

Module

Random

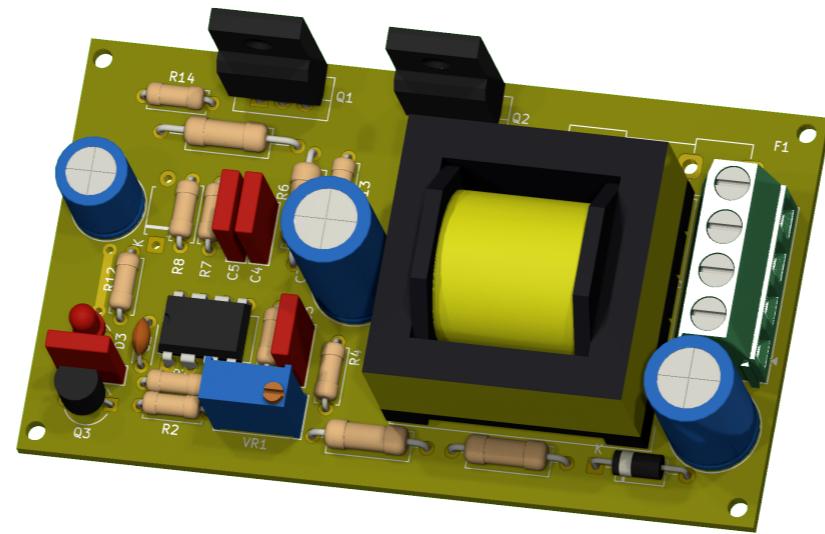
Variant: CHECKED

Rev + (Unreleased)

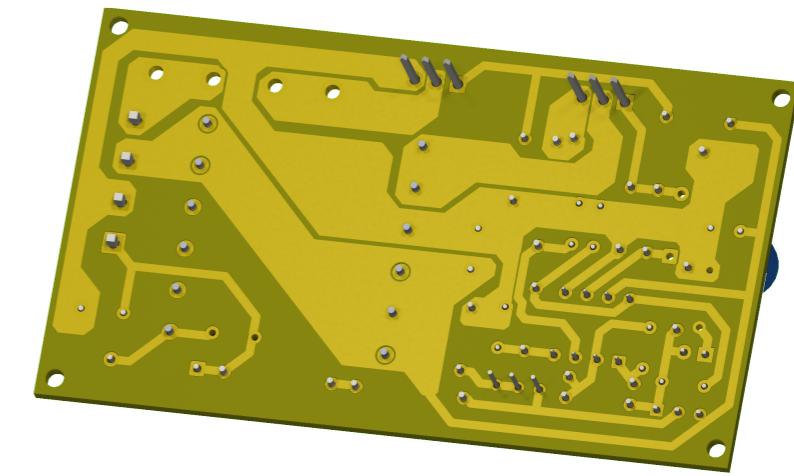
2025-12-19

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TOP VIEW



BOTTOM VIEW



NOTES

Comment

Not fitted components are marked as

DRAFT - Early concept stage, schematic drafted.

PRELIMINARY - Minor schematic changes are expected, ready for layout planning.

CHECKED - DRC completed, schematic and layout ready for review.

RELEASED - Design ready for manufacturing.

Date: 19-Dec-2025

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.

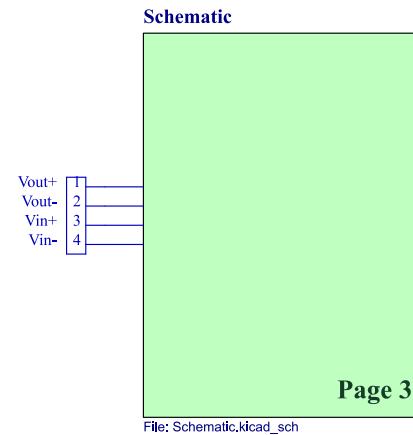
DESIGN NOTE:
Example text for critical design notes.

LAYOUT NOTE:
Example text for critical layout guidelines.

| | | | | |
|--|------------------------------|---|---------------------|--|
| | Comments: | Company: FR | Variant: CHECKED | Git Hash: 14654ba |
| | Board Name: Module | Project Name: Step-up module 12:450 V | | |
| | Sheet Title: | File Name: StepUp_module_12to450V.kicad_sch | Designer: FR | Date: 2025-01-12 Revision: + (Unreleased) |
| | Sheet Path: | / | Reviewer: NA | Size: A3 Sheet: 1 of 4 |

