

Unfiltered circuit area to be as small as possible; place components as close to barrel jack as possible.

SOT25 / SOT-753: 0.95 pitch, package 1.6mm width (pins 2.8)

Battery pack: 8V min, with 0.8V drop
Vin,min = 7.2V

Input current:
Vaux: 770mA
5V2 supplies: 2.4A x2
SEPIC: 1.95A @ 10V
Total: 0.77+2.4+2.4 = 5.6A

CMC footprint: pads 3.2 x 2.7, dx = 10.8, dy = 5.2

ACM12V-701-2PL-TL00

SBR8U60P5-13

U1
ZXCT1110

$I_{out} = 0.004 \cdot V_{sense}$

6Ain @ 3Vout
 $V_{sense} = 6 \cdot 0.01 = 60\text{mV}$
 $I_{out} = 0.004 \cdot 60\text{m} = 240\mu\text{A}$
 $R = 3\text{V} / 240\mu\text{A} = 12.5\text{k}$
Use 10k instead

D2
15MQ060NTR

D3
5.6V 50uA

R6
1k
0603

INPUT_SENSE

R7
10k
0603

C9
0.01uF
10V
0603

U2A
TS462CDT

VCC

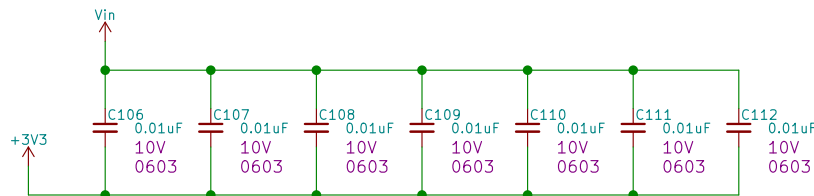
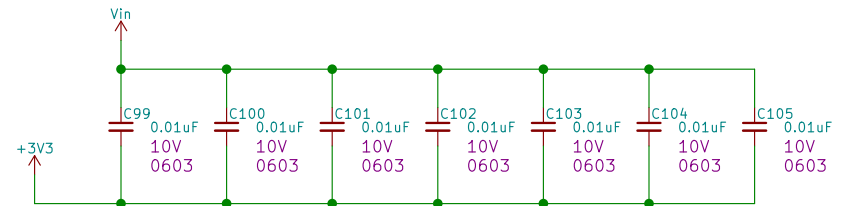
0.1uF
50V
0603

