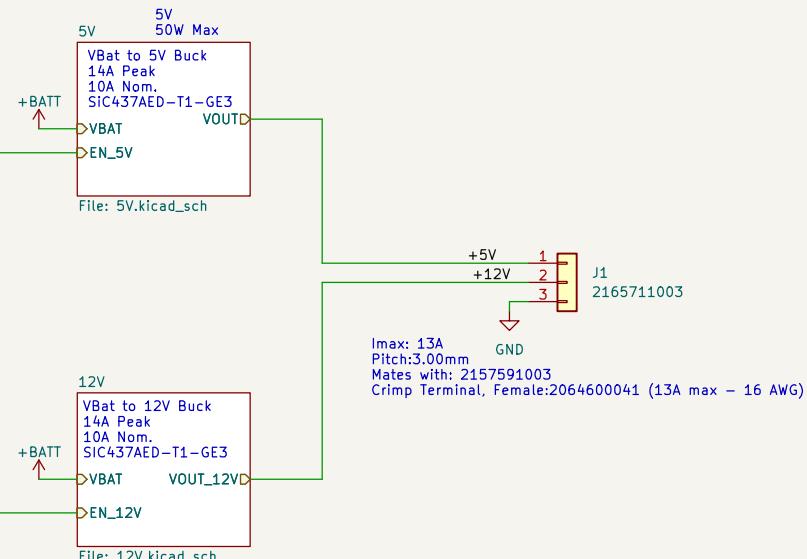


UVLO Protection

When VBat falls below 16 V, the OUT pin of U3 is asserted low, pulling the EN pins of the 5 V buck converter and the 12 V buck converter to GND, thereby disabling both converters.

Table 6-1. Truth Table

CONDITION	OUTPUT	STATUS
SENSE > V_{IT+}	OUT high	Output high impedance
SENSE < V_{IT-}	OUT low	Output asserted



Sheet: /
File: Power_management_V2.kicad_sch

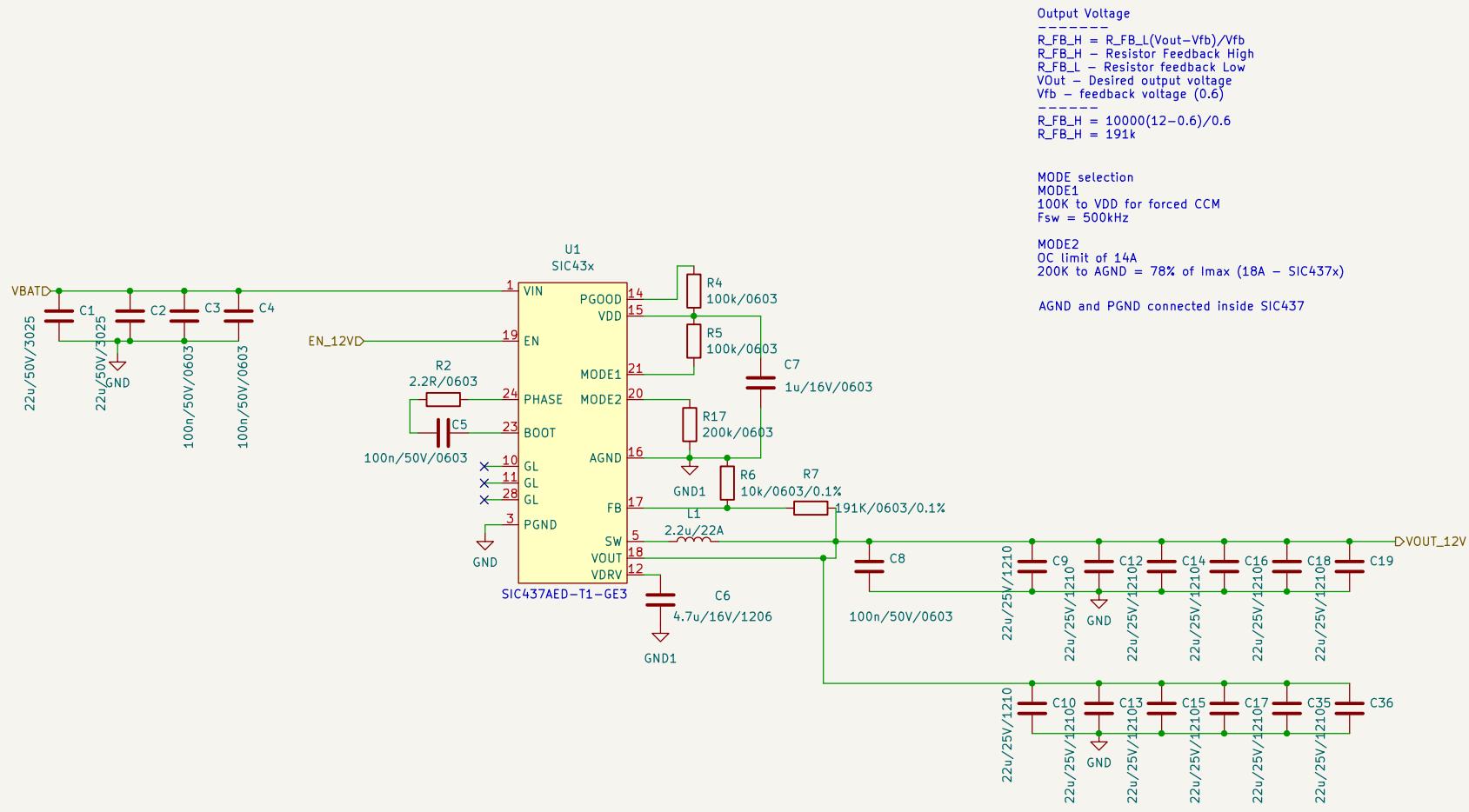
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Size: A4

