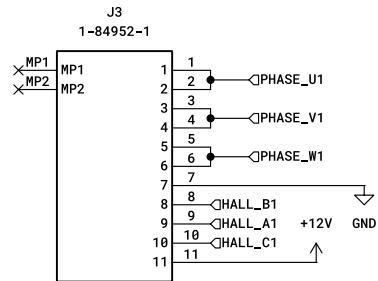
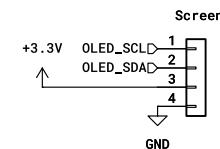
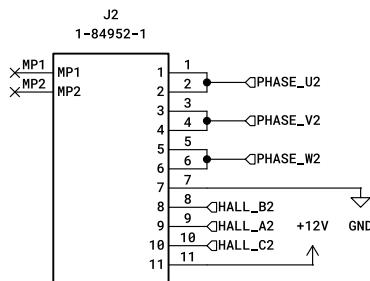


**Motor Headers**

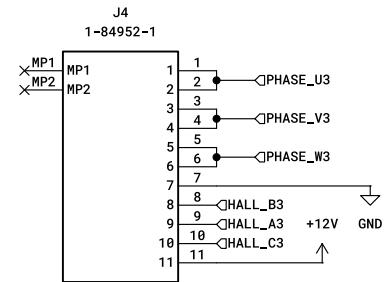
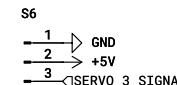
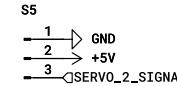
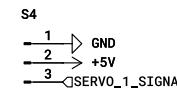
MP1 &amp; MP2 are mounting pins

**Debug**

MP1 &amp; MP2 are mounting pins



MP1 &amp; MP2 are mounting pins

**Servo Headers**

Sheet: /output1/  
File: output.kicad\_sch

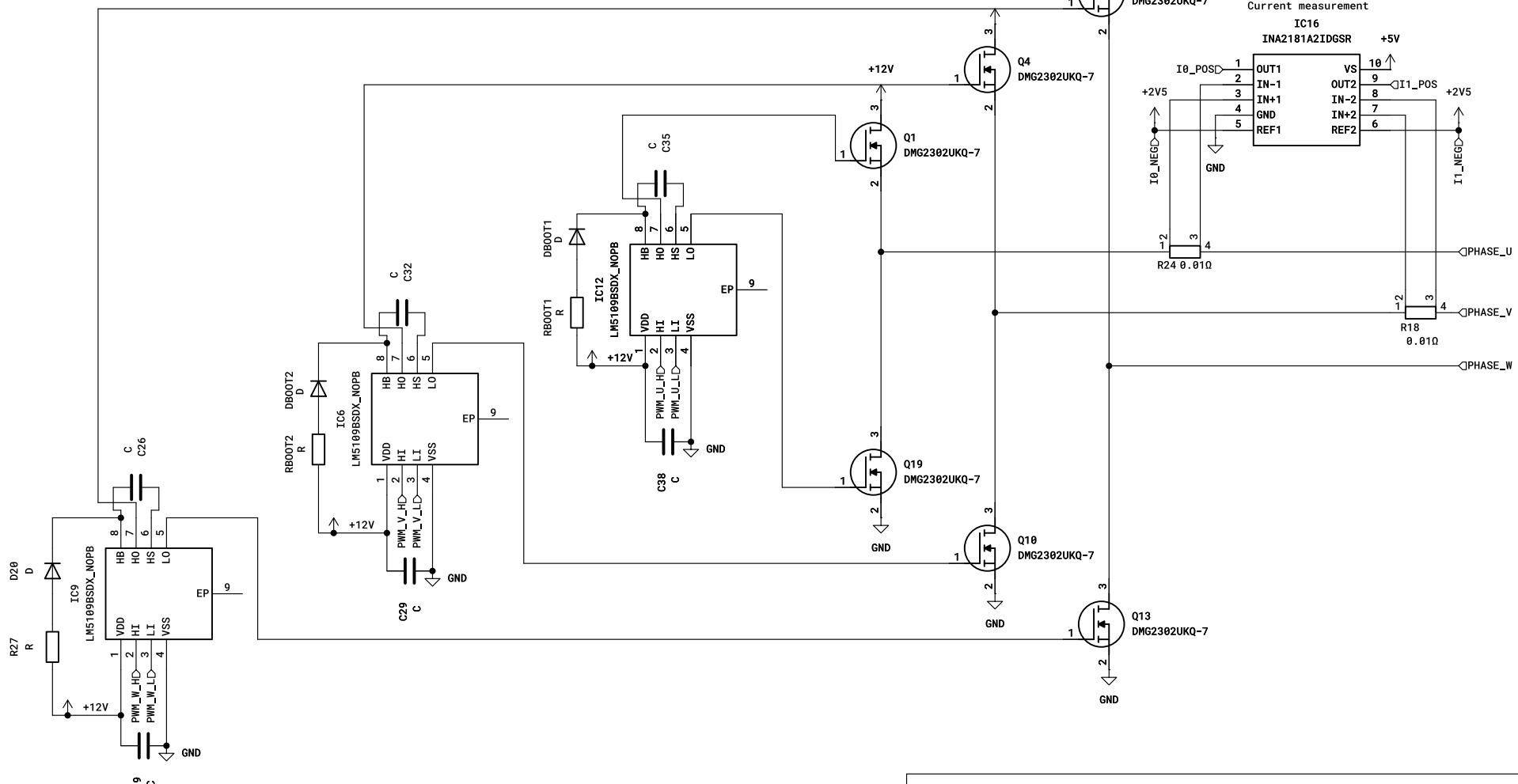
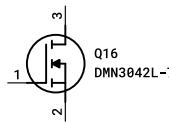
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Size: A4 Date:  
KiCad E.D.A. 8.0.6