R5
100 Ohm
0603

C8
100pF
25V
0603

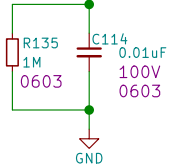
ADC_VIN_V

ADC_VIN_I



Barrel jack: 6mm 1-2, 4.7mm 1/2-3, pin 1 1.0x3.5, 2/3 1.0x3.0

MK1
Mounting_Hole_PAD

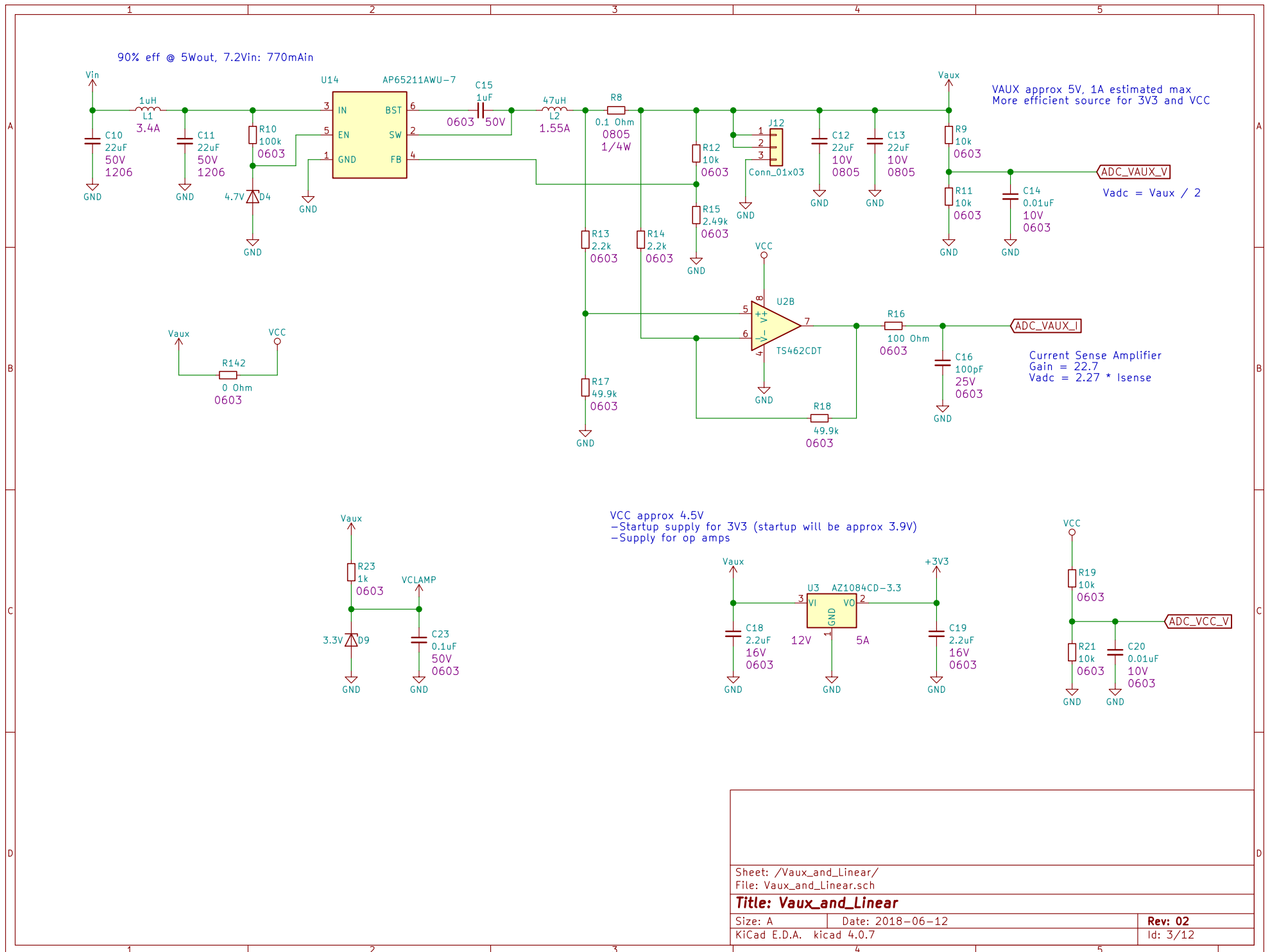


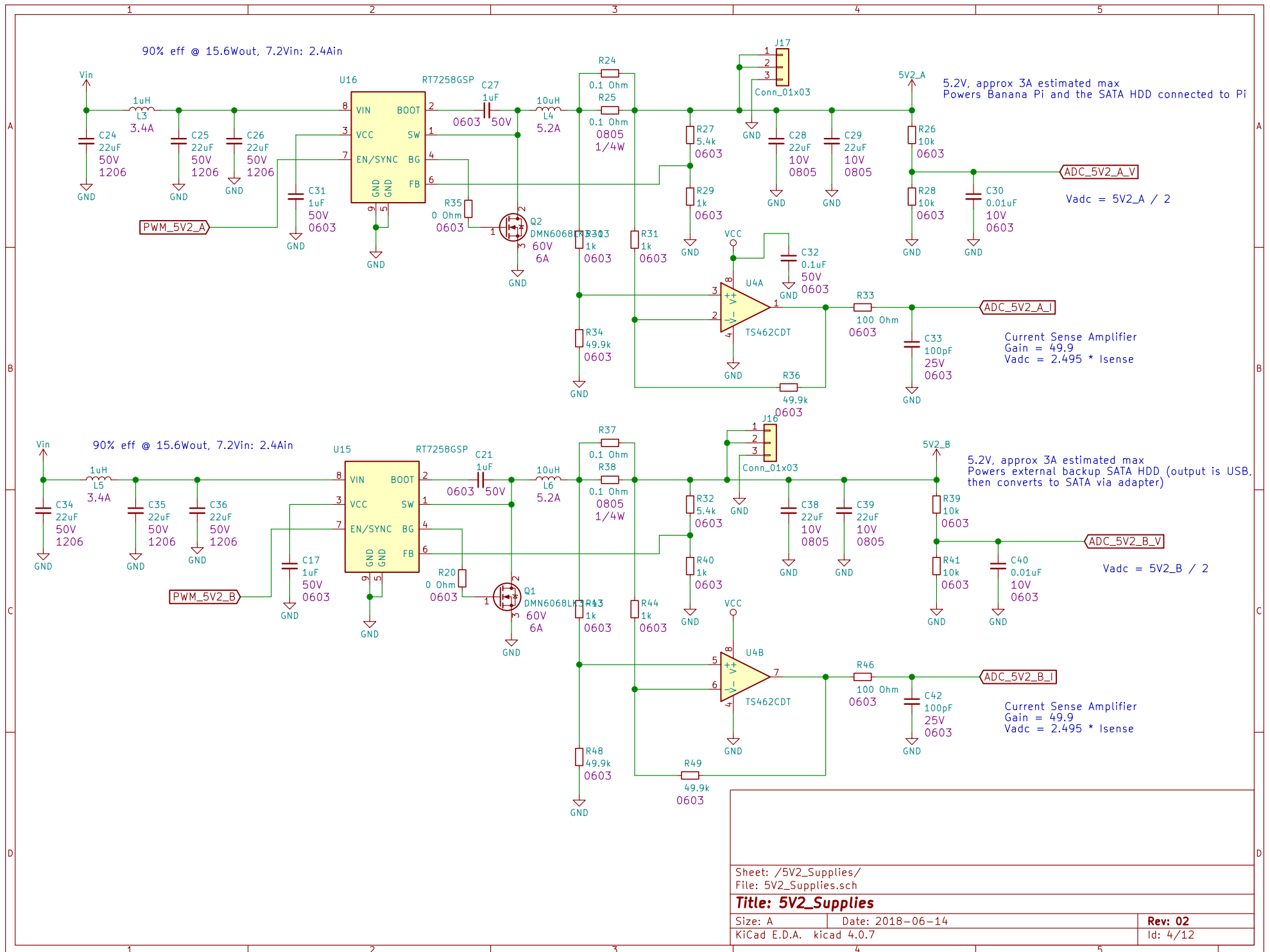
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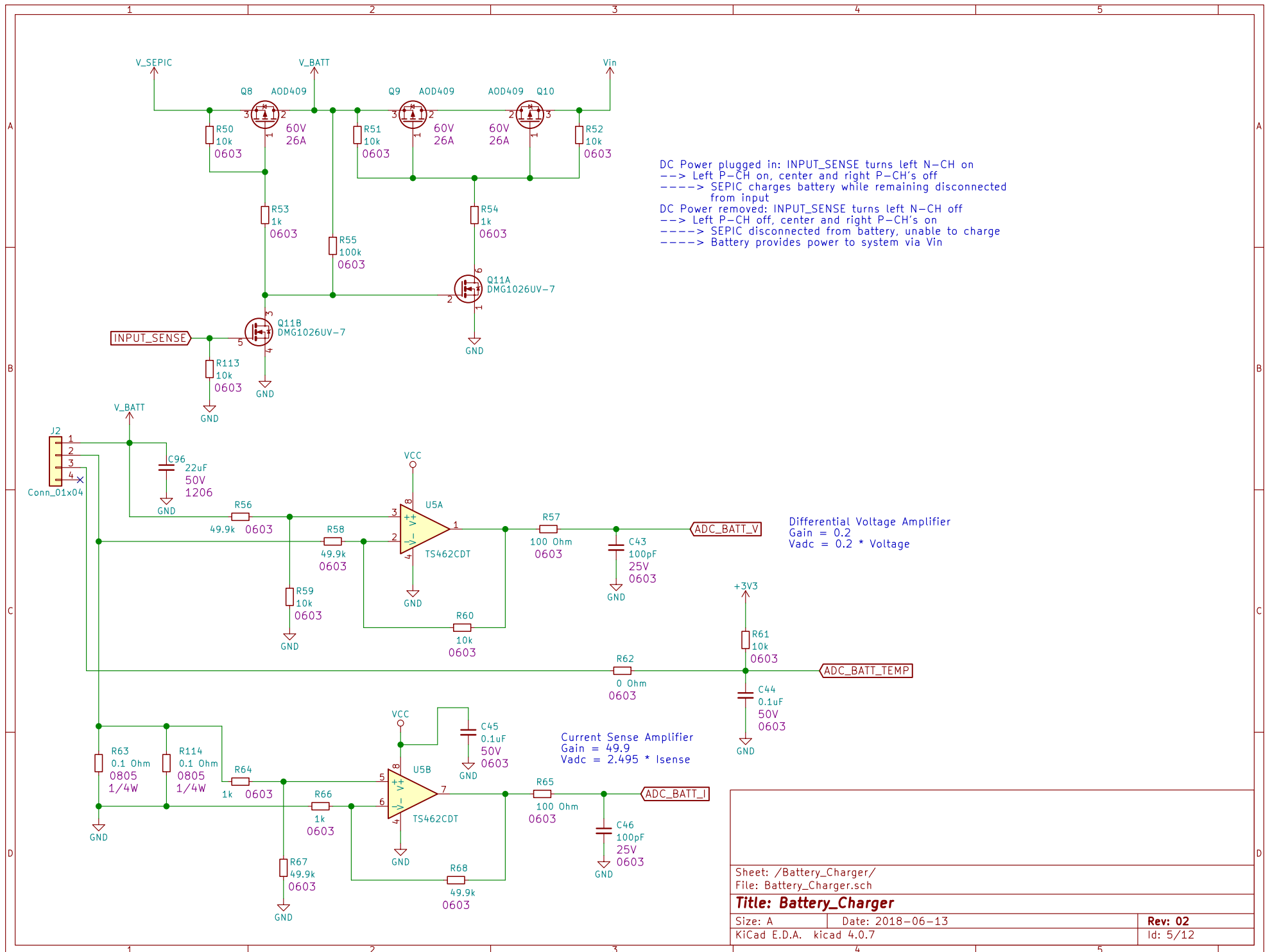
