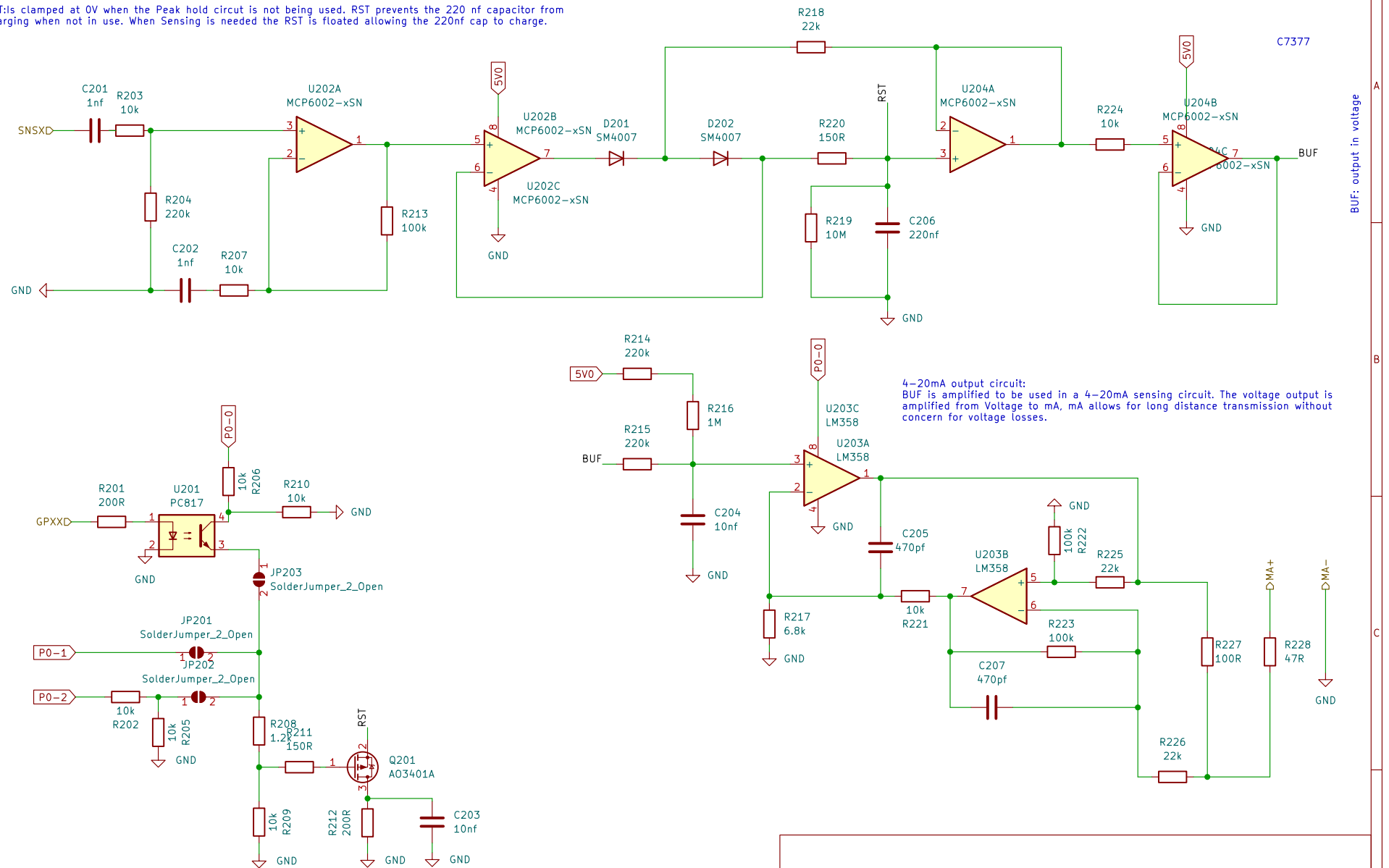




SNS: Piezo Electric sensor, used to measure knock. Op-amps used to amplify the voltage using a peak hold circuit. The peak hold circuit has a 220 uf cap used for peak hold.

RST: Is clamped at 0V when the Peak hold circuit is not being used. RST prevents the 220 nf capacitor from charging when not in use. When Sensing is needed the RST is floated allowing the 220nf cap to charge.



#### RST Options:

RST can be set to float by either 2 methods:

- 1) GP pin from mcu, when pin is set high 3V3. Powered by P0-0 24VDC.
- 2) P0-1, 12V remotely switched supply for ignition.
- 3) P0-2, 24 voltage triggered output

