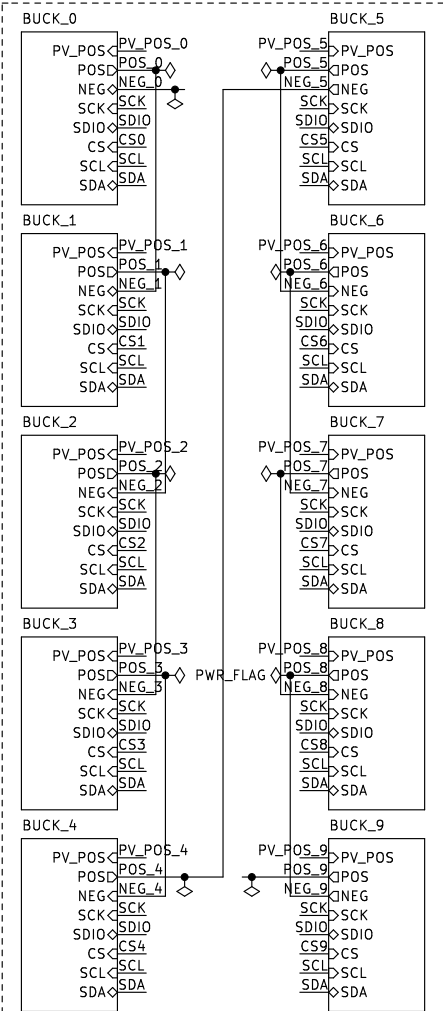
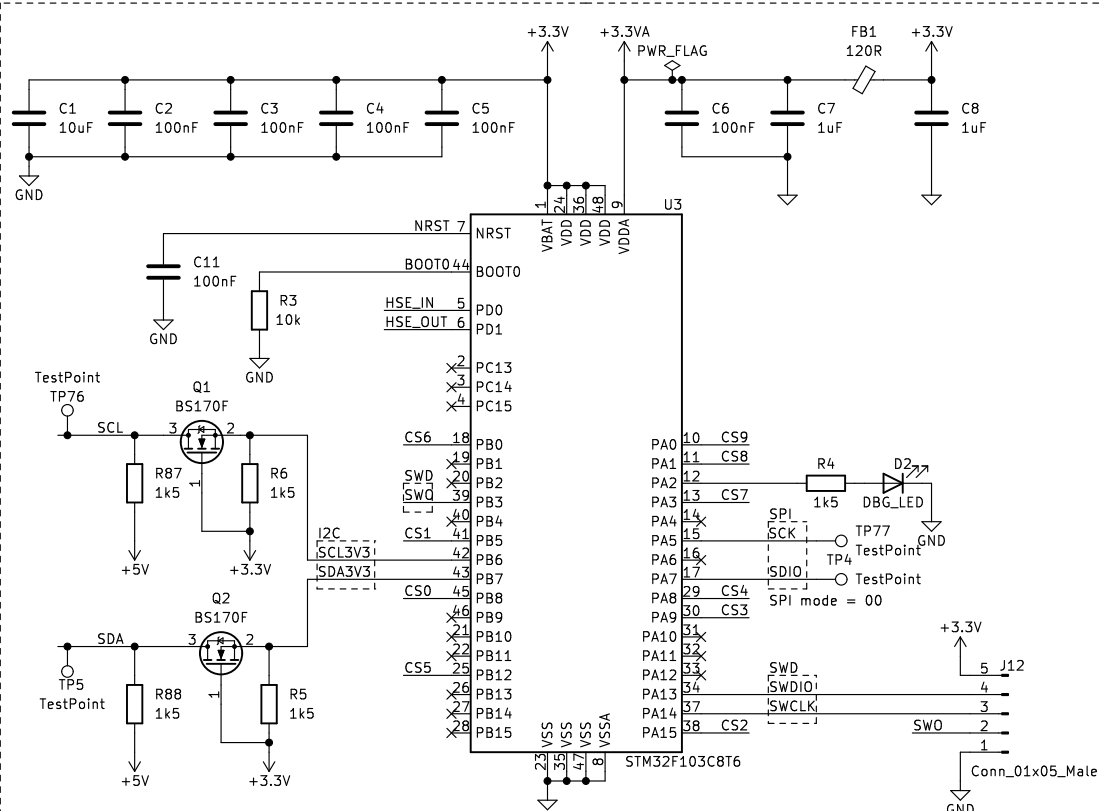


