

Nicholas Loehrke
University of Wisconsin-Platteville

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File: power_supply.kicad_sch

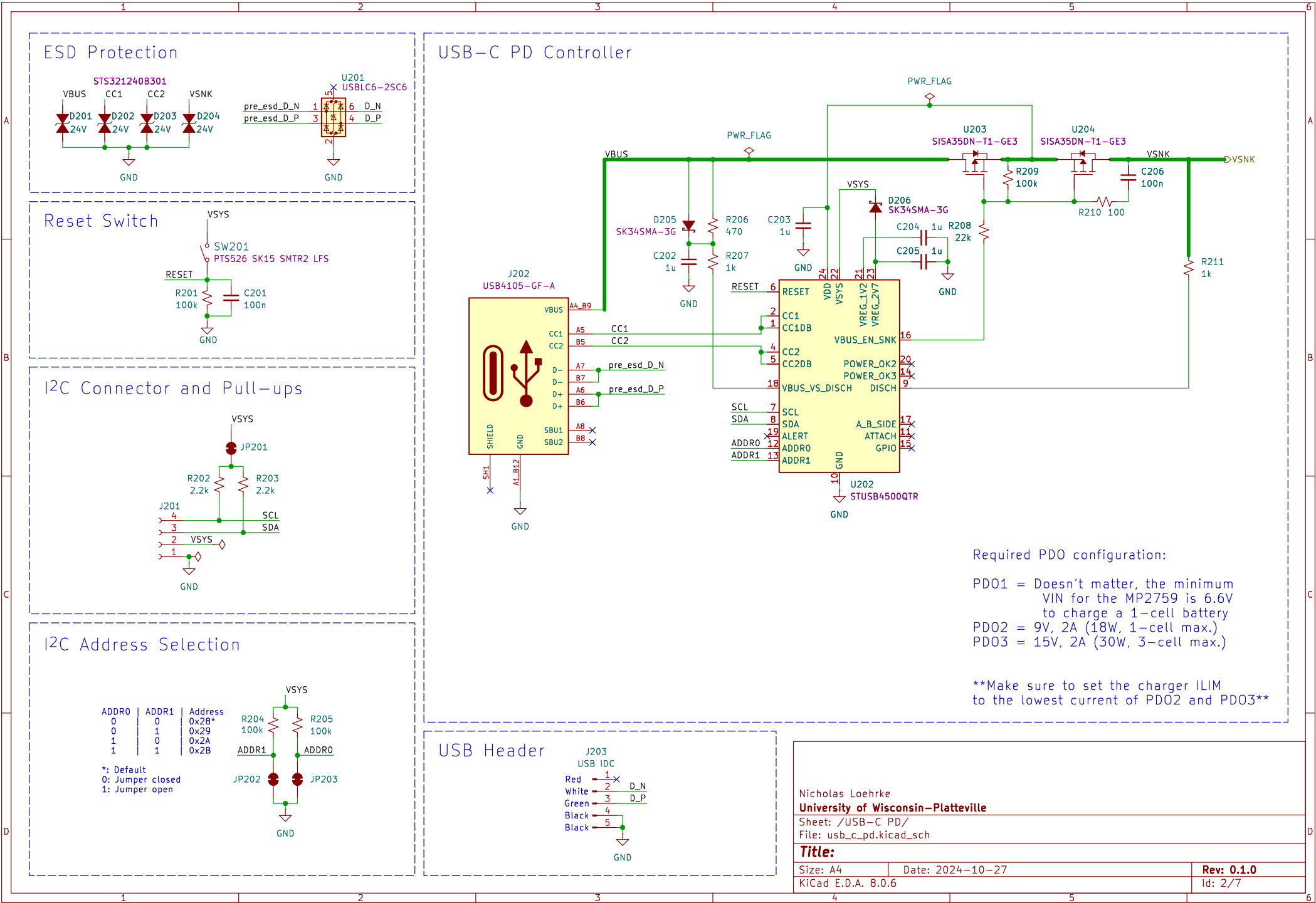
Title: Power Supply

Size: A4 Date: 2024-10-27

KiCad E.D.A. 8.0.6

Rev: 0.1.0

Id: 1/7

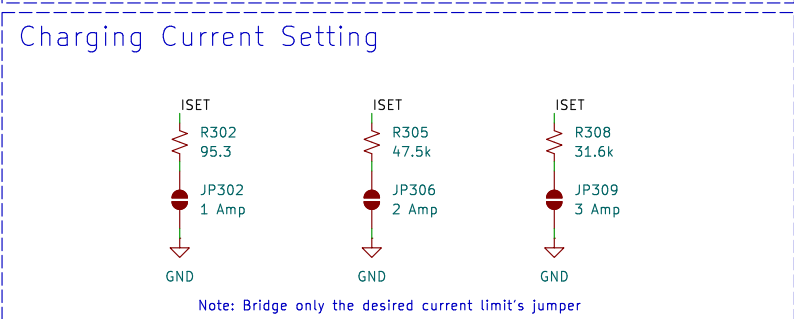


Input Current Limit Setting

Diagram illustrating three different input current limit settings (ILIM) using resistors (R301, R304, R307) and jumpers (JP301, JP305, JP308) connected to ground (GND).