Sheet: /SNS2/  
File: SNS01.kicad\_sch

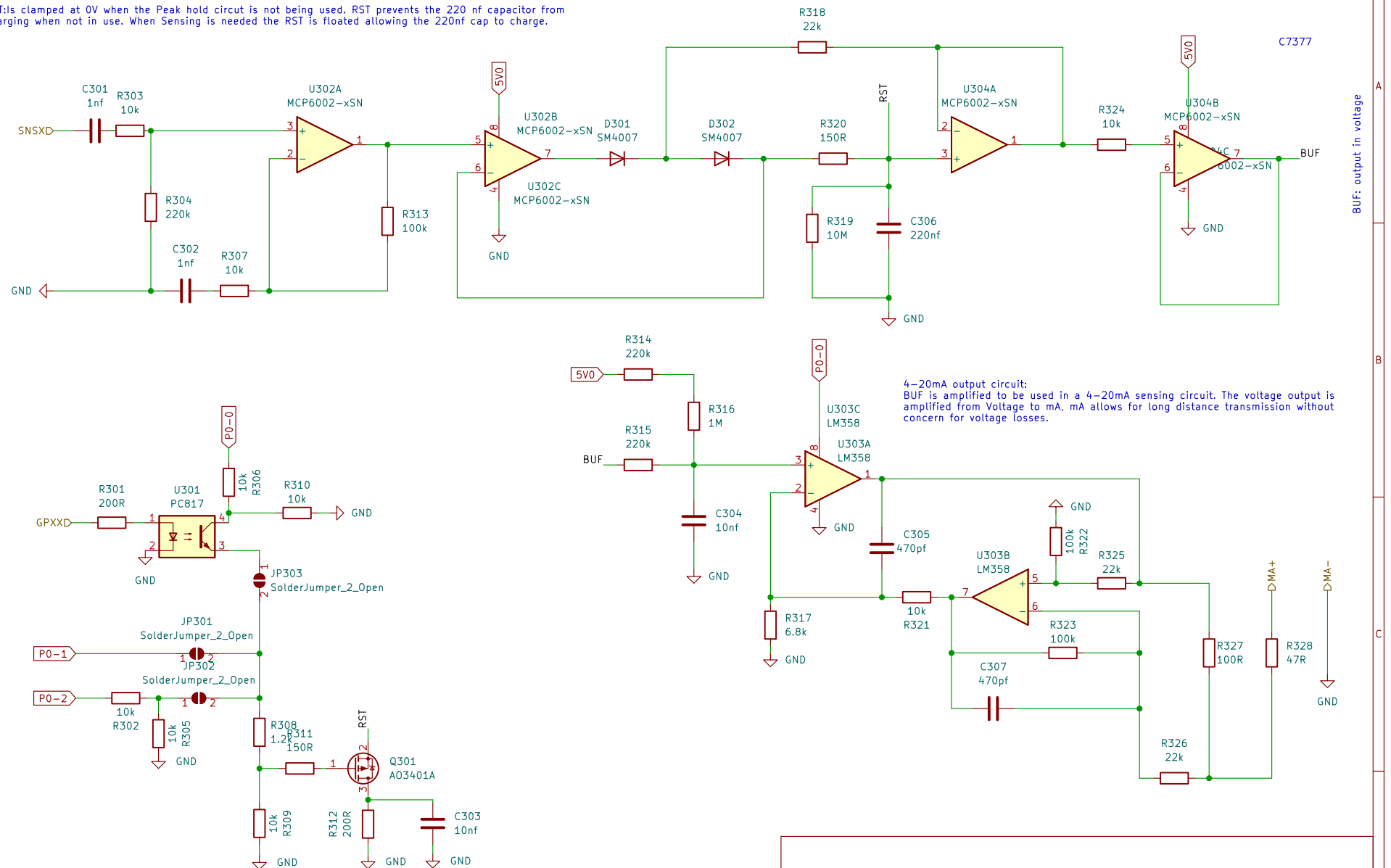
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Size: USLetter Date:  
KiCad E.D.A. kicad (6.0.5)

Rev:  
Id: 2/16

SNS: Piezo Electric sensor, used to measure knock. Op-amps used to amplify the voltage using a peak hold circuit. The peak hold circuit has a 220 uf cap used for peak hold.

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#### RST Options:

RST can be set to float by either 2 methods:

