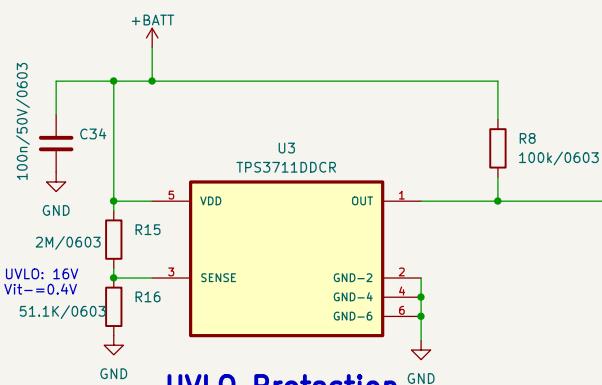


2 Milwaukee 18V
5S LiPo pack
21V-16V
16V Minimum Voltage
250W Peak draw
15.6A peak

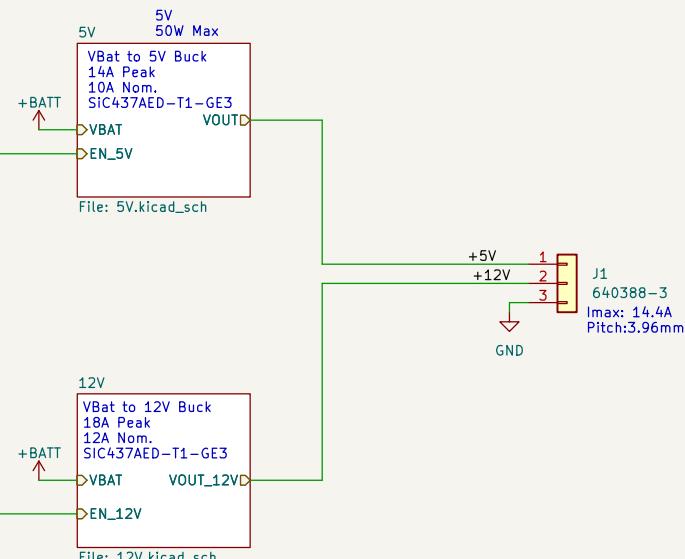


UVLO Protection

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

| TABLE 11.1 Truth Table | | |
|------------------------|----------|-----------------------|
| CONDITION | OUTPUT | STATUS |
| SENSE > V_{IT+} | OUT high | Output high impedance |
| SENSE < V_{IT-} | OUT low | Output asserted |



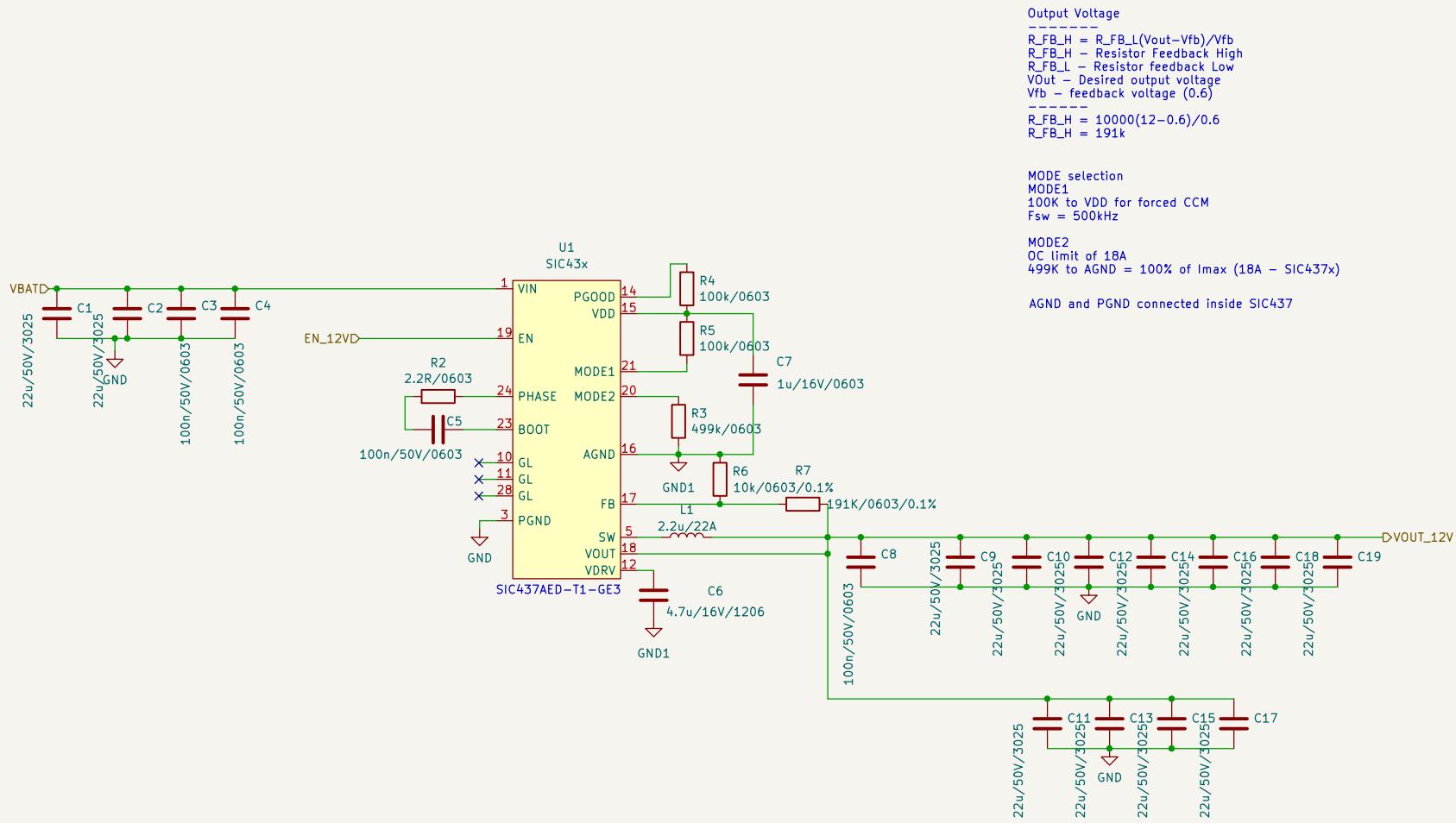
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File: Power_management_V2.kicad_sch