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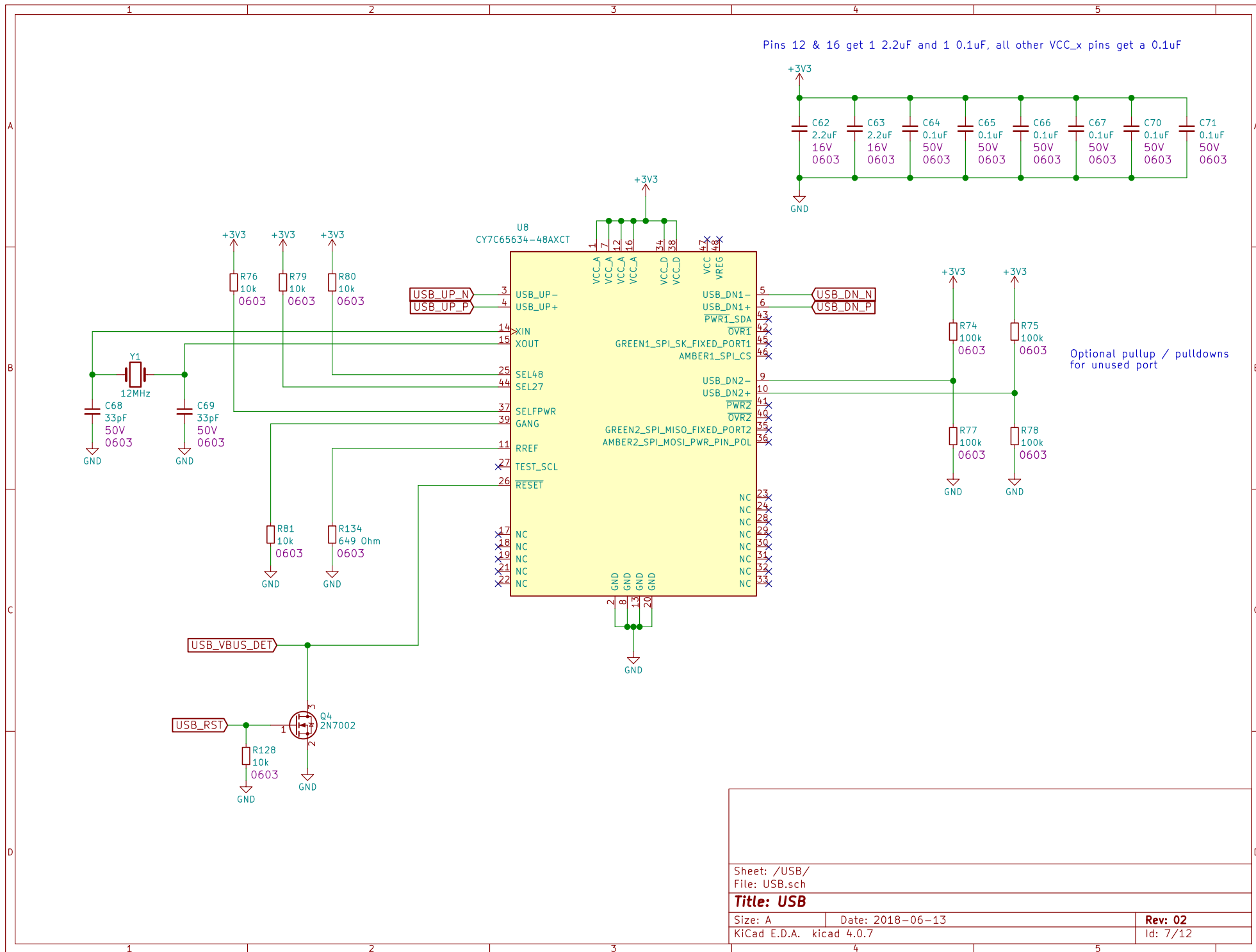
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KiCad E.D.A. kicad 4.0.7