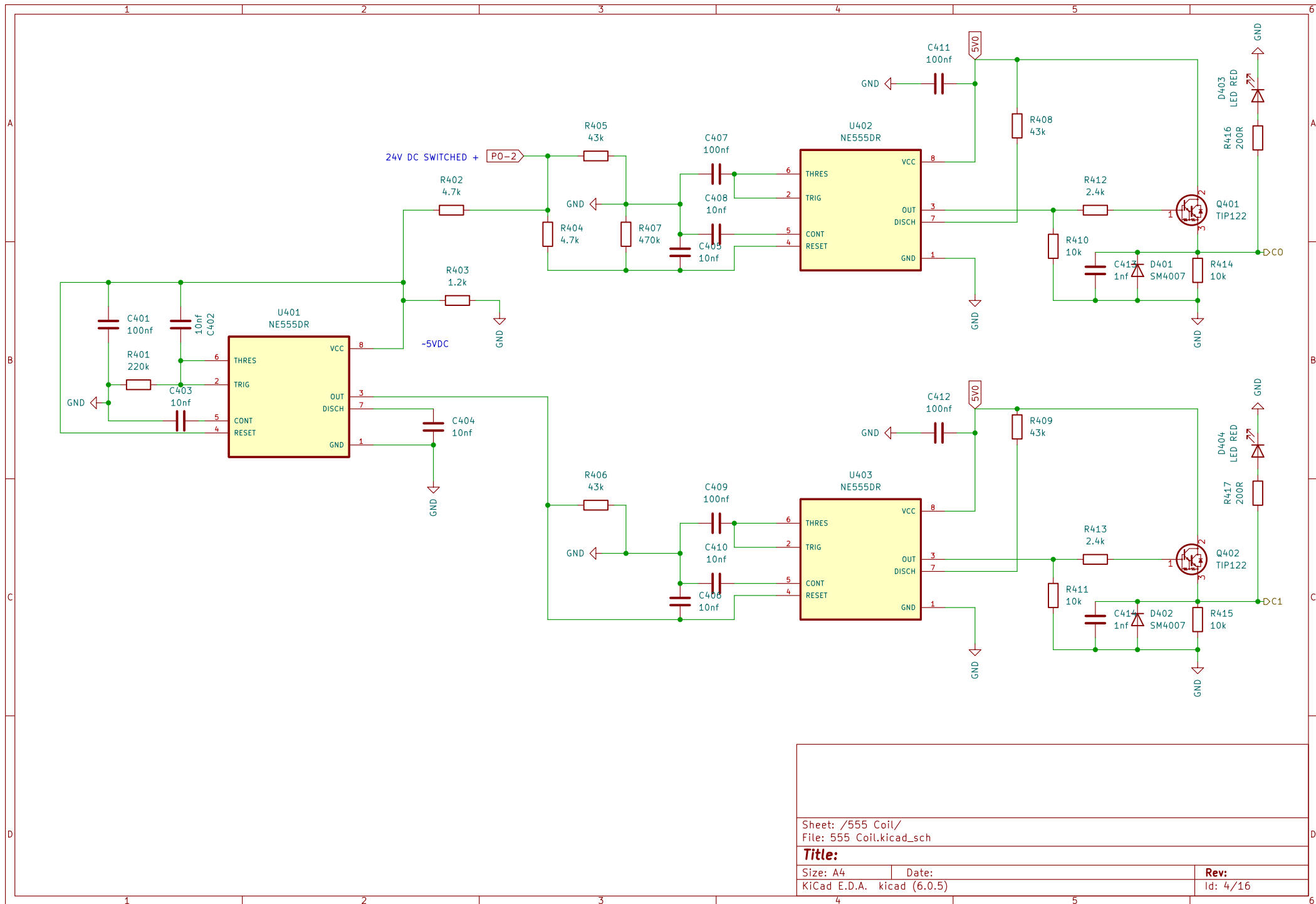
- 1) GP pin from mcu, when pin is set high 3V3. Powered by P0-0 24VDC.
- 2) P0-1, 12V remotely switched supply for ignition.
- 3) P0-2, 24 voltage triggered output

Sheet: /SNS01/  
File: SNS01.kicad\_sch