Title: Diptek Power Board V2

Size: A4 Date: 2025-08-26

KiCad E.D.A. 9.0.0

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

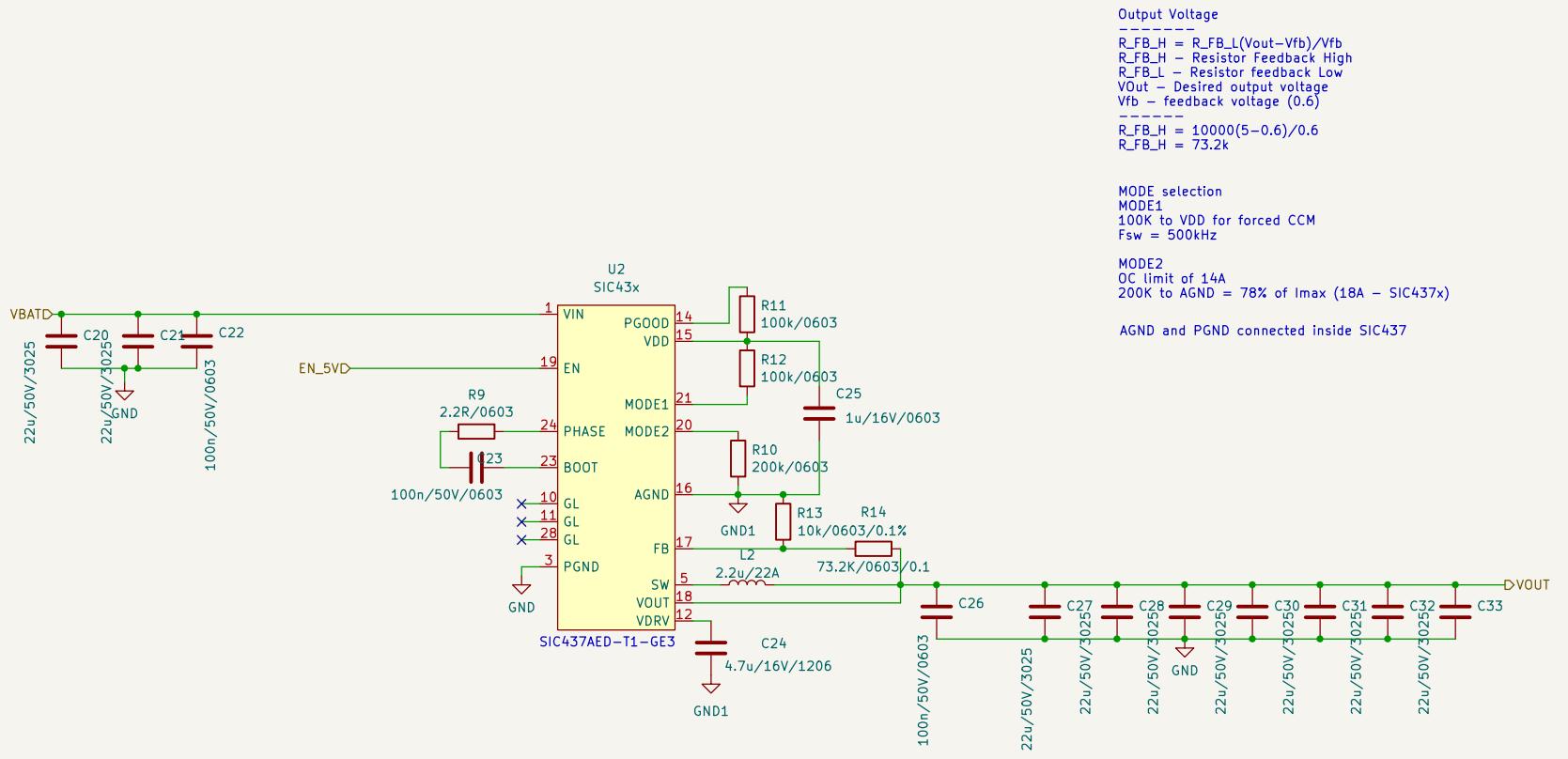
B

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