Date: 2025-08-26

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Rev: 2
Id: 1/3



Sheet: /12V/
File: 12V.kicad_sch

Title: Diptek Power Board V2

Size: A4 Date: 2025-08-26

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Rev: 2
Id: 2/3

1 2 3 4 5 6

A

A

B

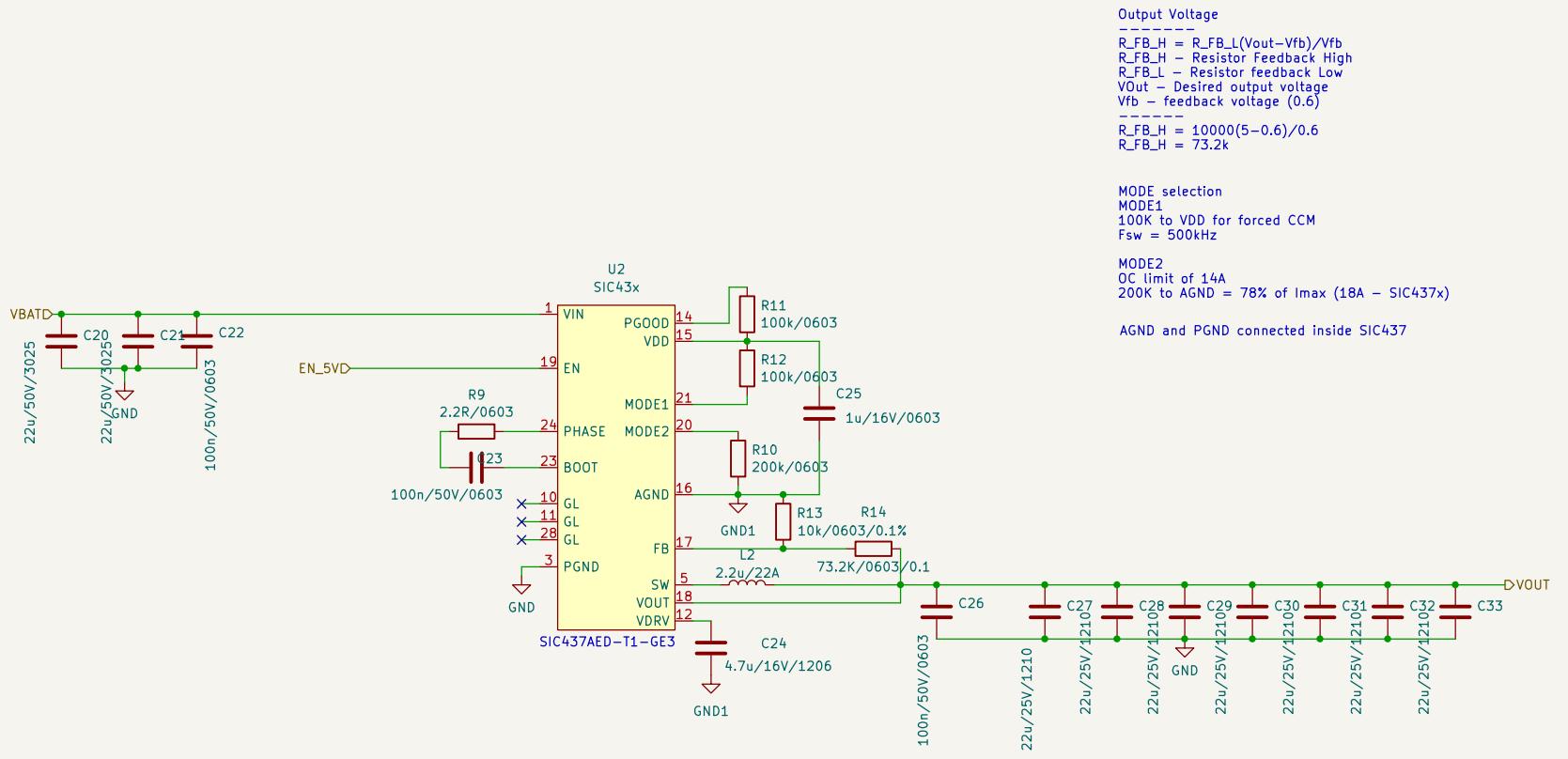
B

C

C

D

D



Sheet: /5V/
File: 5V.kicad_sch

Title: Diptek Power Board V2

Size: A4 Date: 2025-08-26

KiCad E.D.A. 9.0.0

Rev: 2
Id: 6/3

1 2 3 4 5 6