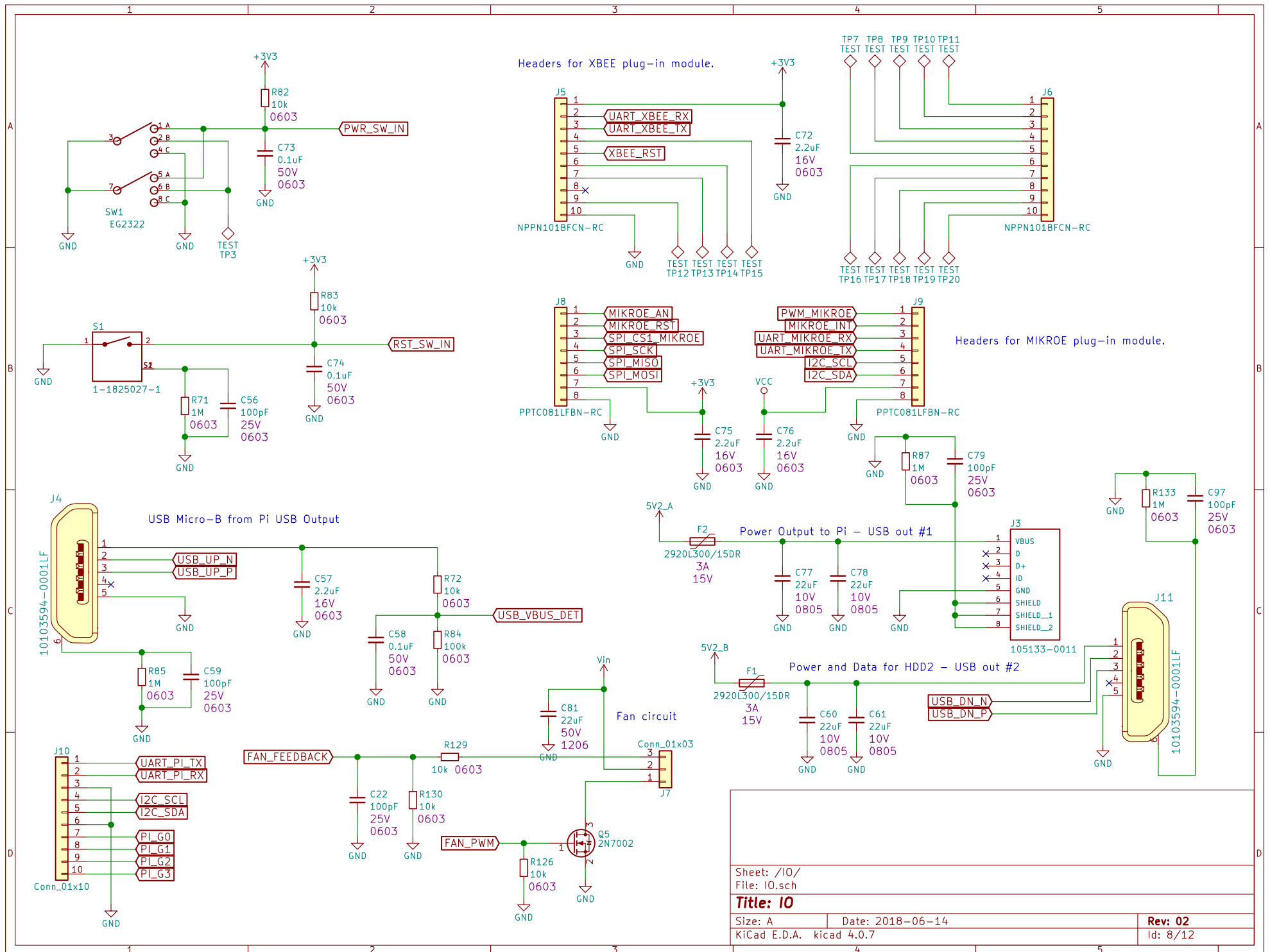
Rev: 02