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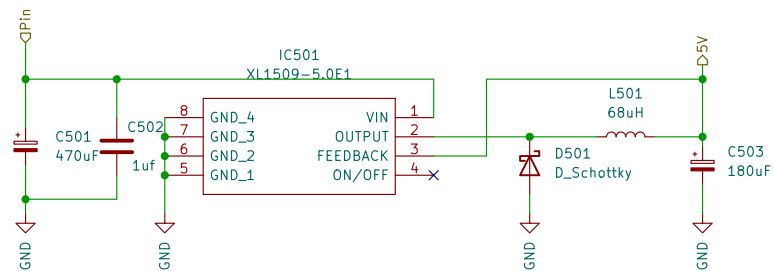


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Date:  
Rev: 4/16



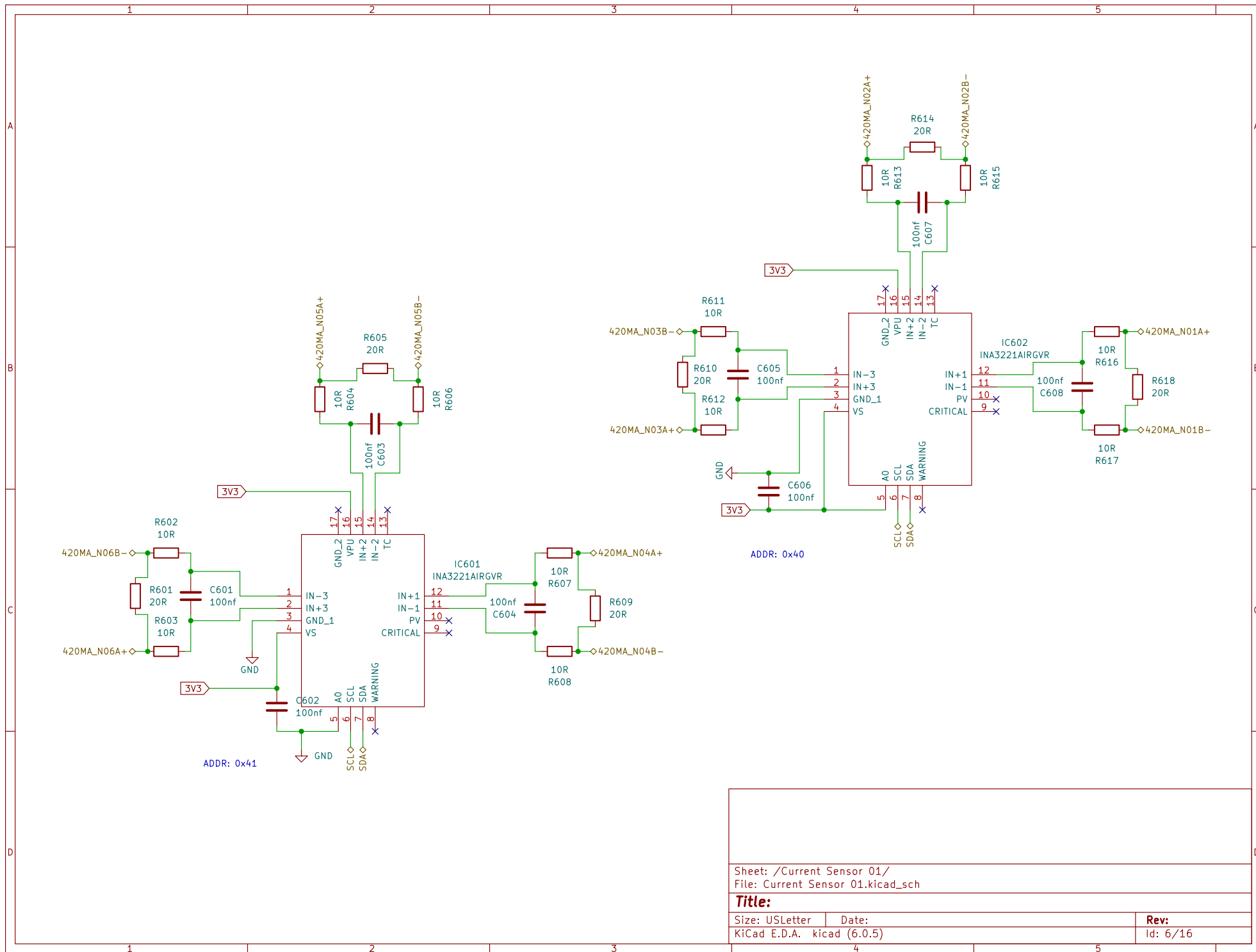
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Date:

