b>LiPo Battery Charger with CI/CD</b>		
	Sheet Title: MCU	File Name: Section B - Title B.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12 Revision: + (Unreleased)
	Sheet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



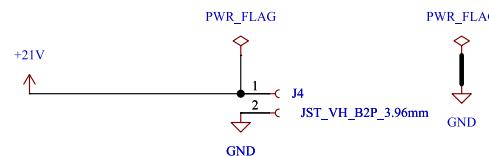
# [7] Connectors

A

Connect jumper here to enable charging (normal operation).

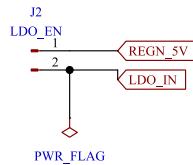


Placing input (solar) on one side and the rest on the opposite side of the PCB

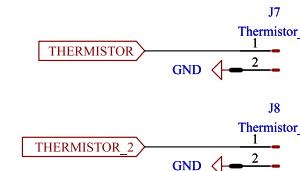
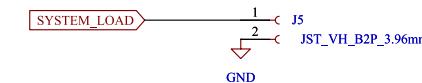


B

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



Programming pins.



C



Comments:

Company:  
Electronic-Handyman

Variant:  
CHECKED  
Git Hash:  
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)

Sheet Path:

/Project Architecture/Connectors/

Reviewer:

Size:

**A4**

Sheet:

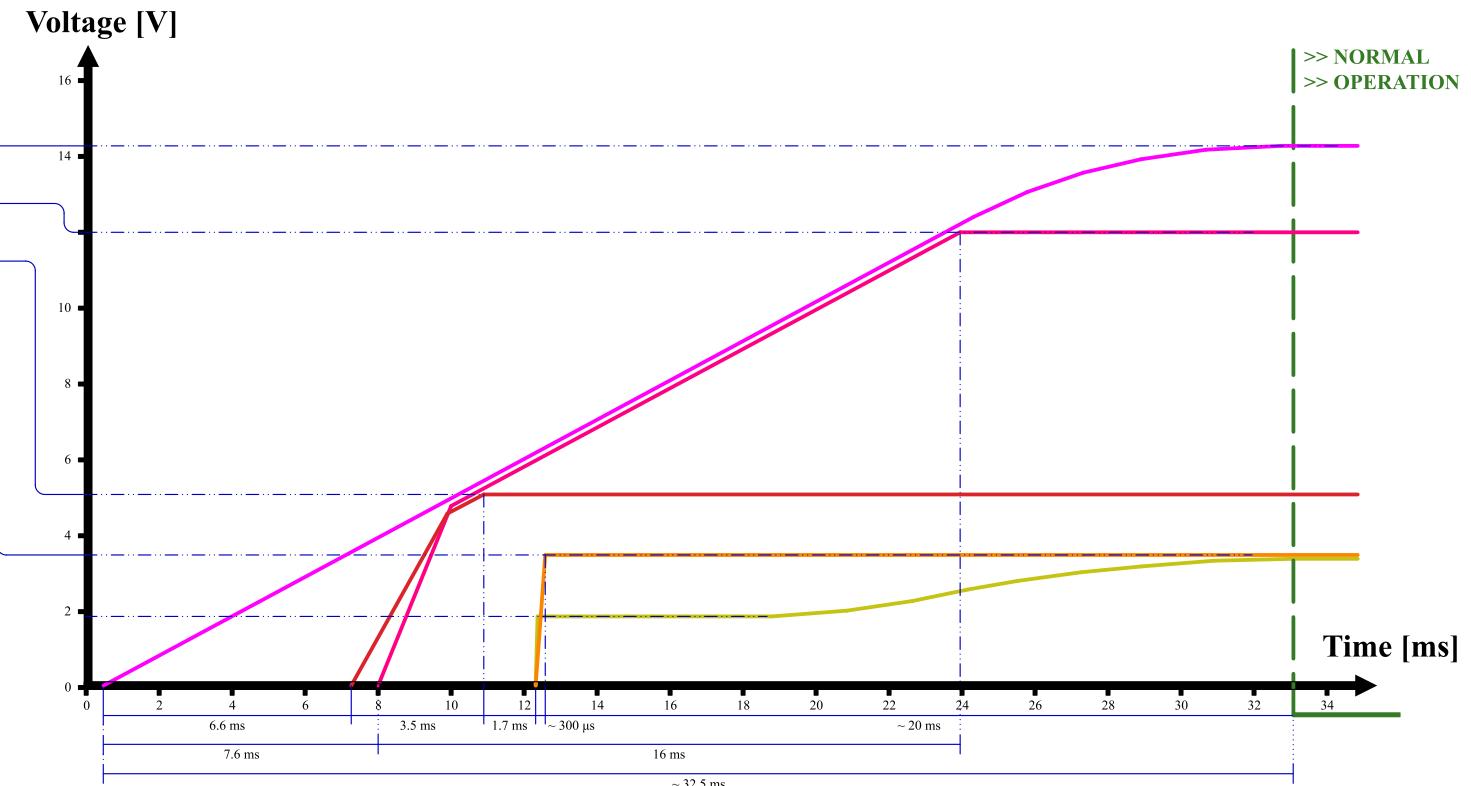
**7** of **9**

## [8] Revision History

A					A
B					B
C					C
D					D
		Comments:	Company: Electronic-Handyman	Variant: CHECKED	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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			Project Name: <b>LiPo Battery Charger with CI/CD</b>			
			Sheet Title: Power - Sequencing	File Name: Power - Sequencing.kicad_sch	Designer: Nhan Duy Truong	Date: 2025-01-12
			Sheet Path: <a href="#">/Power - Sequencing/</a>	Reviewer:  Size: <b>A4</b>		Revision: + (Unreleased)  Sheet: <b>9</b> of 9