Rev:  
Id: 2/12

1 2 3 4 5 6

consider using this mosfet instead



Sheet: /drivergates/  
File: gates.kicad\_sch

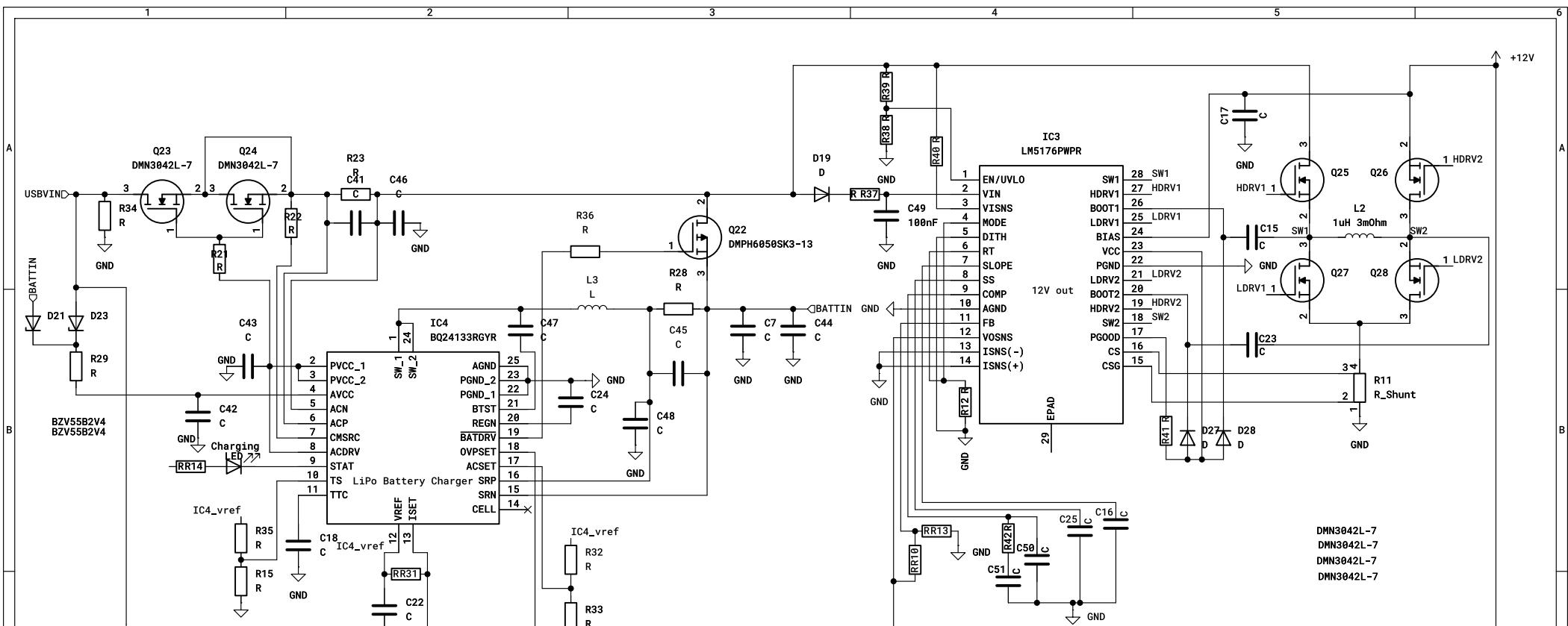
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KiCad E.D.A. 8.0.6