Rev:  
Id: 5/16

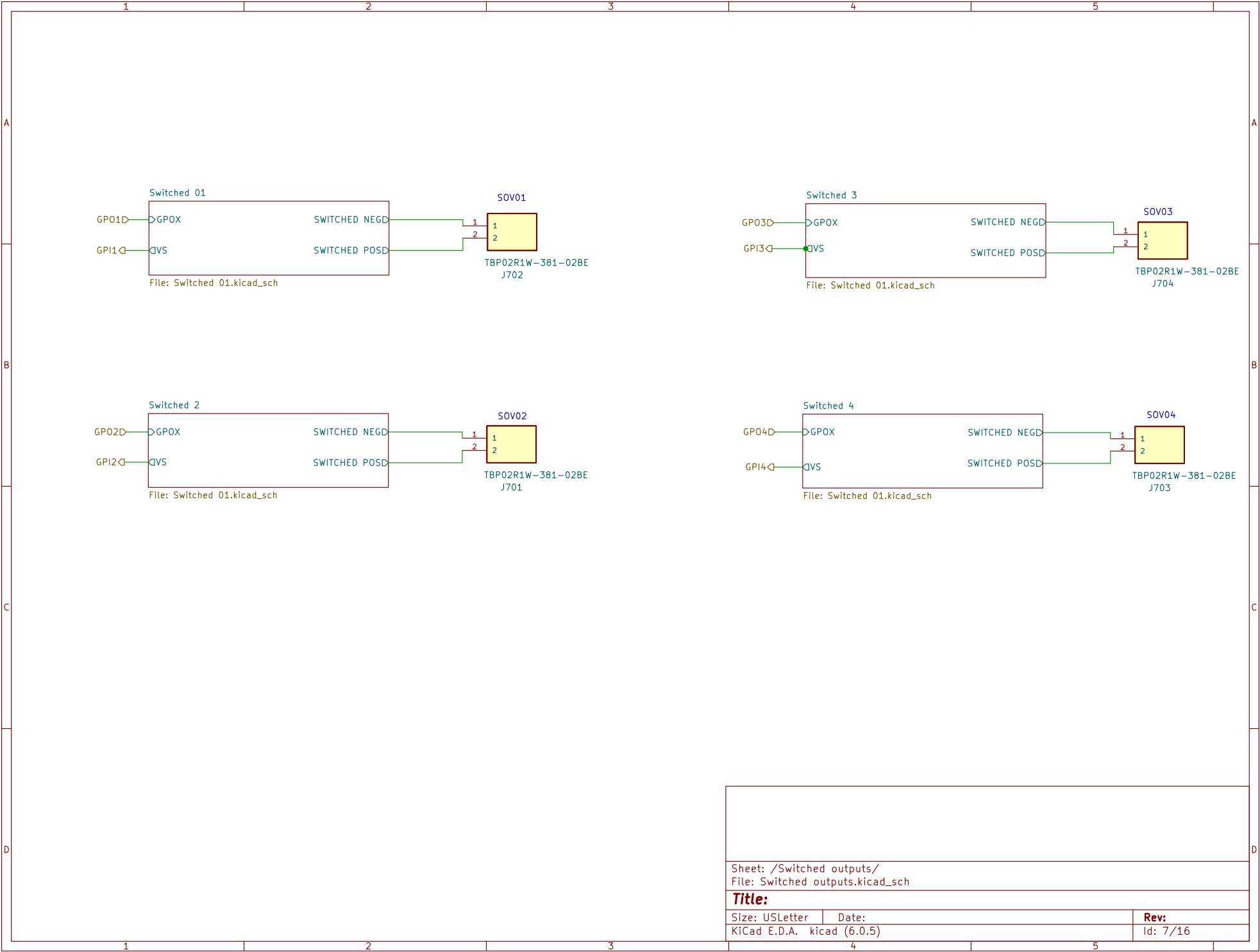


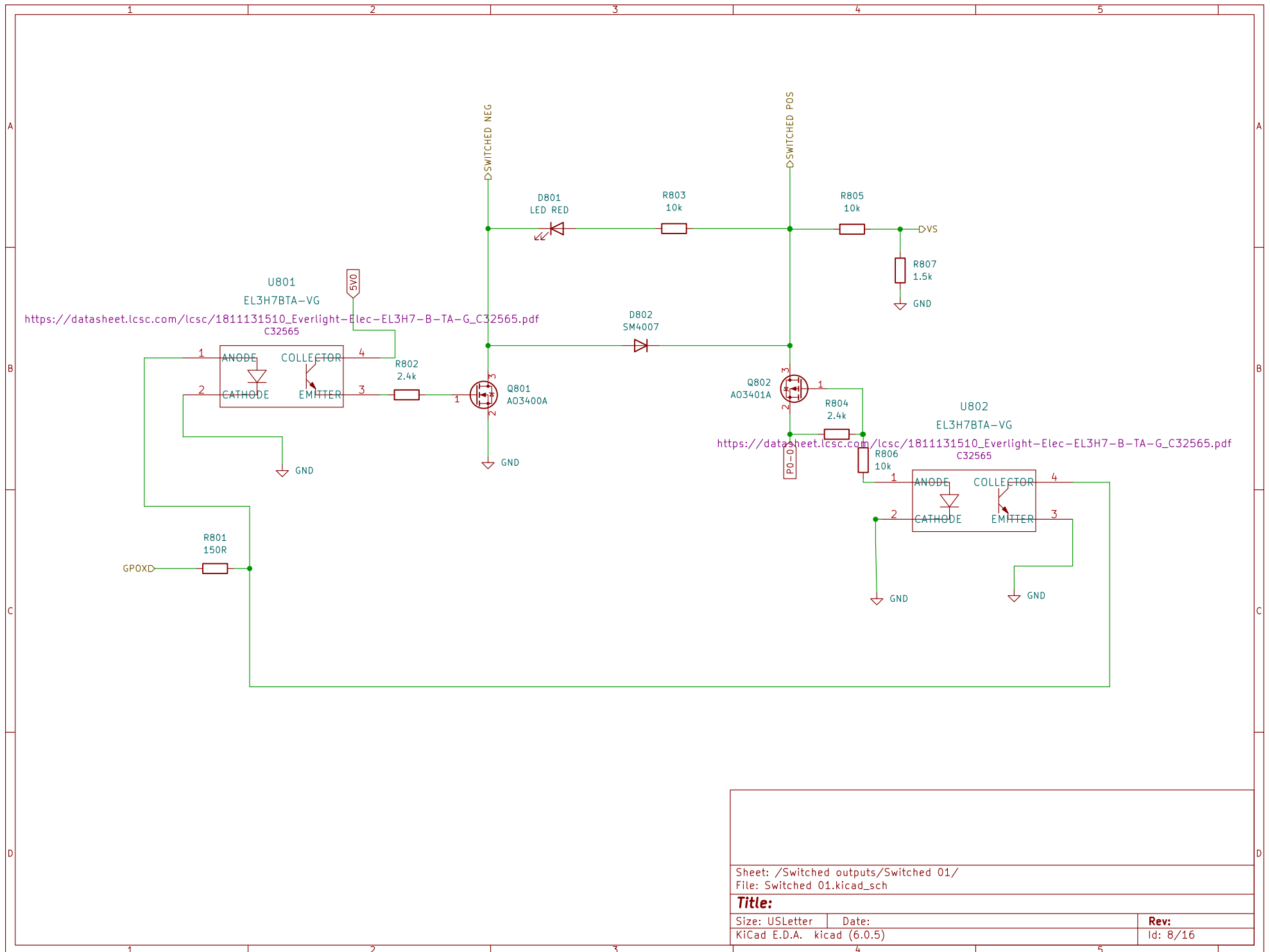
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