Power management



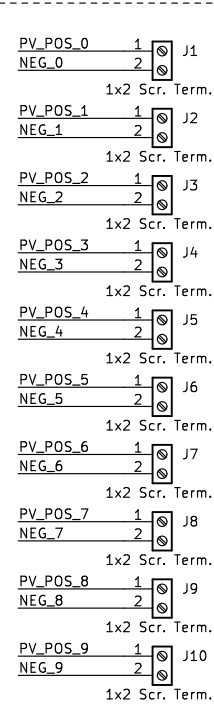
Nested schem. for each LTM4611EV and supporting circuitry

Microcontroller

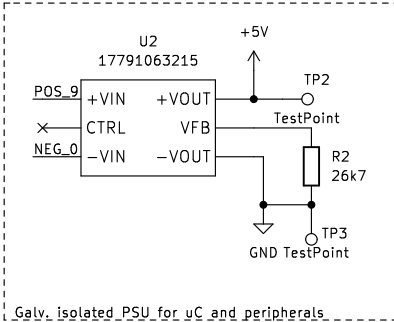


Added bi-directional level-shifters to simplify layout

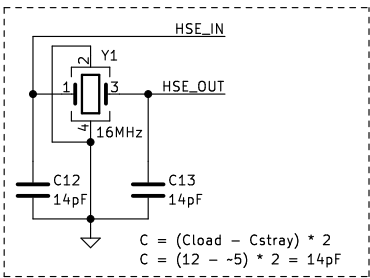
PV groups conn. Buck Converter 5V



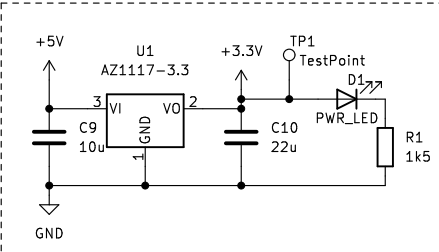
Buck Converter 5V



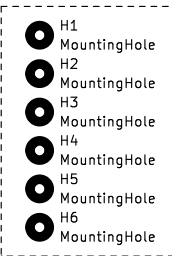
Crystal Oscillator