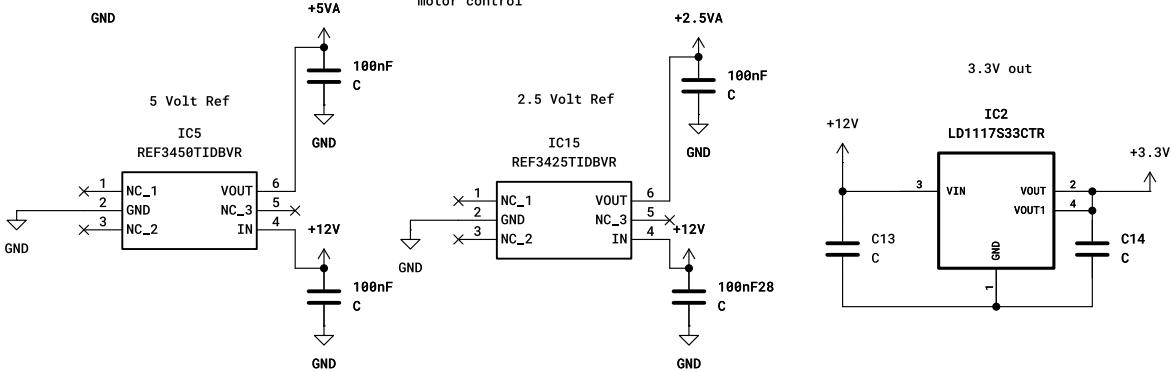
Rev:  
Id: 3/12

1 2 3 4 5 6



TODO: find the right MOSFETS and inductor

TODO: we need to swap out these references with low noise regulators. reason being that we have components that need 5v power not reference. I think that a low noise 5v regulator can be used as both reference and power since it is not so critical to have a very precise measurements for motor control.



Sheet: /voltageregulators/  
File: voltageregulatros.kicad\_sch

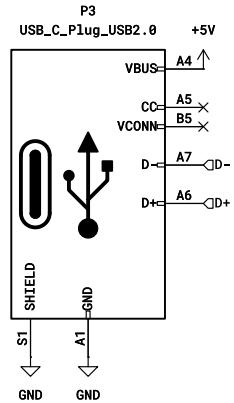
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KiCad E.D.A. 8.0.6

A

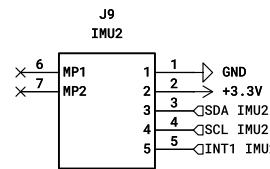
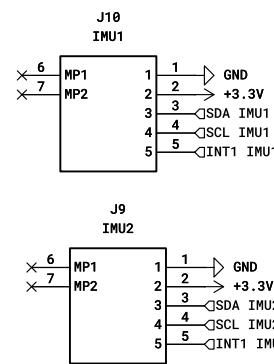


