

- H4 MTG Hole 2.5mm
- H8 MTG Hole 2.5mm
- H6 MTG Hole 2.5mm
- H2 MTG Hole 2.5mm
- H7 Paste Hole 2.5mm
- H5 Paste Hole 2.5mm
- H1 Paste Slot 5x2.5mm
- H3 Paste Slot 5x2.5mm

Power Utilization

3V3:
- CAN-FD: 28 mA
- IMU Driver: 56 mA
TOTAL 84 mA

5V:
- CAN-FD: 70 mA
TOTAL: 70 mA

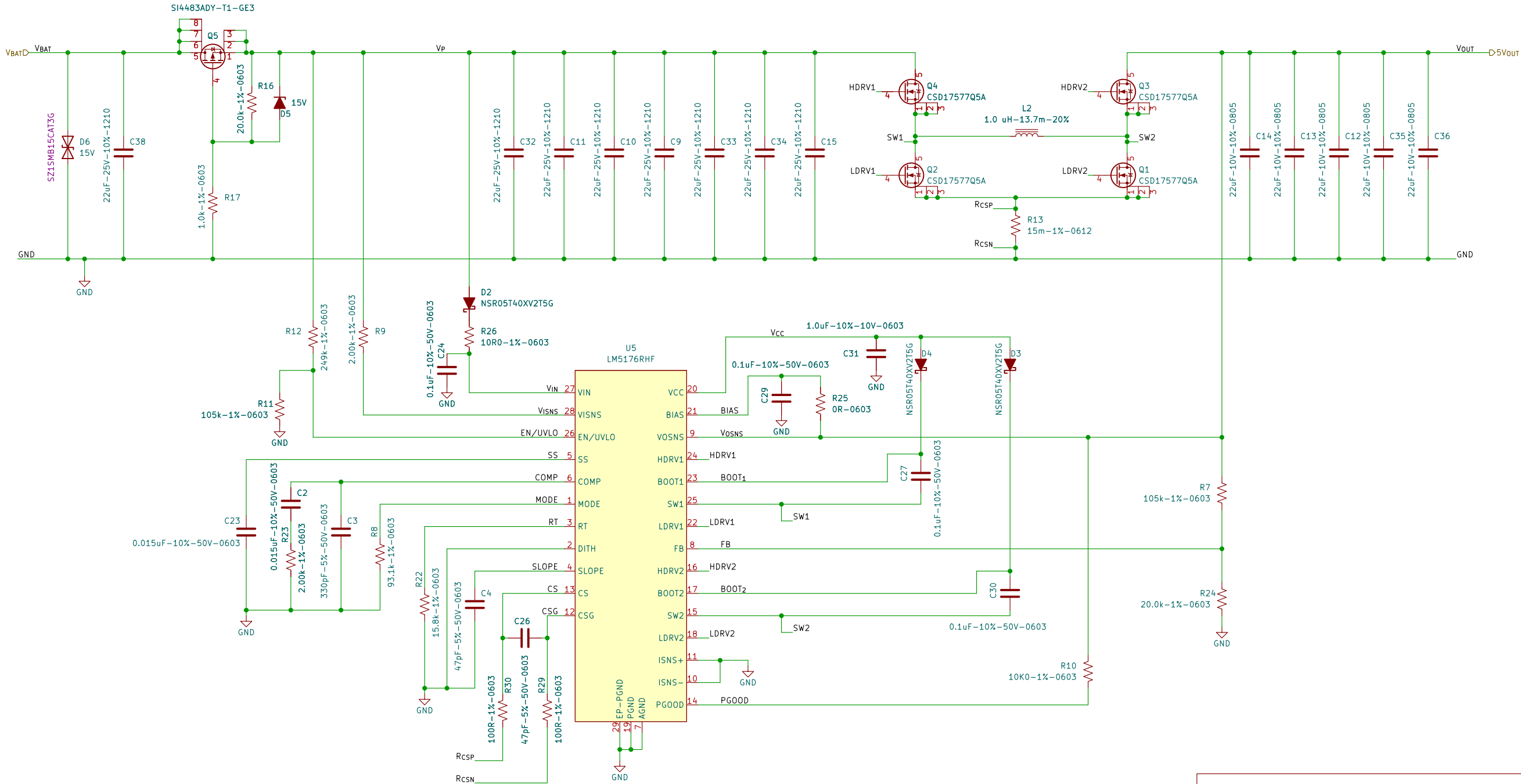
971 Spartan Robotics