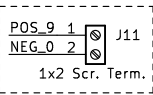
LDO regulator 3.3V



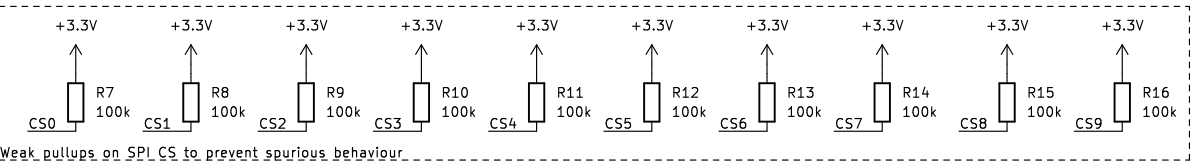
Mounting



PV OUT



SPI pullups



Hogeschool Utrecht

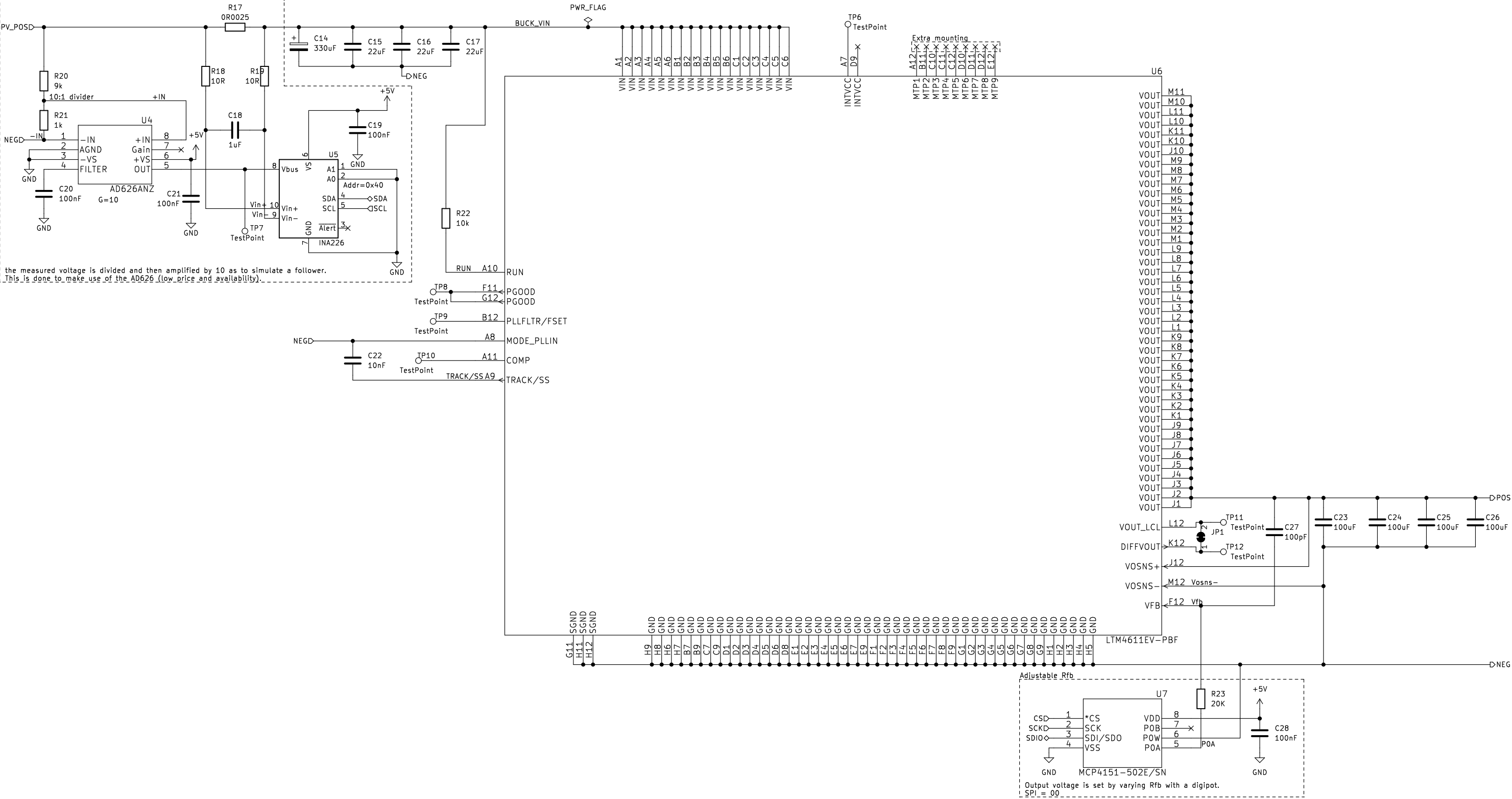
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File: Quest_39.kicad_sch

Title: Smart Solarpanel Controller

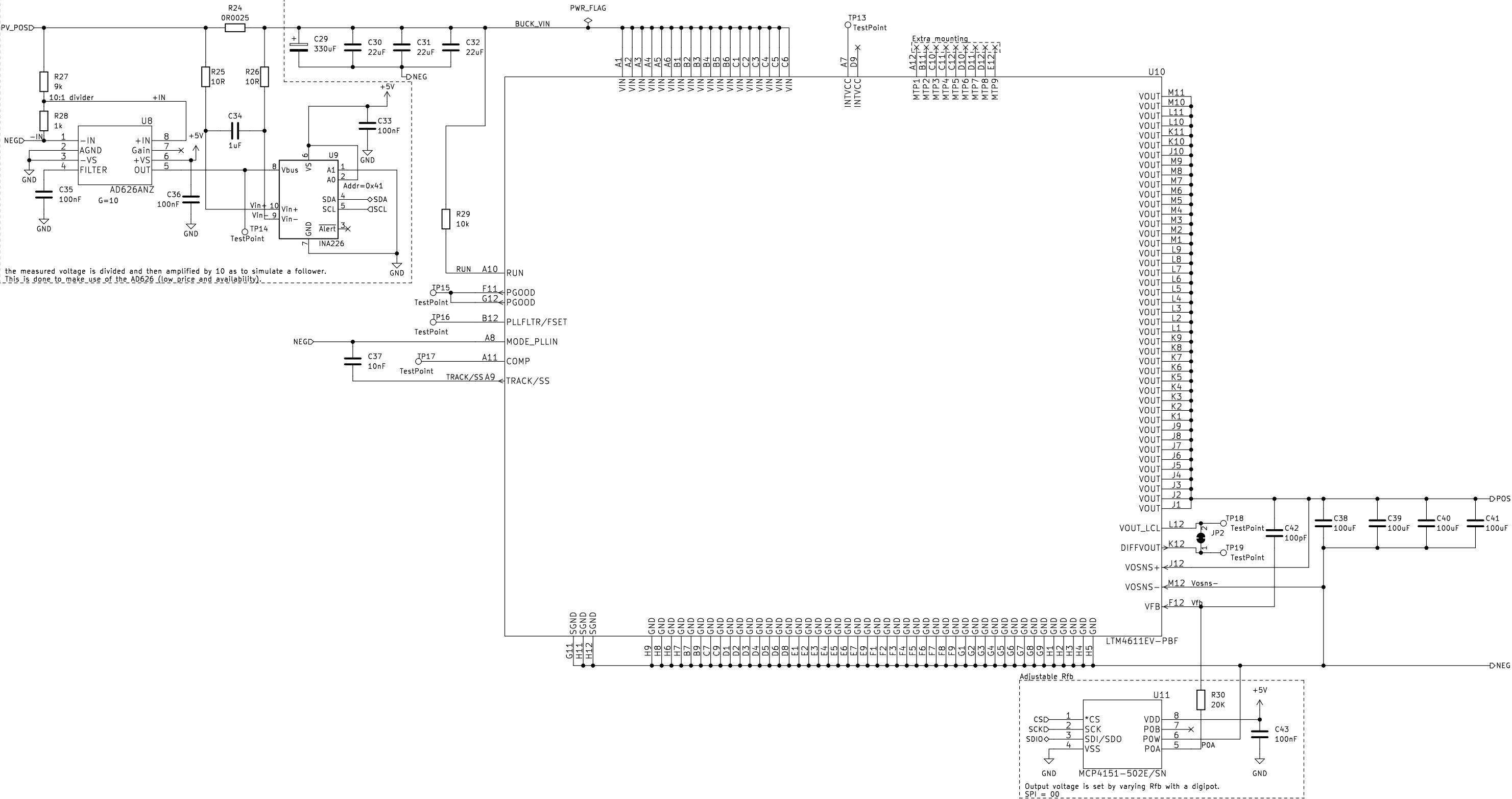
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KiCad E.D.A. kicad (6.0.9)