B



FFC to IMU

Dont need SA0 pin, because  
we have 2 sep i2c lines



C

D

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

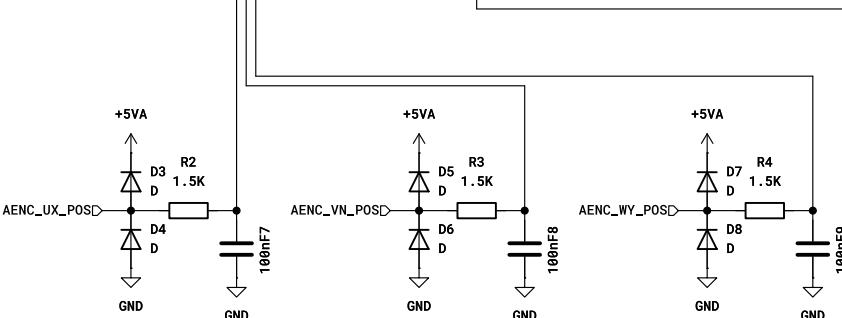
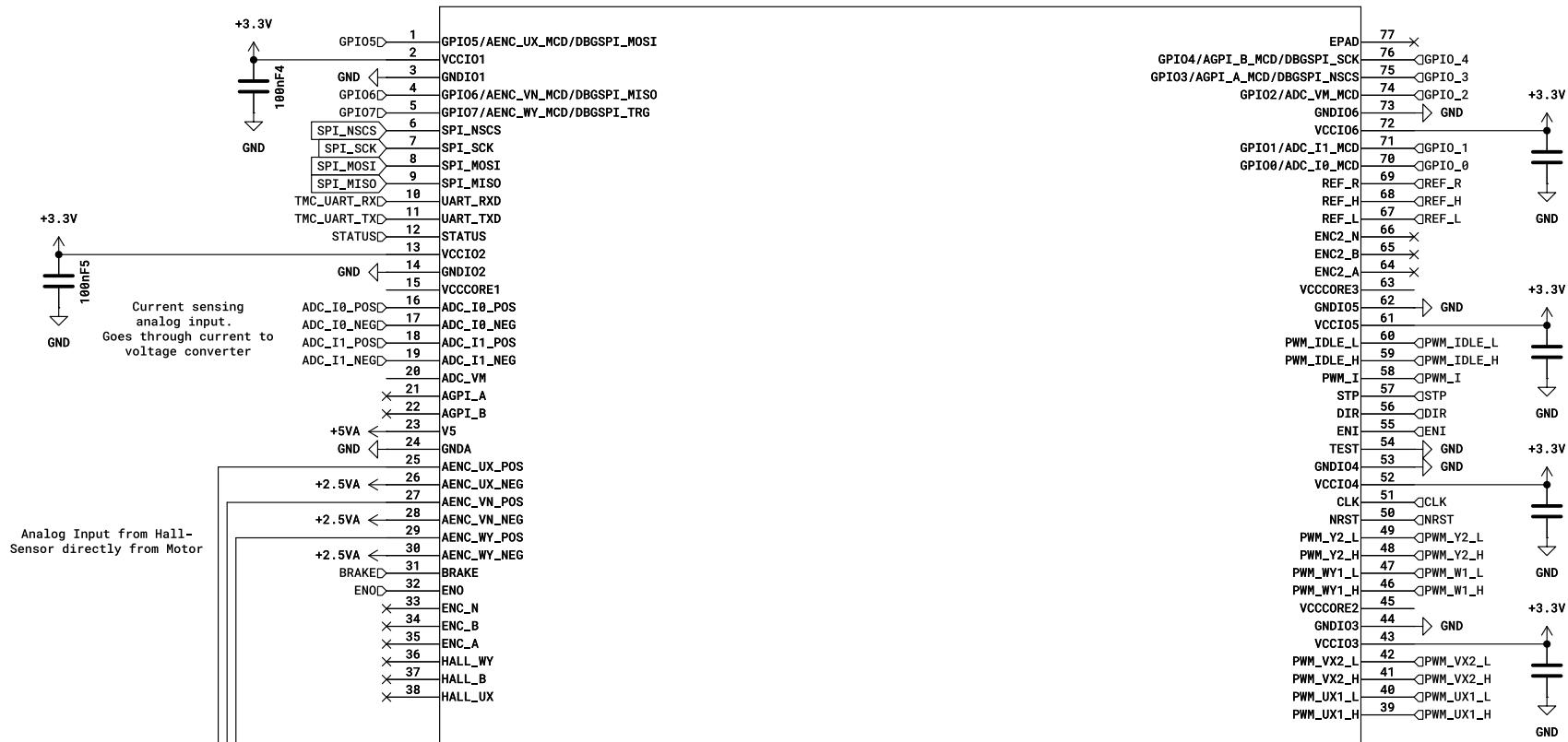
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KiCad E.D.A. 8.0.6