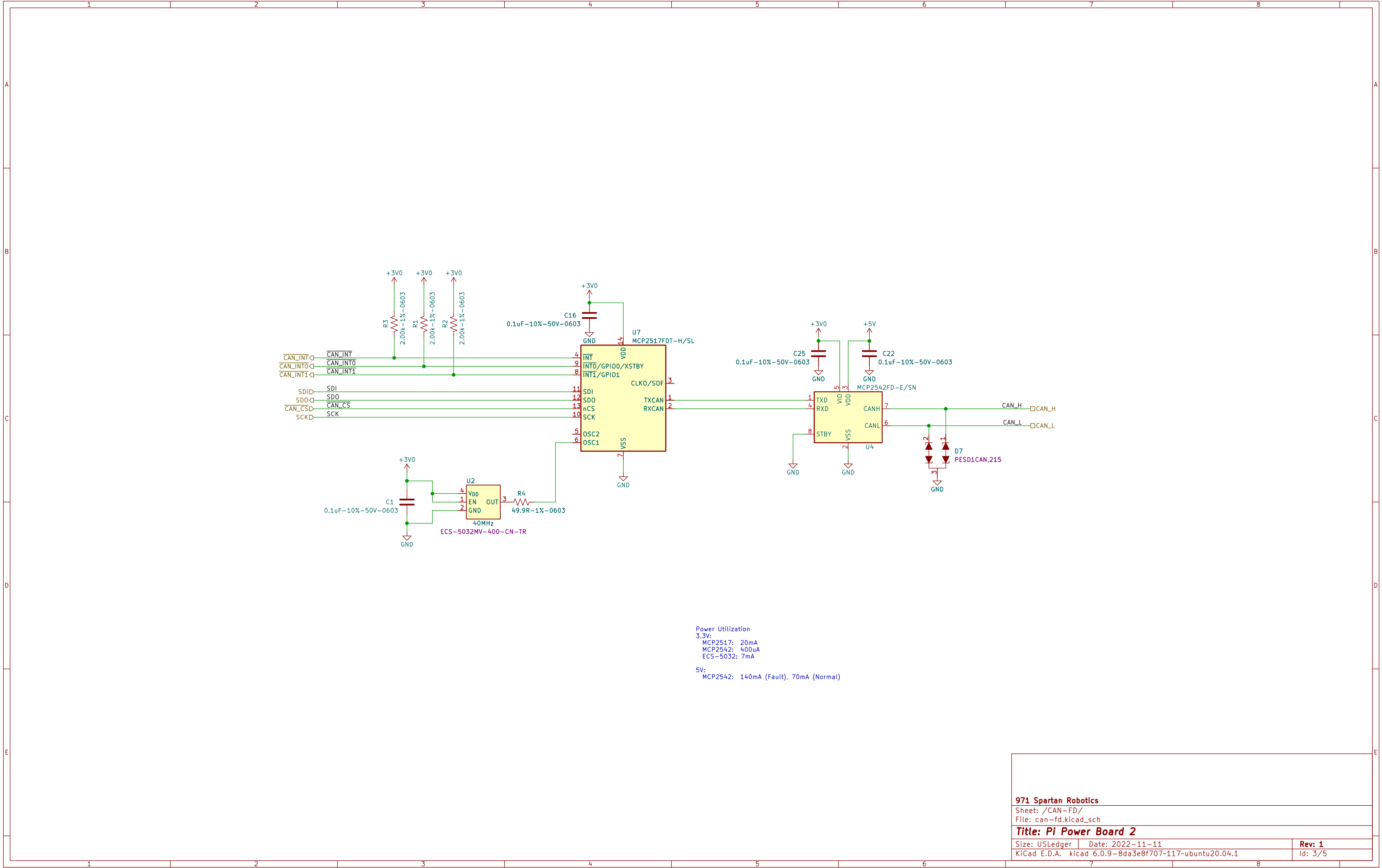
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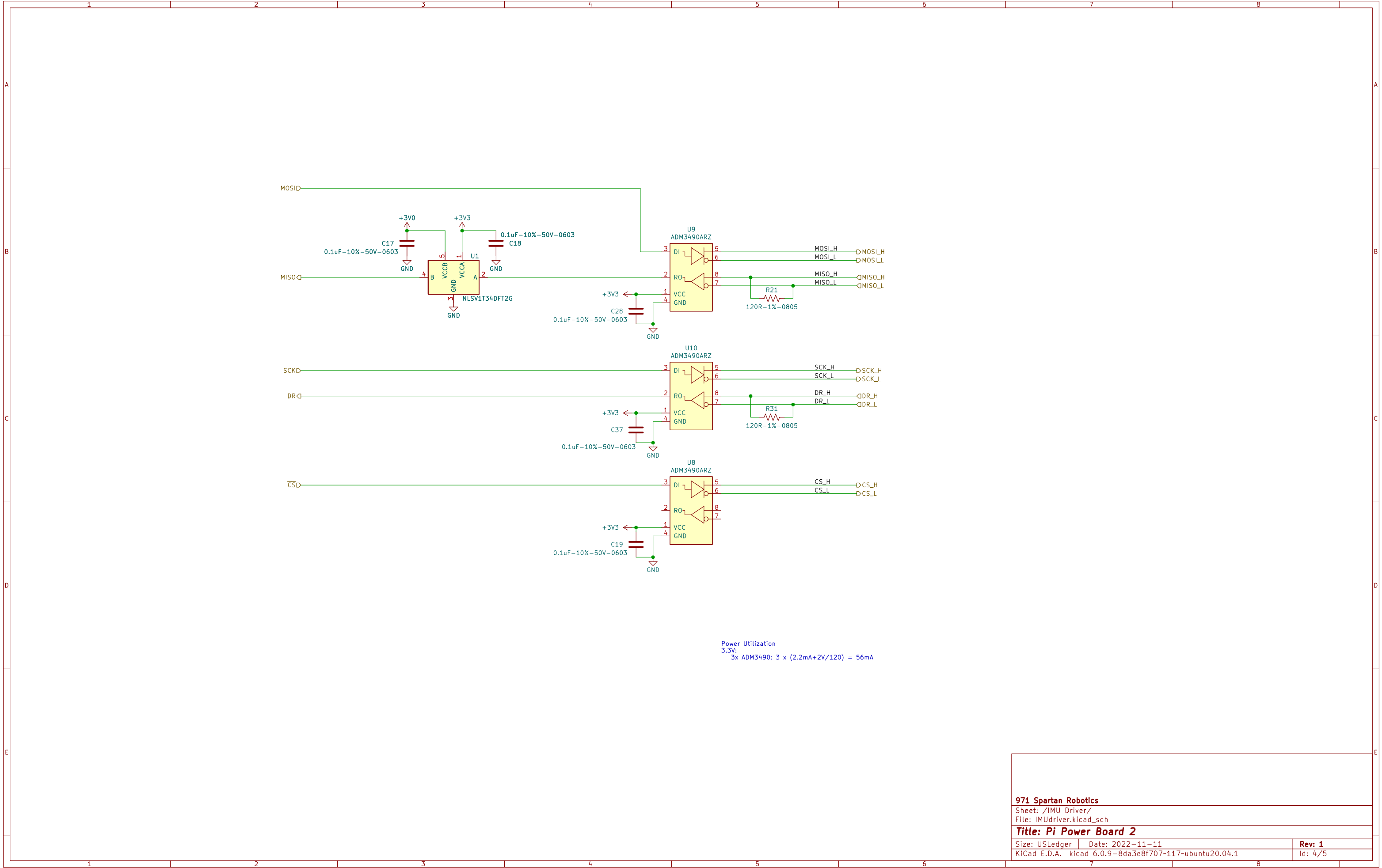
Title: Pi Power Board 2