Rev: 1.0
Id: 1/11

Power Measurement



Power Measurement



Sheet: /BUCK_1/

File: BUCK_1.kicad_sch

Title:

Size: A3

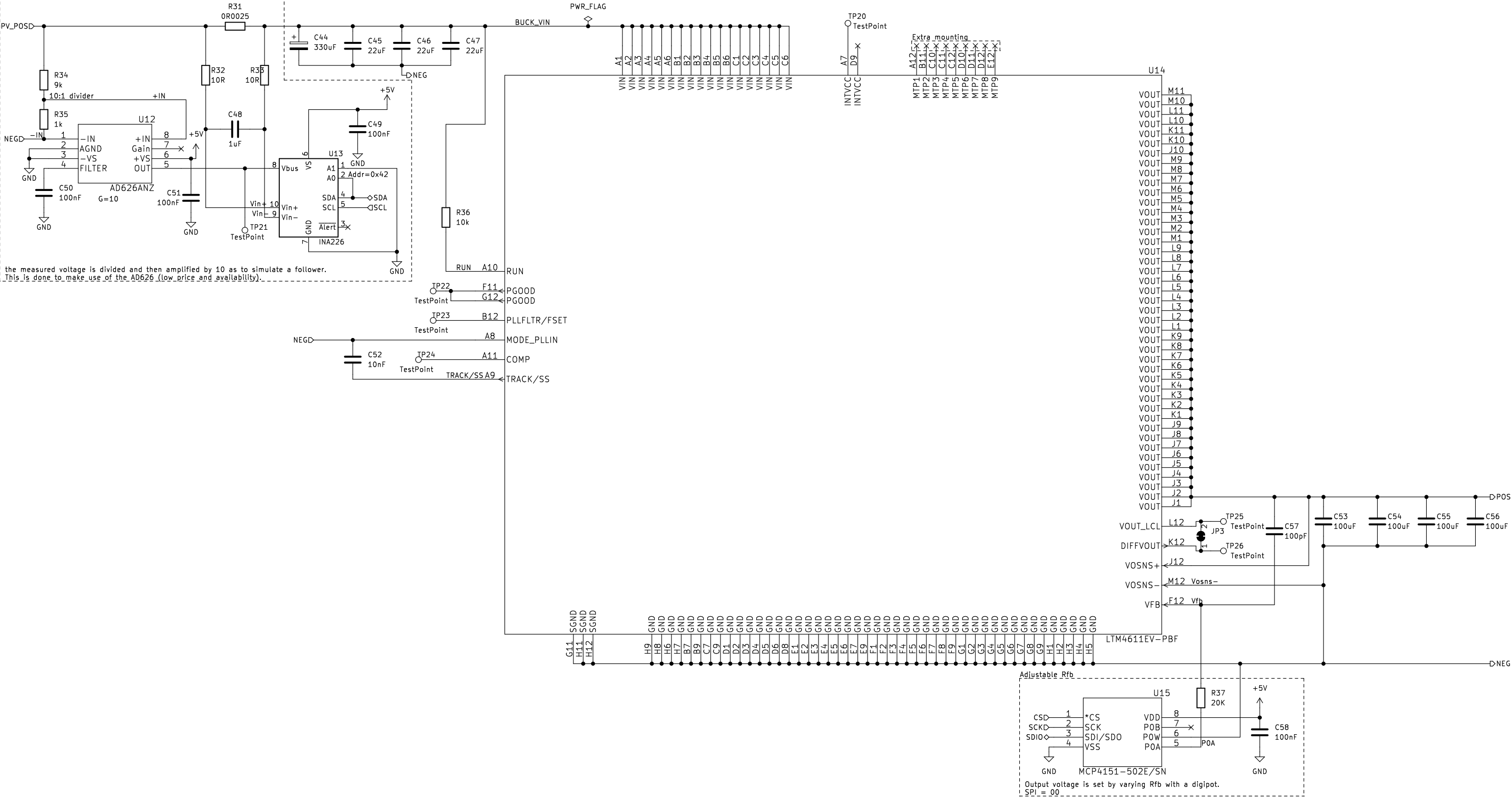
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Rev: 1.0