Rev:  
Id: 5/12

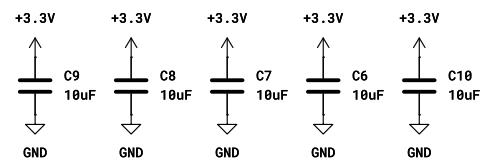
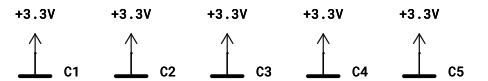
U1  
TMC4671-LA



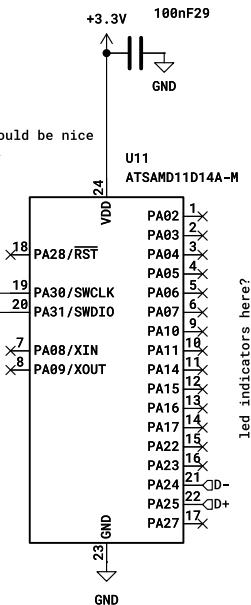
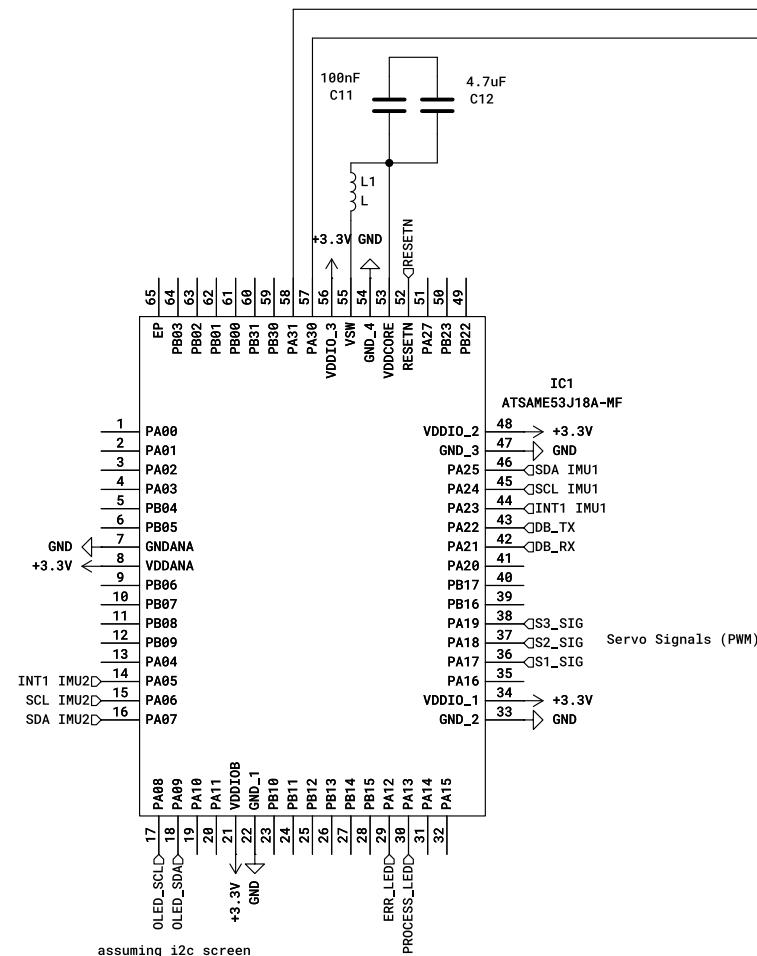
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File: driverIC.kicad\_sch  
**Title:**  
Size: A4 Date:  
Rev:  
KiCad E.D.A. 8.0.6 Id: 7/12

A

Decoupling capacitors, place them close to IC



D24 LED  
D25 LED  
D26 LED



led indicators here?