Resistor	Value	Jumper	Rating
R301	80.6k	JP301	1 Amp
R304	40.2k	JP305	2 Amp
R307	27.4k	JP308	3 Amp

Note: Bridge only the desired current limit's jumper

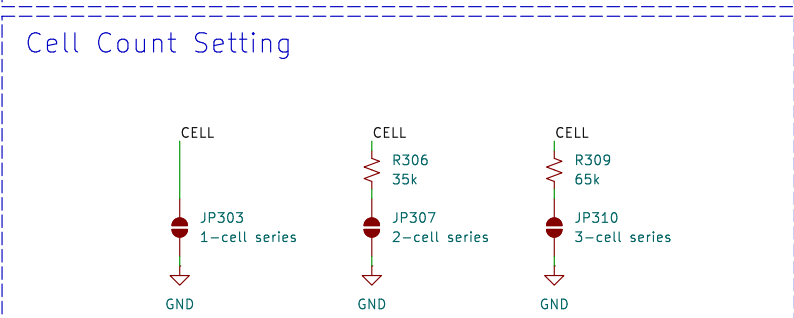


Charging Current Setting

The diagrams illustrate three different current settings for the charging circuit. Each diagram shows a resistor connected to the ISET pin and a jumper connected to GND.

Resistor	Value	Jumper	Current
R302	95.3	JP302	1 Amp
R305	47.5k	JP306	2 Amp
R308	31.6k	JP309	3 Amp