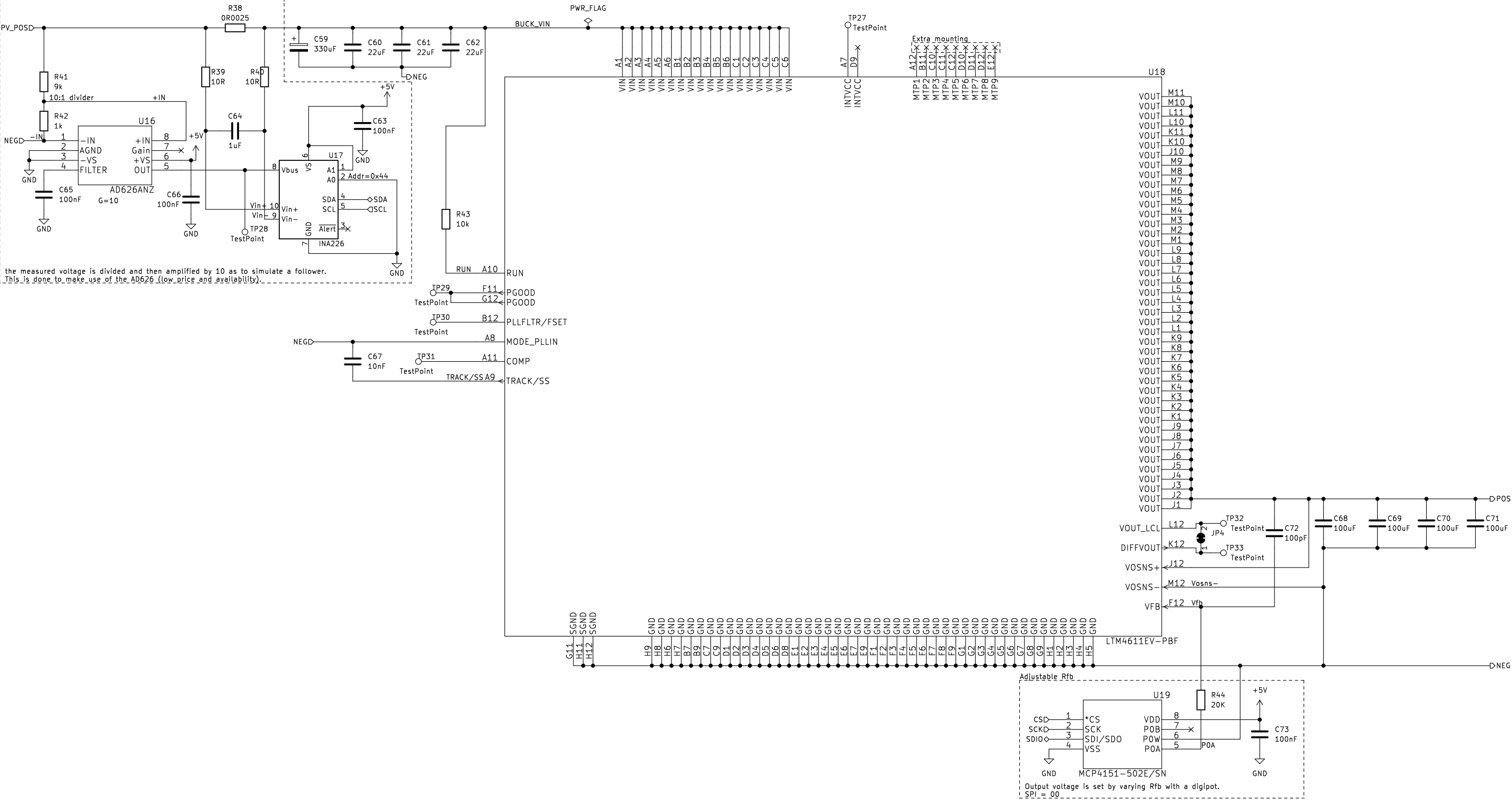
KiCad E.D.A. kicad (6.0.9)