B

A

B

C

C

D

D

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

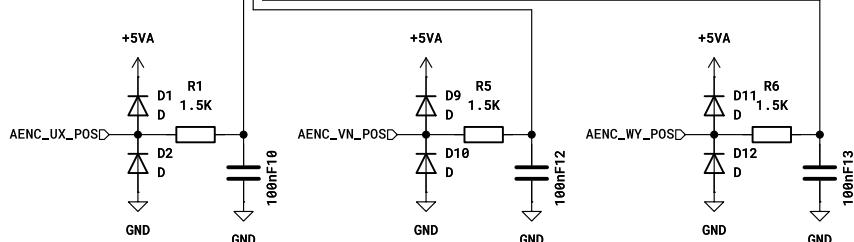
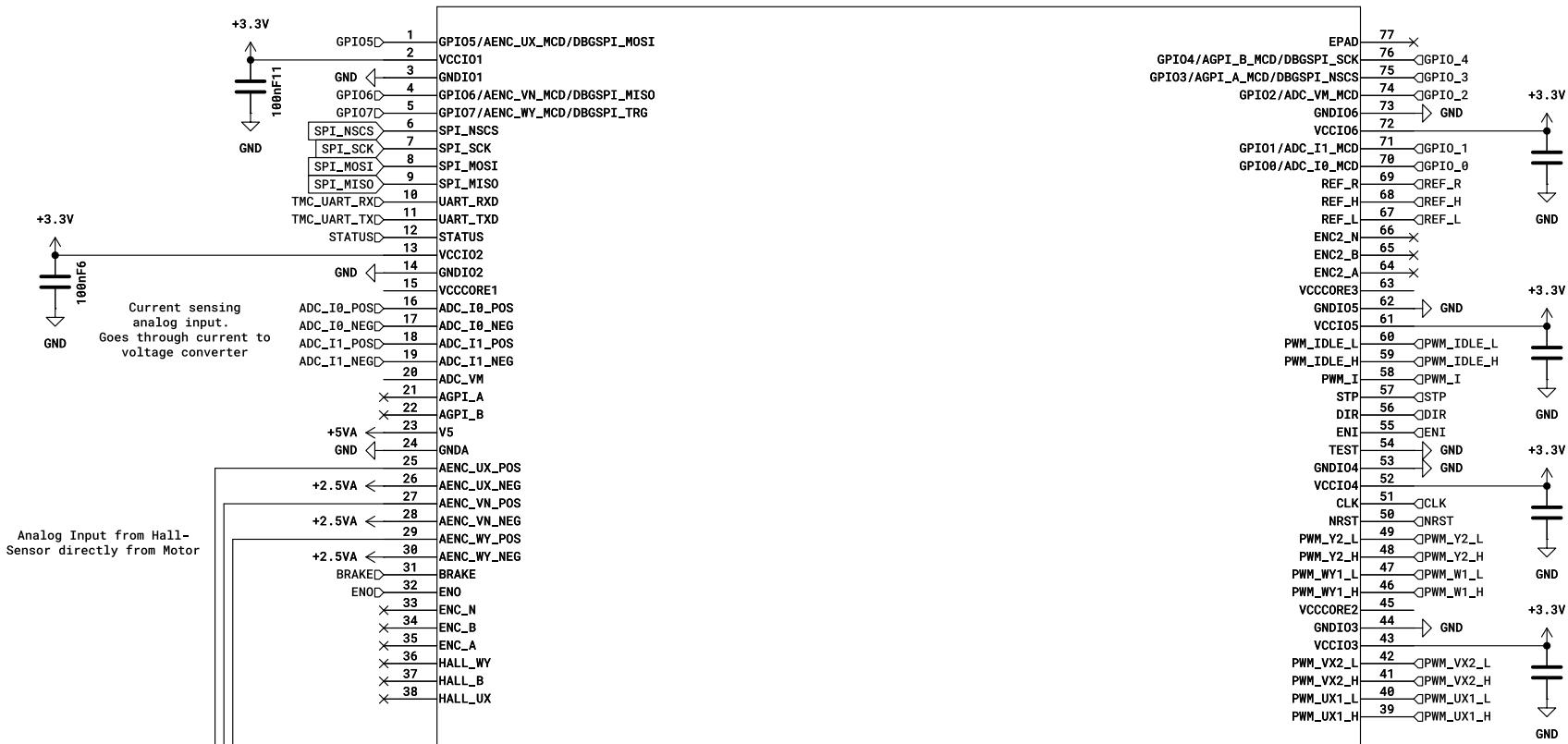