Note: Bridge only the desired current limit's jumper



Cell Count Setting

CELL

JP303
1-cell series

GND

CELL

R306
35k

JP307
2-cell series

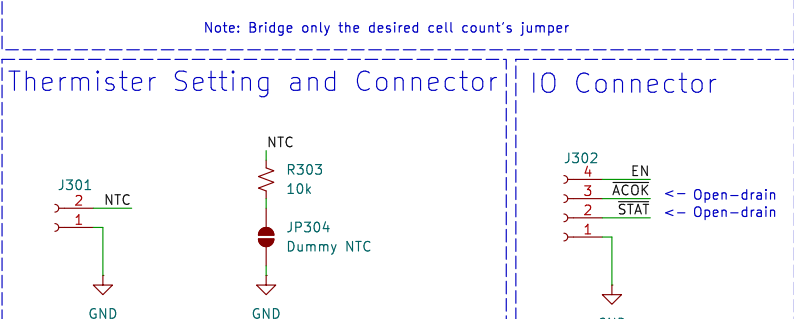
GND

CELL

R309
65k

JP310
3-cell series

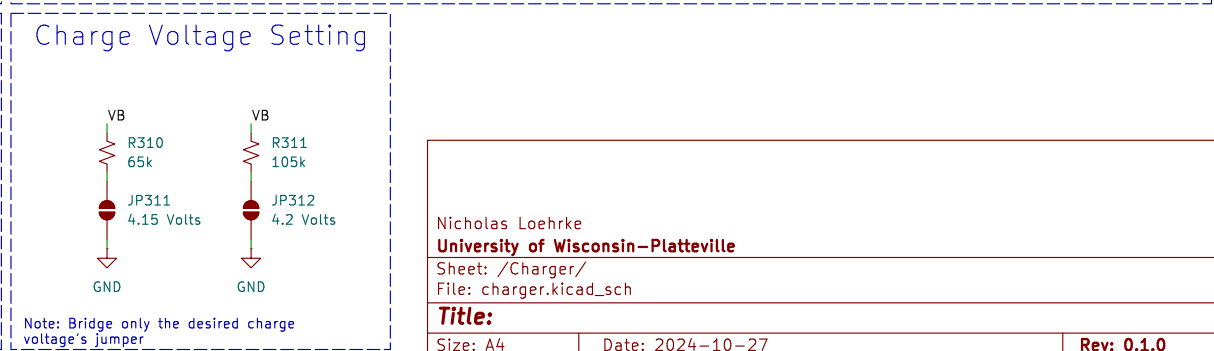
GND



Thermistor Setting and Connector

I/O Connector

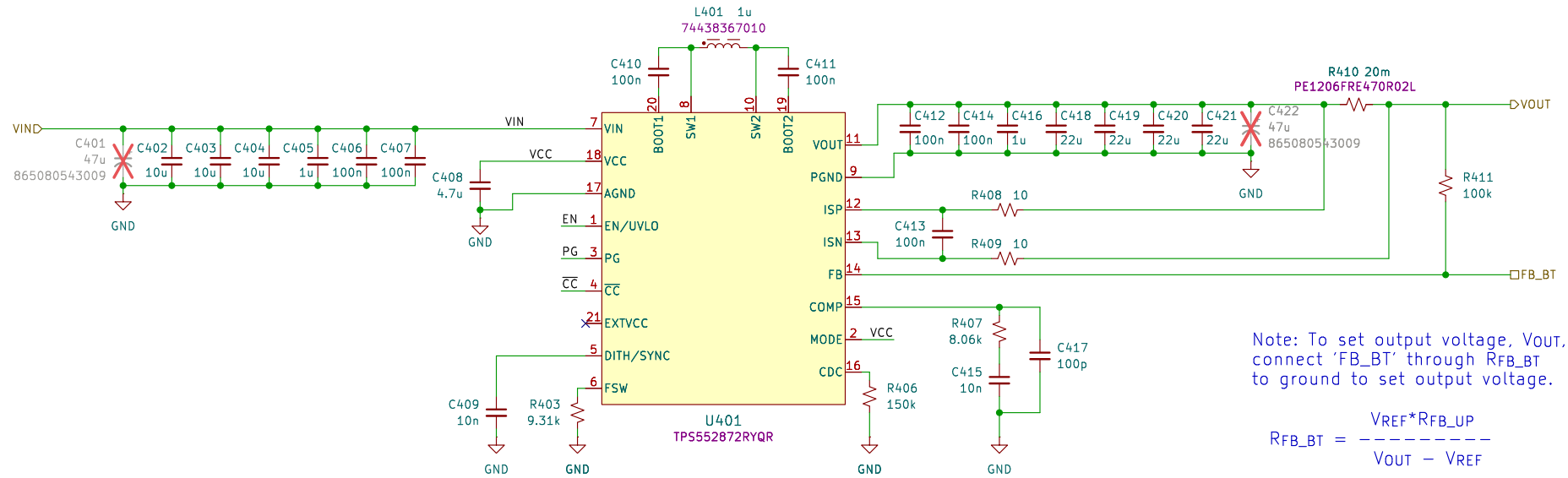
J302
 4 EN
 3 ACOK <- Open-drain
 2 STAT <- Open-drain
 1
 GND

[illegible]

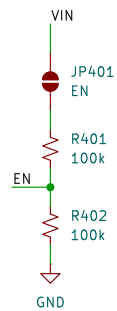
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File: charger.kicad_sch		
Title:		
Size: A4	Date: 2024-10-27	Rev: 0.1.0
KiCad E.D.A. 8.0.6		Id: 3/7

