

A 1 2 3 4 5 6 7 8

Module

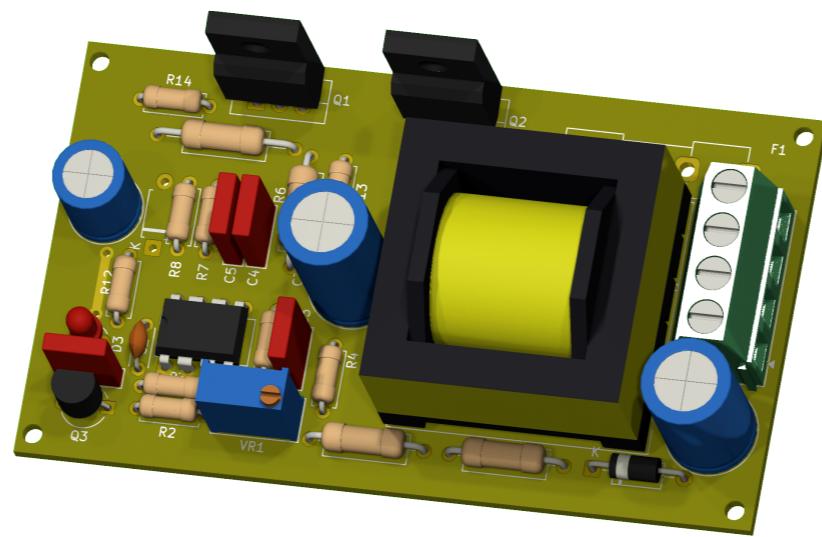
Variant: CHECKED

Rev + (Unreleased)

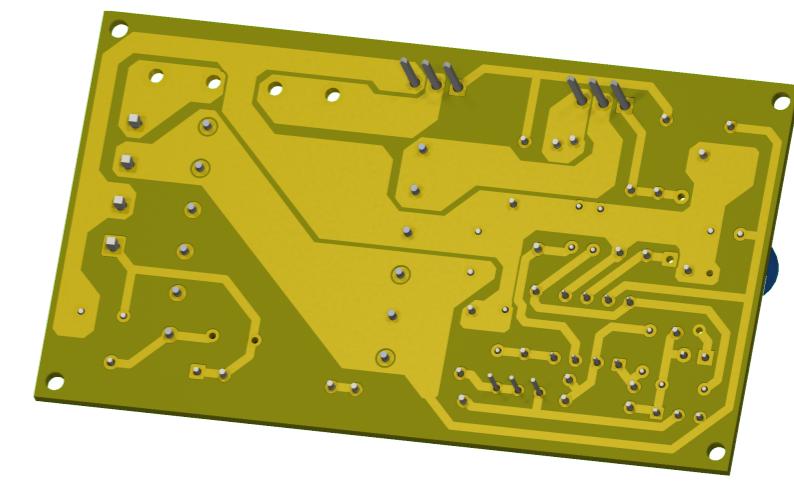
2025-12-20

Page	Index
1	Cover Page
2	Block Diagram
3	Schematic
4	Revision History
5
6
7
8
9
10

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: 20-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.

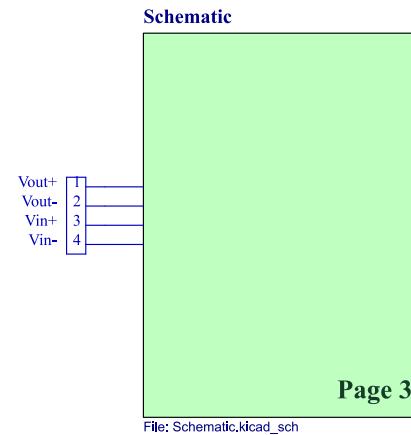
DESIGN NOTE:
Example text for critical design notes.

LAYOUT NOTE:
Example text for critical layout guidelines.

	Comments: FR	Company: FR	Variant: CHECKED	Git Hash: 4fc064d
	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