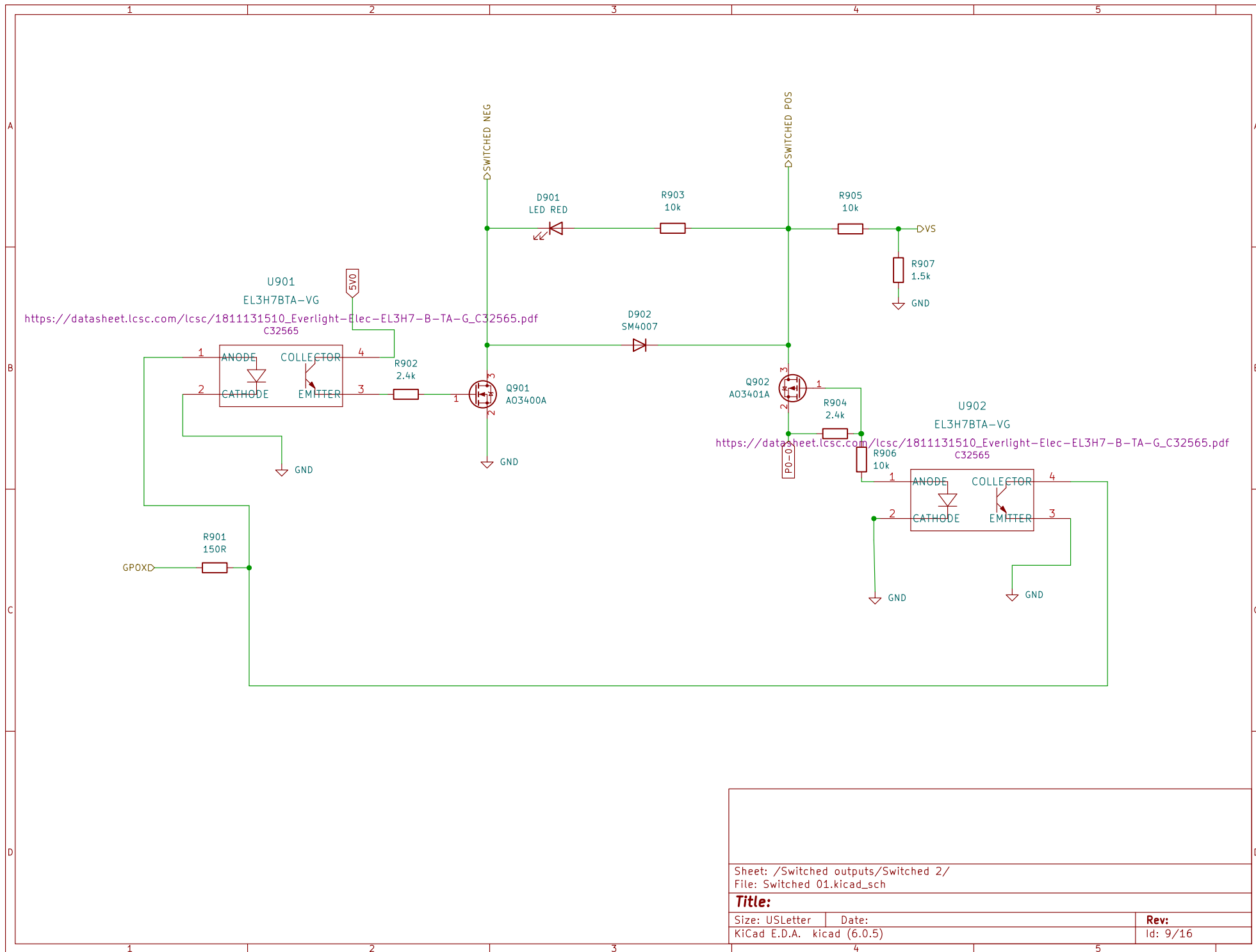
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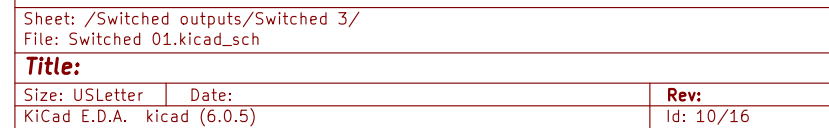
Rev:  
Id: 6/16