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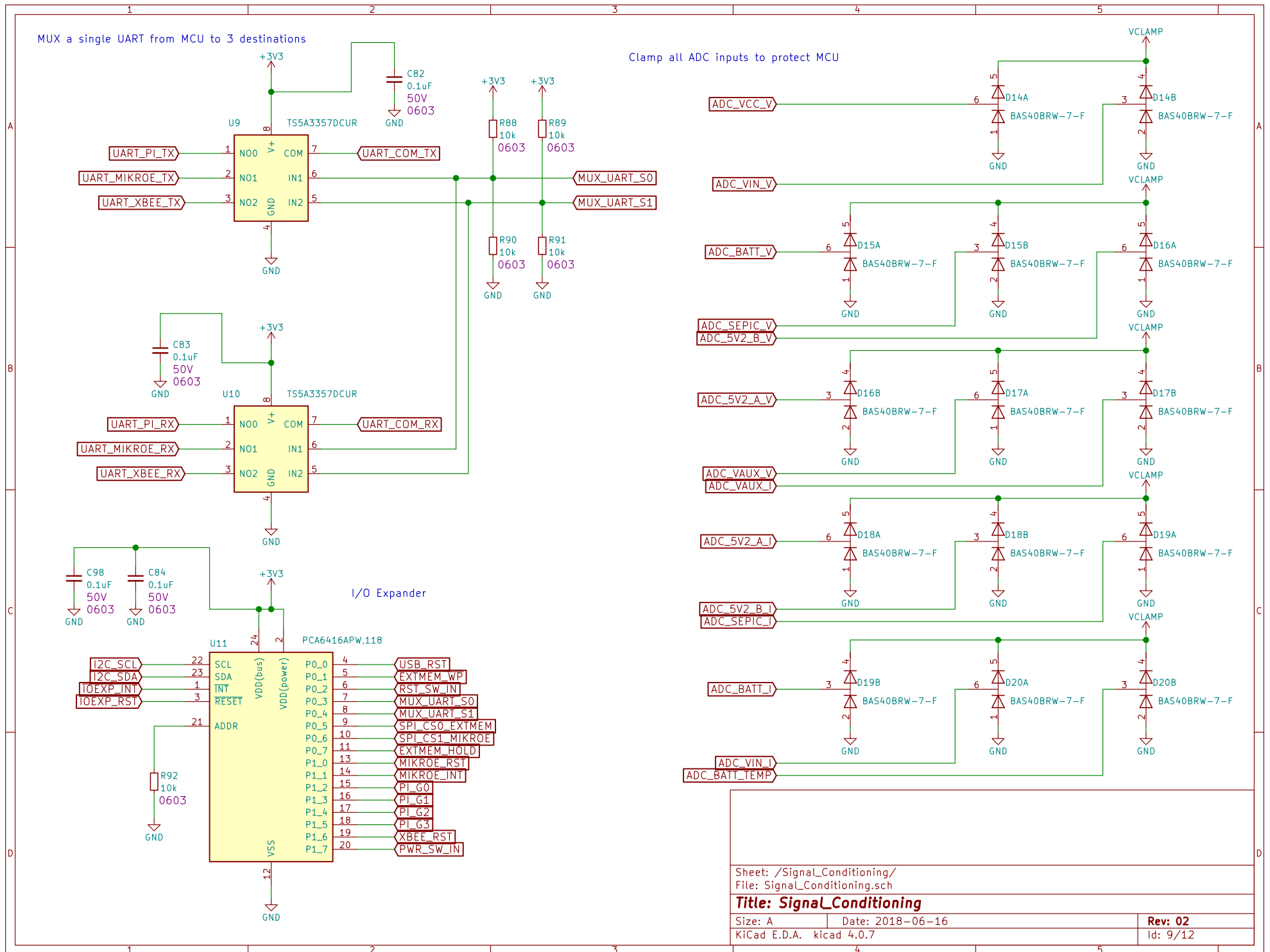