Size: A4	Date: 2024-10-27	Rev: 0.1.0
KiCad E.D.A. 8.0.6		Id: 3/7

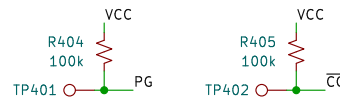
Buck-Boost Converter



Enable



Test Points



Sheet: /Buck-Boost-1/
File: buck_boost.kicad_sch

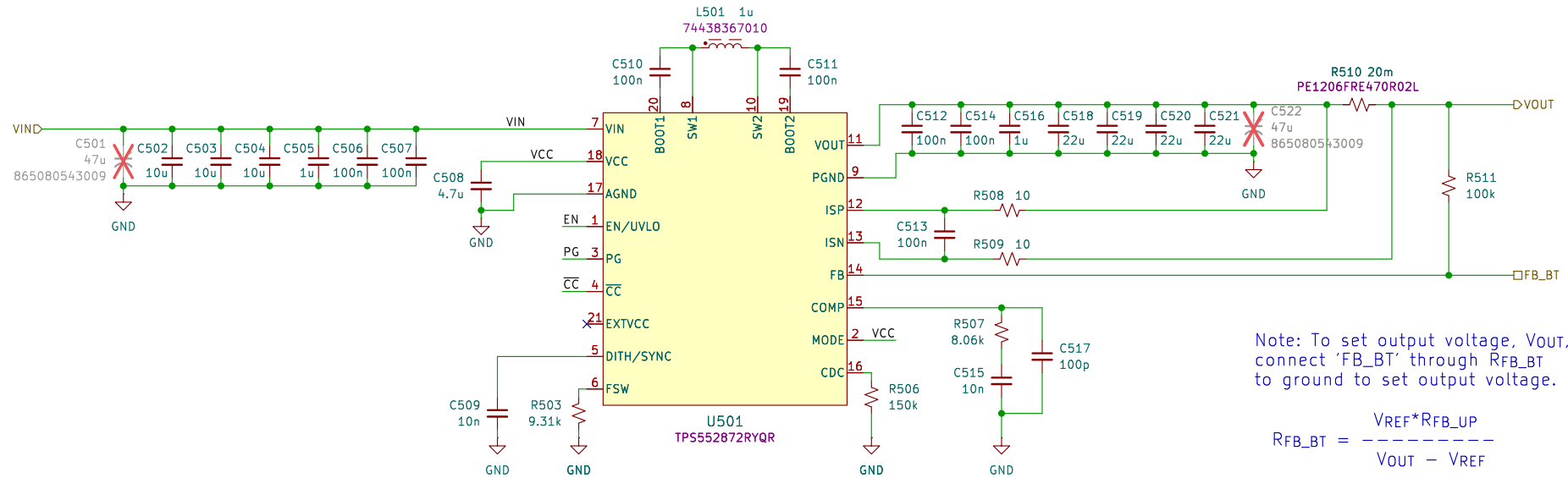
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KiCad E.D.A. 8.0.6

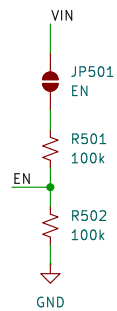
Date:

Rev:
Id: 4/7

Buck-Boost Converter



Enable



Test Points



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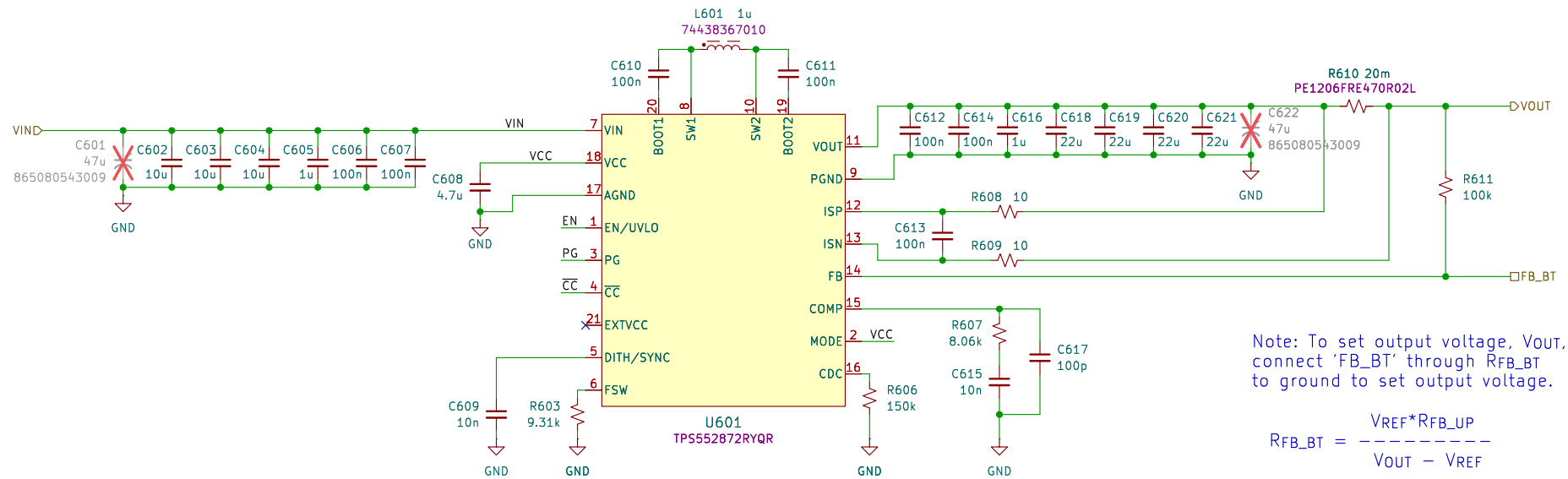
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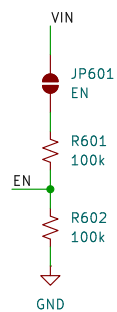
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Id: 5/7

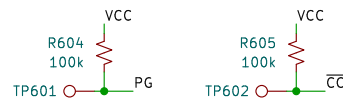
Buck-Boost Converter



Enable



Test Points



Sheet: /Buck-Boost-3/
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Title:

Size: A4
KiCad E.D.A. 8.0.6

Date:

Rev:
Id: 6/7