Size: USLedger | Date: 2022-11-11
KiCad E.D.A. kicad 6.0.9-8da3e8f707-117-ubuntu20.04.1

Rev: 1
Id: 1/5







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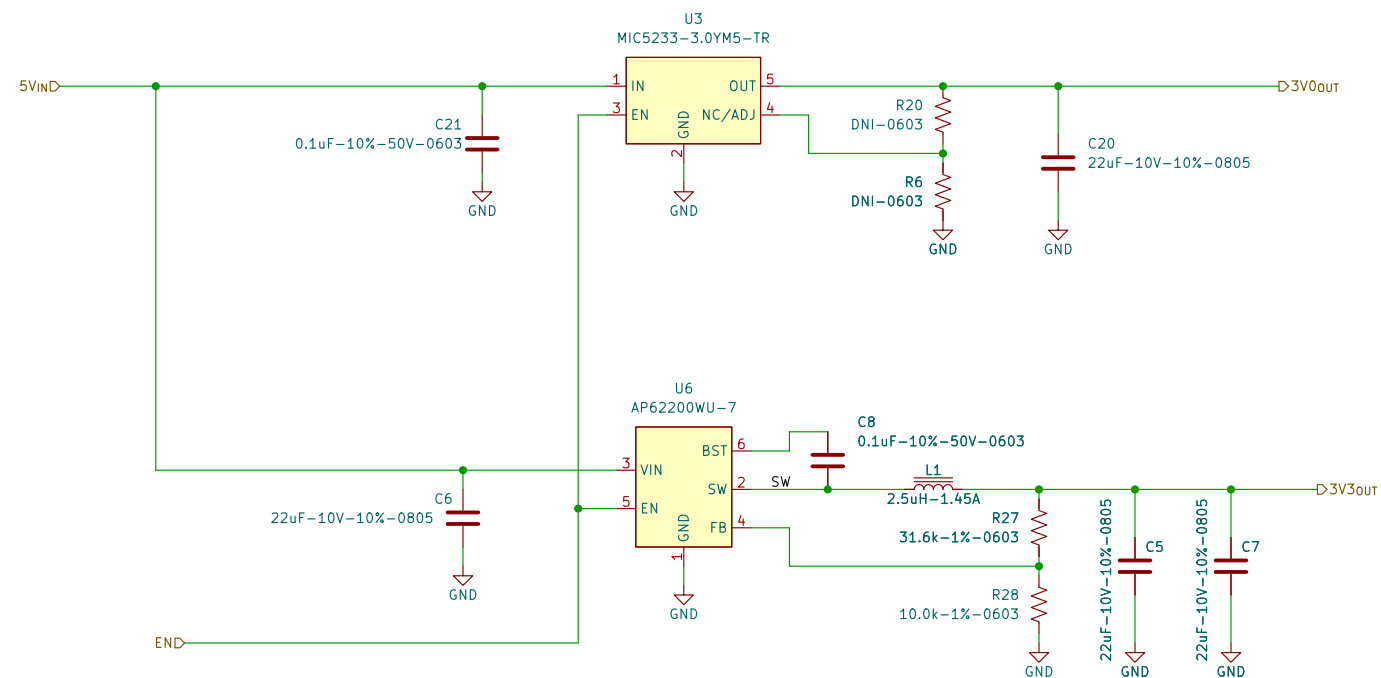
Title: **Pi Power Board 2**

Size: USLedger | Date: 2022-11-11

Rev: 1

KiCad E.D.A. | kicad 6.0.9-8da3e8f707-117-ubuntu20.04.1

Id: 4/5



```

ton = VOUT/(VIN*fsw
ton = 3.3/(5*750E3) = 0.88us

LOAD = ((VIN - VOUT)/(2*L) * ton
L = 0.5*(VIN - VOUT)*ton/LOAD
L = 0.5*(5 - 3.3)/0.88E-6/0.5
L = 1.5uH

L = 0.5*(VIN - VOUT)/(VIN*dIL*fsw)
dIL = 3*2 = 0.6
L = 3.5*(5-3.3)/(5*.6*750E3)
L = 2.5uH

```

Vin: 5V
Vout: 3.3V 500mA