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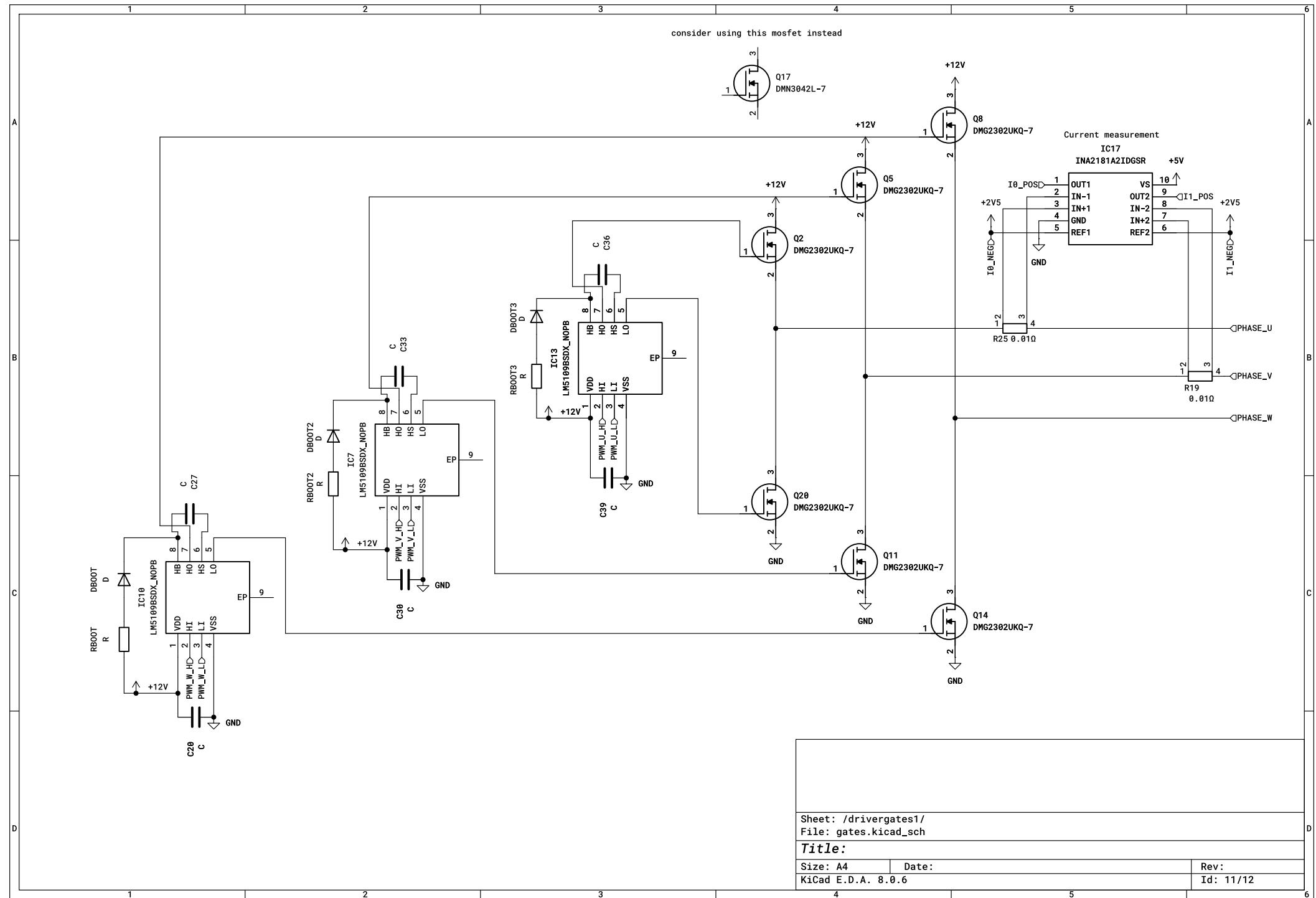
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Rev: Id: 8/12