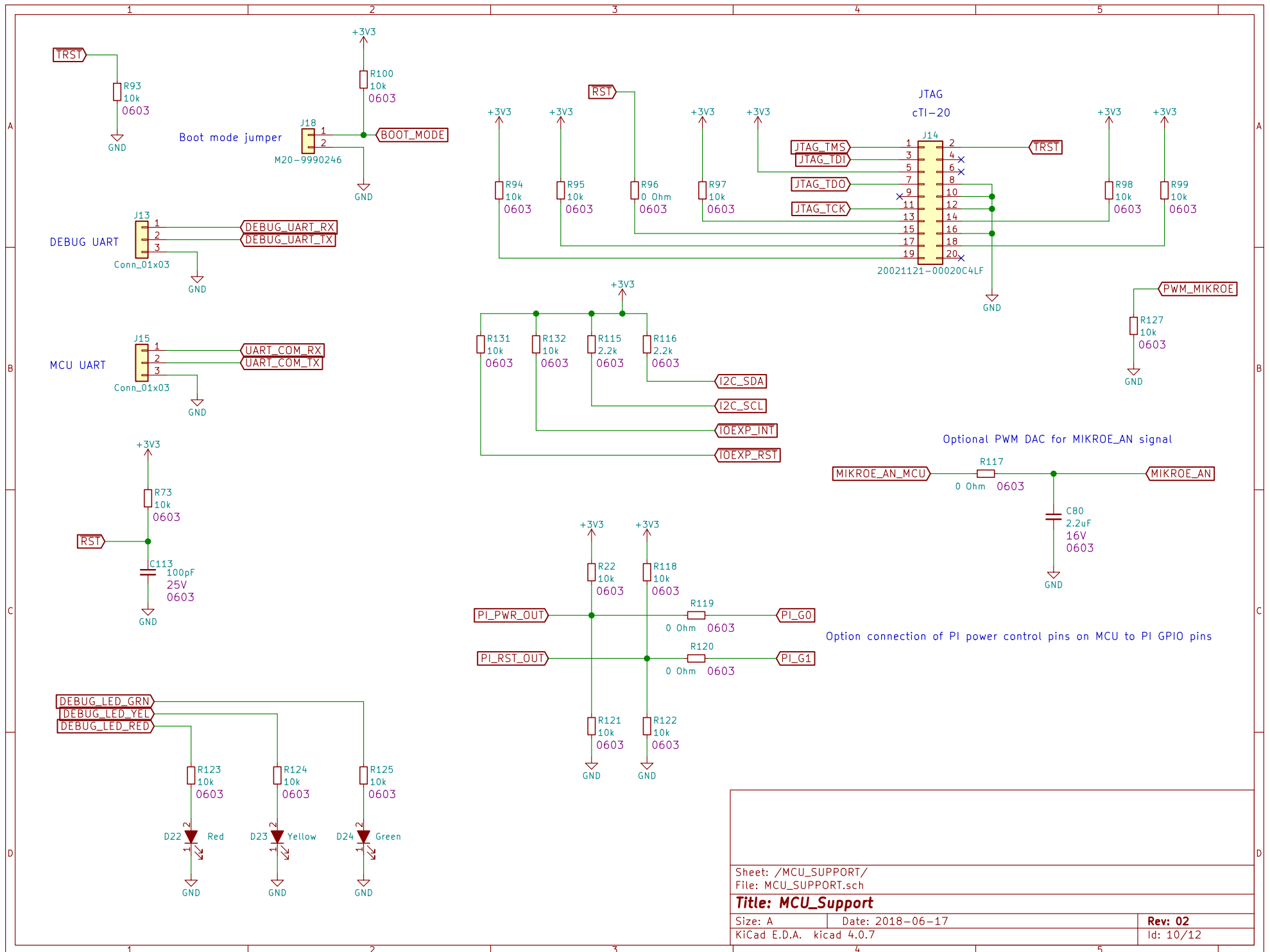


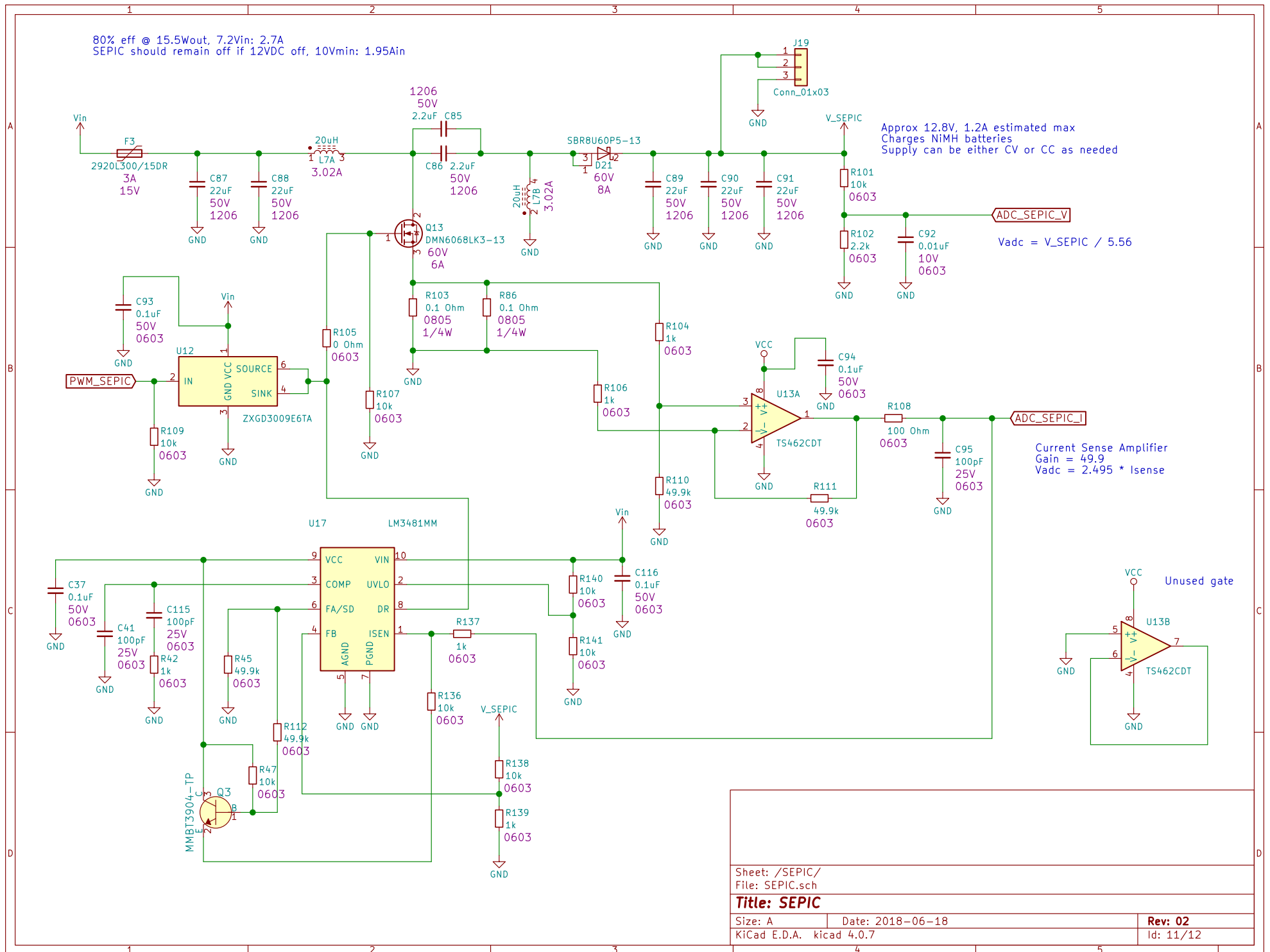