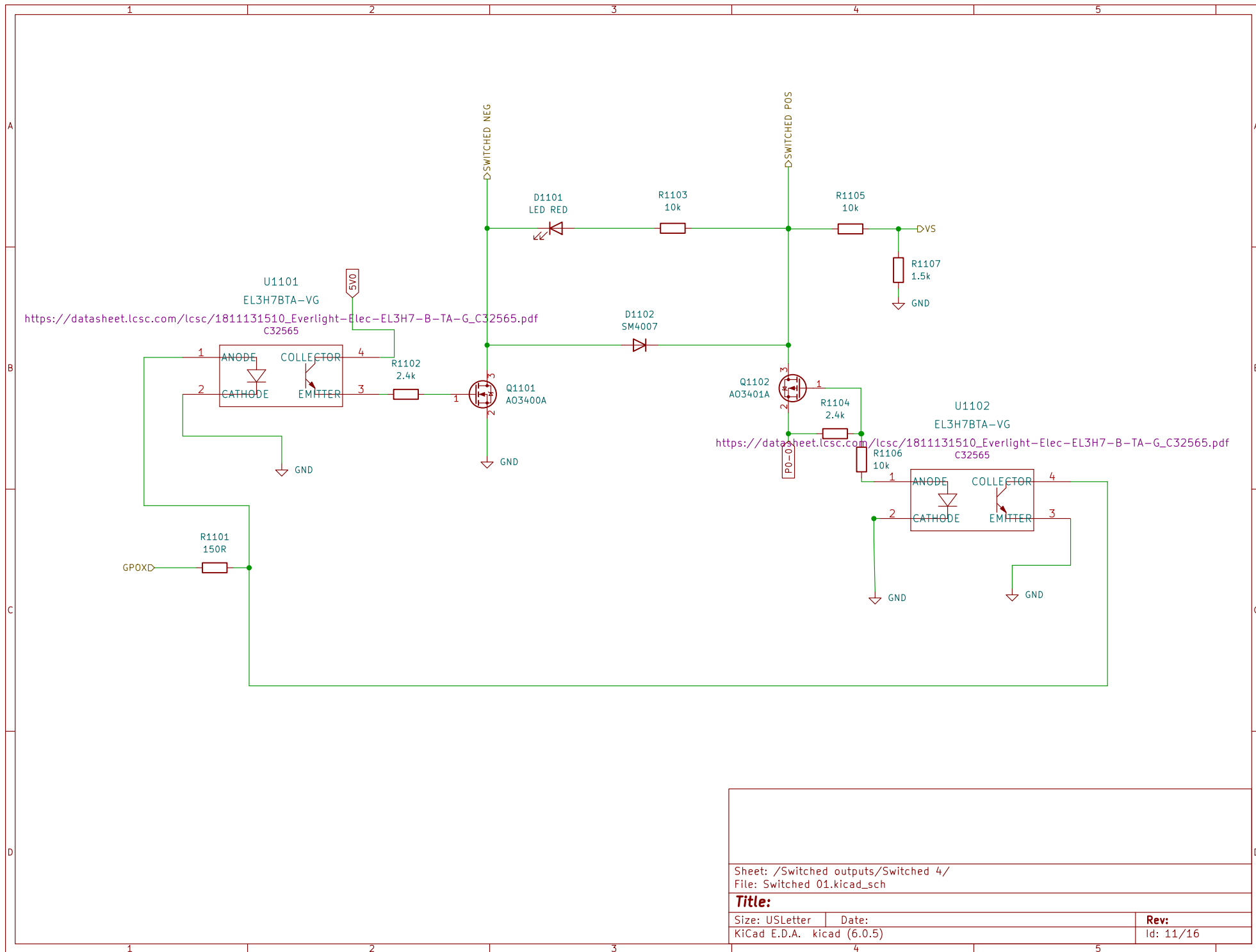










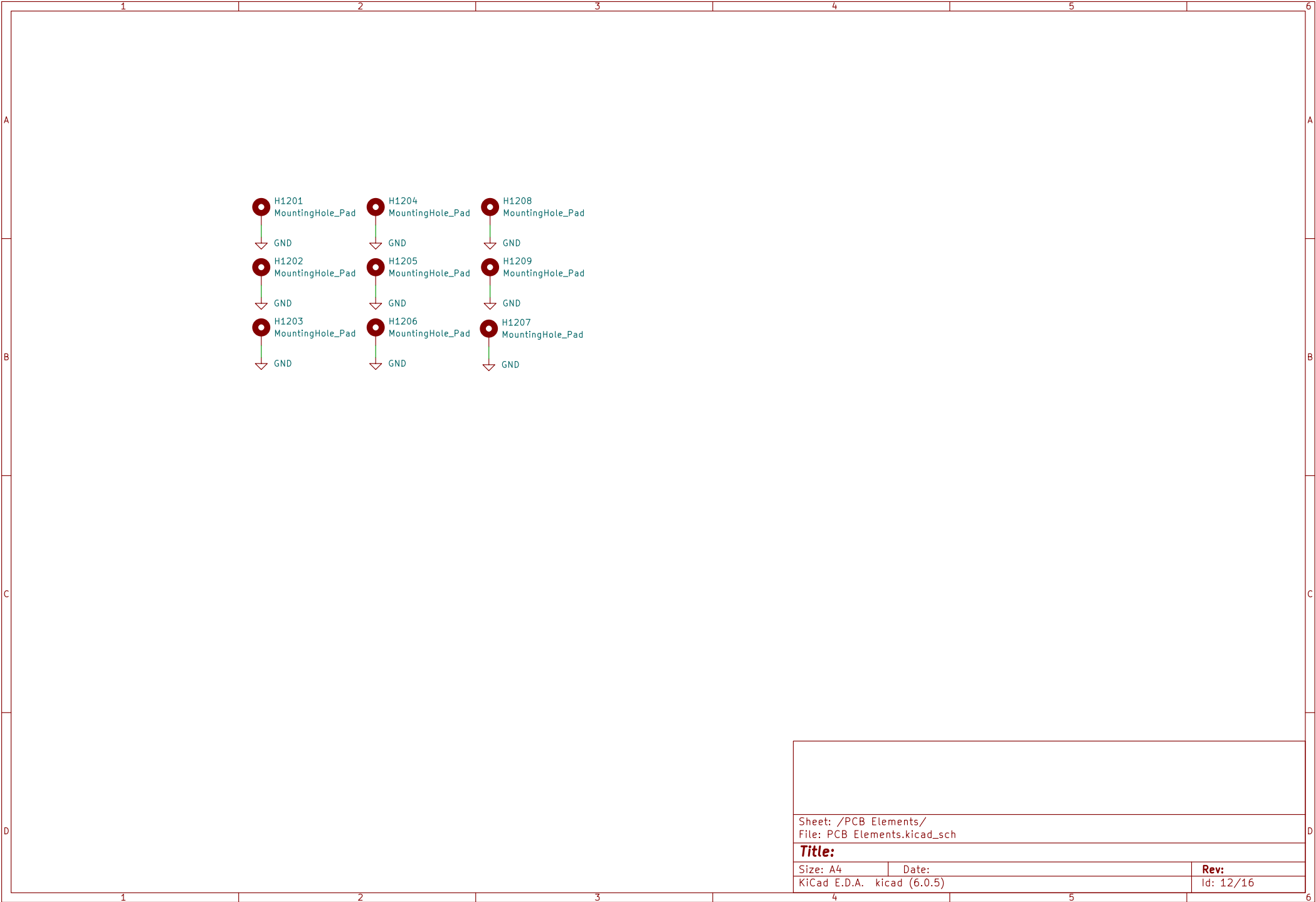


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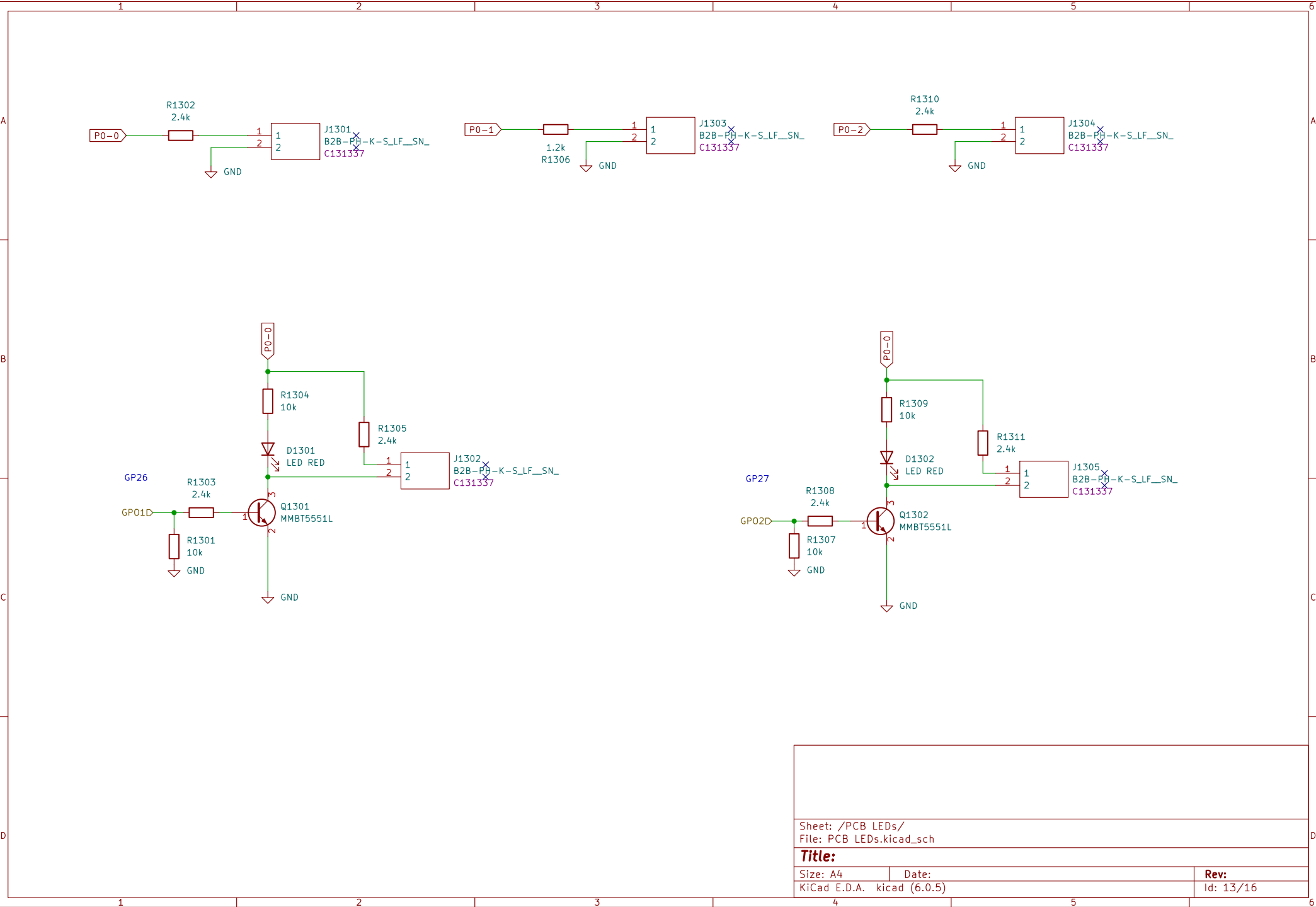
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Id: 11/16



Sheet: /PCB Elements/ File: PCB Elements.kicad_sch		
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Sheet: /PCB LEDs/  