Id: 3/11

Power Measurement



Power Measurement



Power Measurement

PV_POSD

R48 9k

10:1 divider

R49 1k

NEG

GND

C80 100nF

U20 AD626ANZ

1 -IN

2 -IN

3 -VS

4 FILTER

5 +VS

6 Gain

7 +IN

8 +IN

9 +VS

10 +VS

11 +VS

12 +VS

13 +VS

14 +VS

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16 +VS

17 +VS

18 +VS

19 +VS

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348 +VS

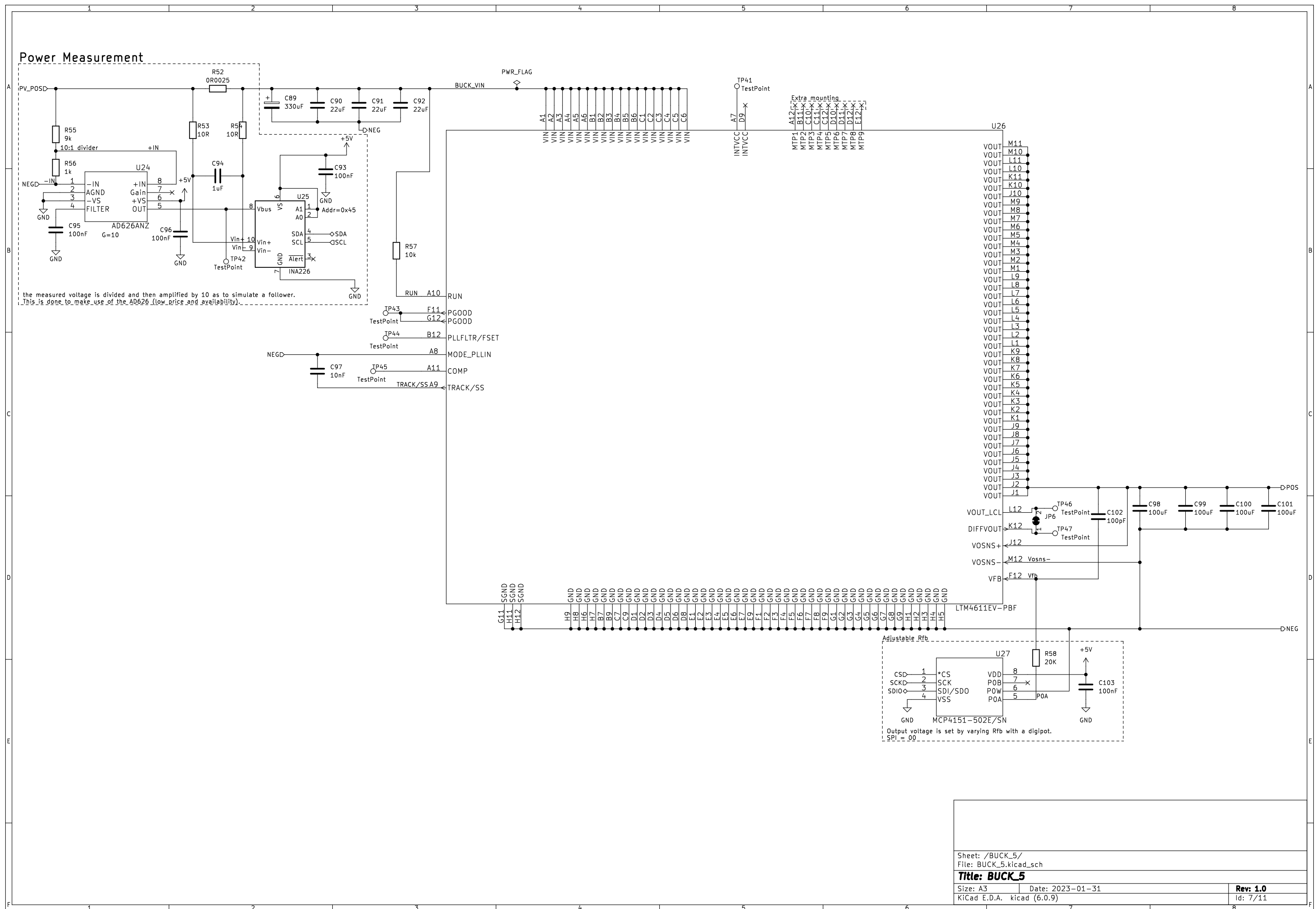