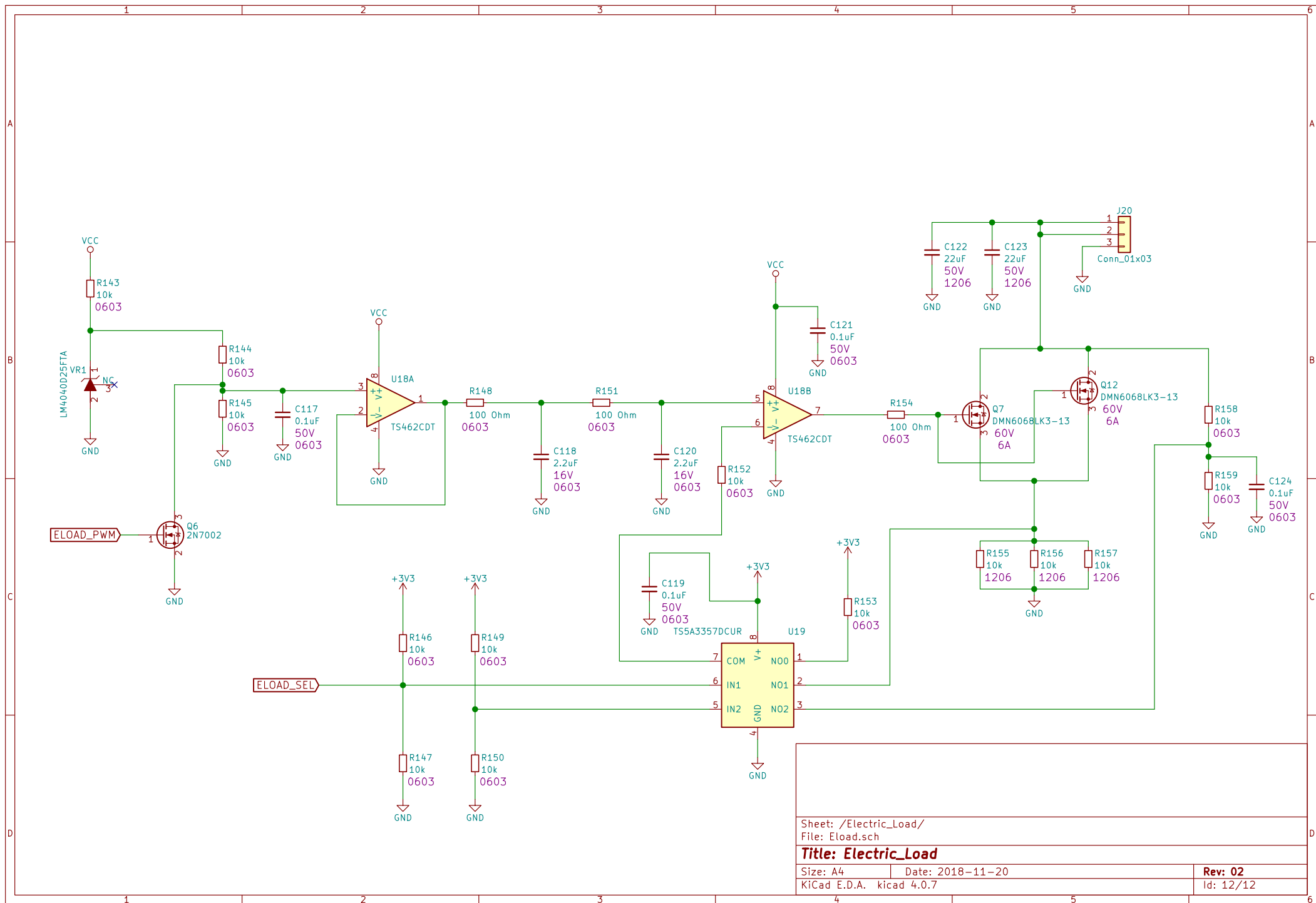












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