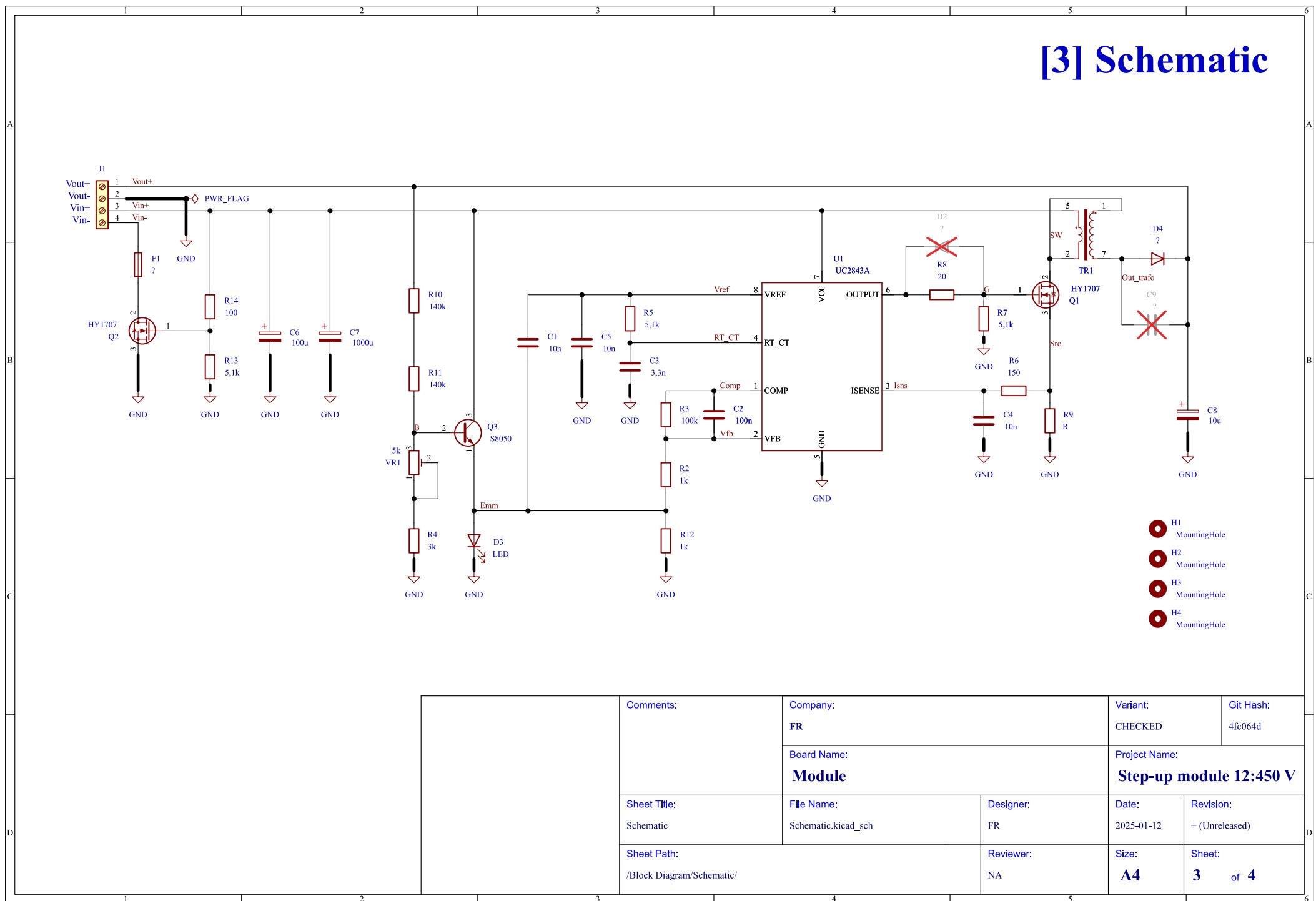
MODULE INTERFACE:
Vin: 9 V to 2 V according to
AliExpress product page
Vout: 200 V to 450 V,
adjustable through VR1



Page 3

	Comments: AliExpress module	Company: FR	Variant: CHECKED	Git Hash: 4fc064d
	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: <i>/Block Diagram/</i>		Reviewer: NA	Size: A4 Sheet: 2 of 4

[3] Schematic



[4] Revision History

	1	2	3	4	5	6																							
A	Version 1.0.0 - 2025-12-19 <hr/> <p>First issue Schematic capture complete, except for parts: - not populated (D2, C9); - with unreadable or absent markings (F1, D4, R9); Best guess: - F1: ~5 A - D4: ~500 mA x 600 V - R9: 10-100 mΩ ## <!--</p>					A																							
B						B																							
C						C																							
D			<table border="1"><tr><td></td><td>Comments: "Comment 1" "Comment 2" "Comment 3" "Comment 4"</td><td>Company: FR</td><td>Variant: CHECKED</td><td>Git Hash: 4fc064d</td></tr><tr><td></td><td></td><td>Board Name: Module</td><td colspan="3">Project Name: Step-up module 12:450 V</td></tr><tr><td></td><td>Sheet Title: Revision History</td><td>File Name: Revision History.kicad_sch</td><td>Designer: FR</td><td>Date: 2025-01-12</td><td>Revision: + (Unreleased)</td><td>D</td></tr><tr><td></td><td>Sheet Path: /Revision History/</td><td></td><td>Reviewer: NA</td><td>Size: A4</td><td>Sheet: 4 of 4</td></tr></table>		Comments: "Comment 1" "Comment 2" "Comment 3" "Comment 4"	Company: FR	Variant: CHECKED	Git Hash: 4fc064d			Board Name: Module	Project Name: Step-up module 12:450 V				Sheet Title: Revision History	File Name: Revision History.kicad_sch	Designer: FR	Date: 2025-01-12	Revision: + (Unreleased)	D		Sheet Path: /Revision History/		Reviewer: NA	Size: A4	Sheet: 4 of 4		
	Comments: "Comment 1" "Comment 2" "Comment 3" "Comment 4"	Company: FR	Variant: CHECKED	Git Hash: 4fc064d																									
		Board Name: Module	Project Name: Step-up module 12:450 V																										
	Sheet Title: Revision History	File Name: Revision History.kicad_sch	Designer: FR	Date: 2025-01-12	Revision: + (Unreleased)	D																							
	Sheet Path: /Revision History/		Reviewer: NA	Size: A4	Sheet: 4 of 4																								