[2] Block Diagram

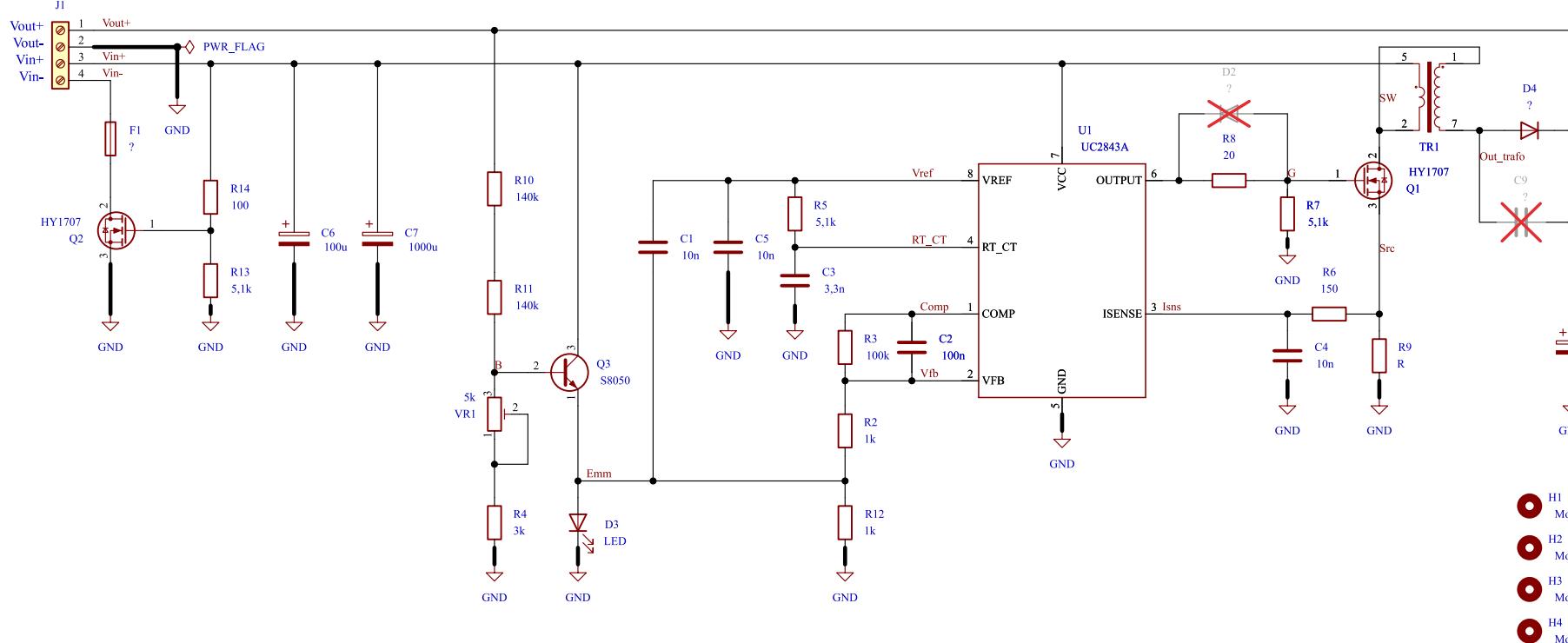
MODULE INTERFACE:
 Vin: 9 V to 2 V according to
 AliExpress product page
 Vout: 200 V to 450 V,
 adjustable through VR1



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| | | | | |
|--|--------------------------------|---------------------------------------|---------------------|--|
| | Comments: AliExpress module | Company: FR | Variant: CHECKED | Git Hash: 14654ba |
| | Board Name: Module | | | Project Name: Step-up module 12:450 V |
| | Sheet Title: Block Diagram | File Name: Block Diagram.kicad_sch | Designer: FR | Date: 2025-01-12 Revision: + (Unreleased) |
| | Sheet Path: /Block Diagram/ | | Reviewer: NA | Size: A4 Sheet: 2 of 4 |

[3] Schematic



| | | | |
|--|---|---------------------|--------------------------------|
| Comments: FR | Company: FR | Variant: CHECKED | Git Hash: 14654ba |
| Board Name: Module | Project Name: Step-up module 12:450 V | | |
| Sheet Title: Schematic | File Name: Schematic.kicad_sch | Designer: FR | Date: 2025-01-12 |
| Sheet Path: /Block Diagram/Schematic/ | Reviewer: NA | Size: A4 | Sheet: 3 of 4 |

[4] Revision History

| | | | | | |
|---|--|---|---|--|------------------------------|
| A | Version 1.0.0 - 2025-12-19 | Version 1.0.1 not found. Version 1.0.1 not found. | Version 1.0.2 not found. Version 1.0.2 not found. | Version 1.1.0 not found. Version 1.1.0 not found. | A |
| B | First issue - Schematic - PCB layout | | | | B |
| C | | | | | C |
| D | | <p>Comments: "Comment 1" "Comment 2" "Comment 3" "Comment 4"</p> <p>Sheet Title: Revision History</p> <p>Sheet Path: /Revision History/</p> | <p>Company: FR</p> <p>Board Name: Module</p> <p>File Name: Revision History.kicad_sch</p> | <p>Variant: CHECKED</p> <p>Project Name: Step-up module 12:450 V</p> <p>Date: 2025-01-12</p> <p>Revision: + (Unreleased)</p> | <p>Git Hash: 14654ba</p> |
| | 1 | 2 | 3 | 4 | 5 |