349 +VS

350 +VS

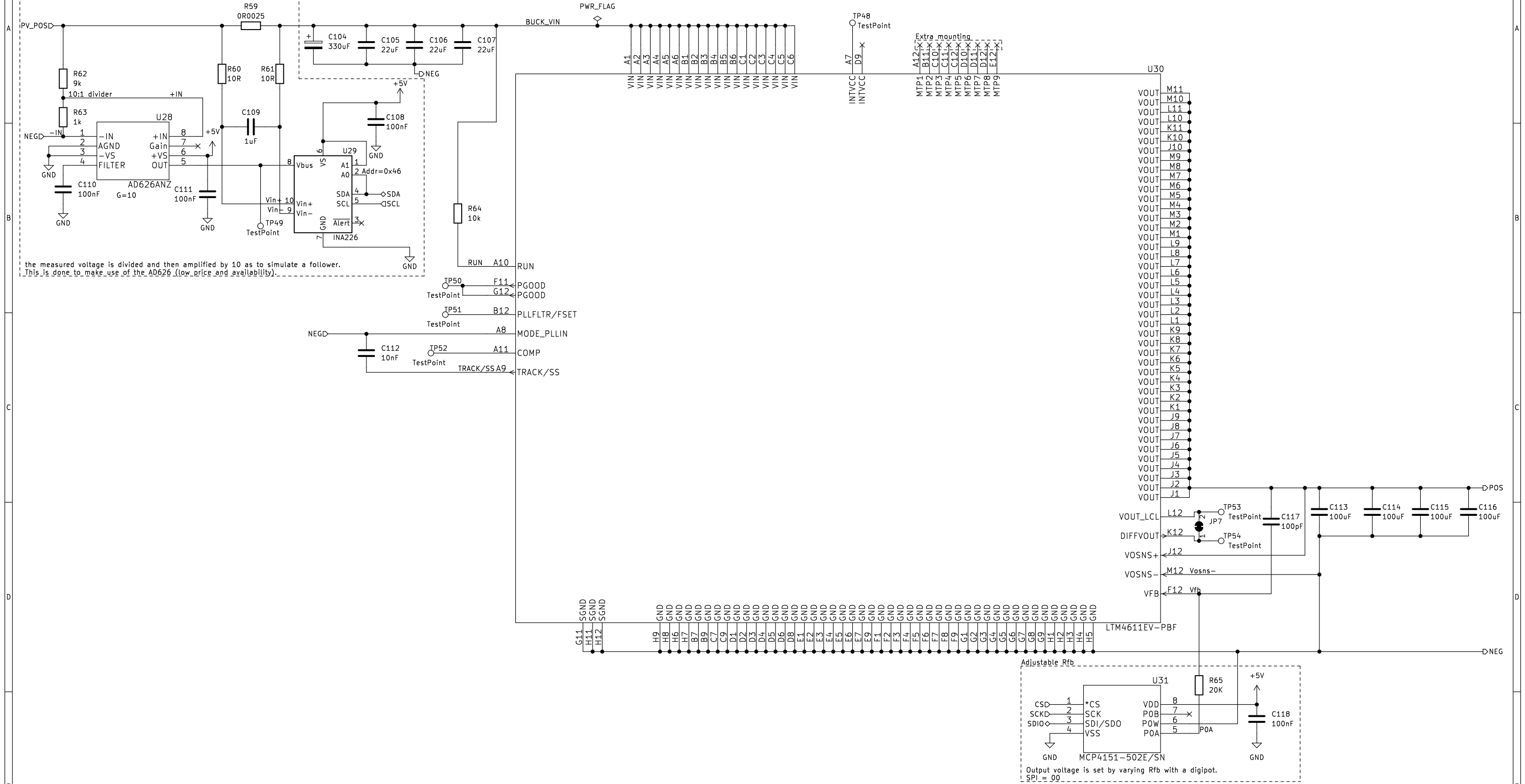
351 +VS

352 +VS

353 +VS



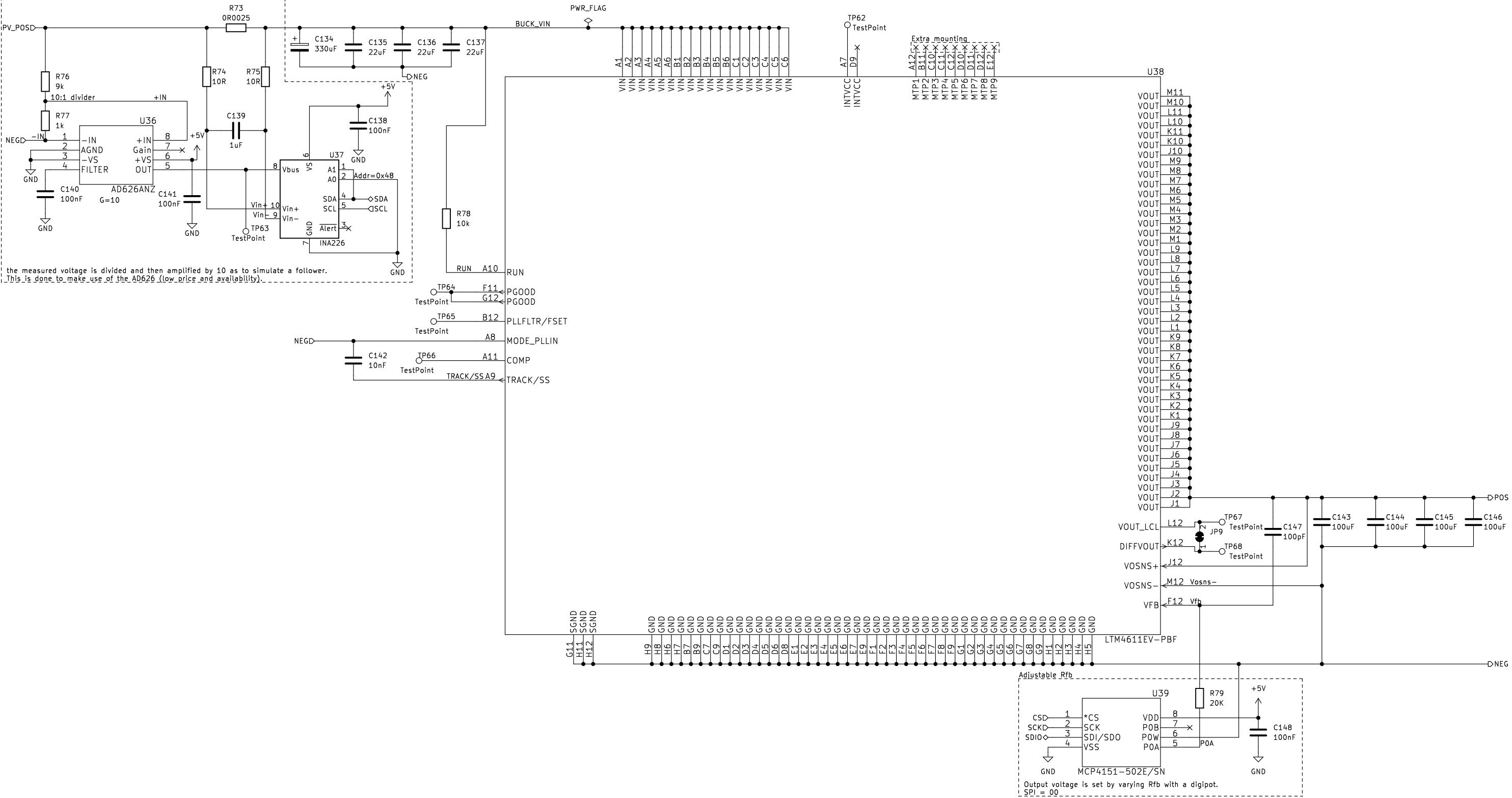
Power Measurement



A
B
C
D
E
F



Power Measurement



Power Measurement