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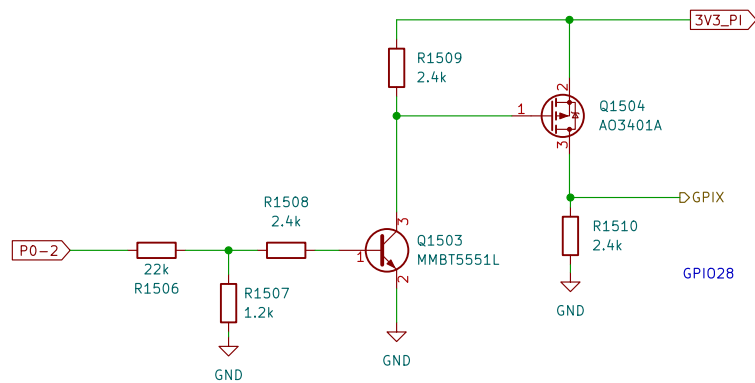
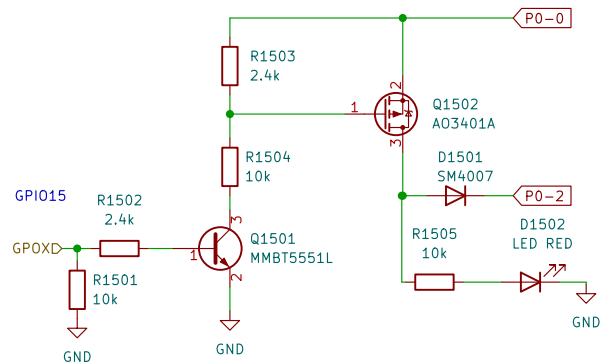
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Date:

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Id: 13/16





Sheet: /Power Control/  
File: Power Control.kicad\_sch

**Title:**

Size: A4  
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Date:

**Rev:**

Id: 15/16