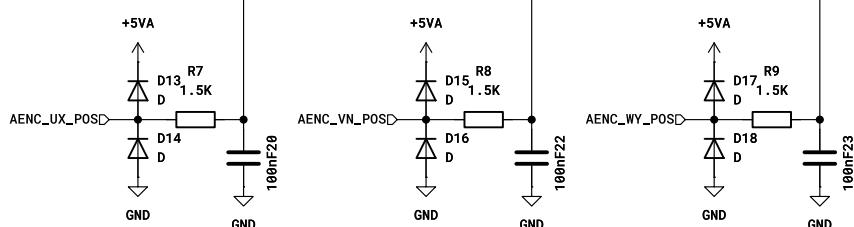
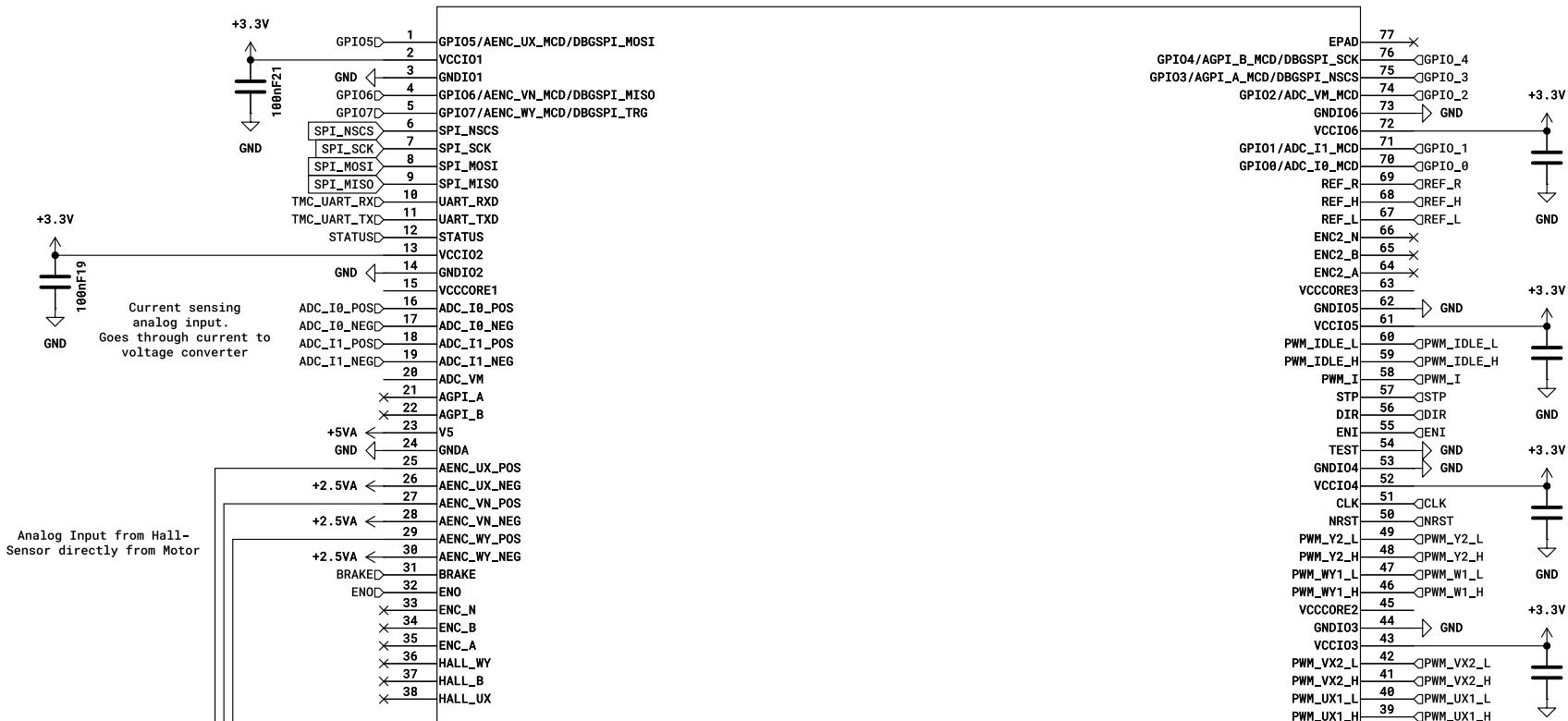
U3  
TMC4671-LA



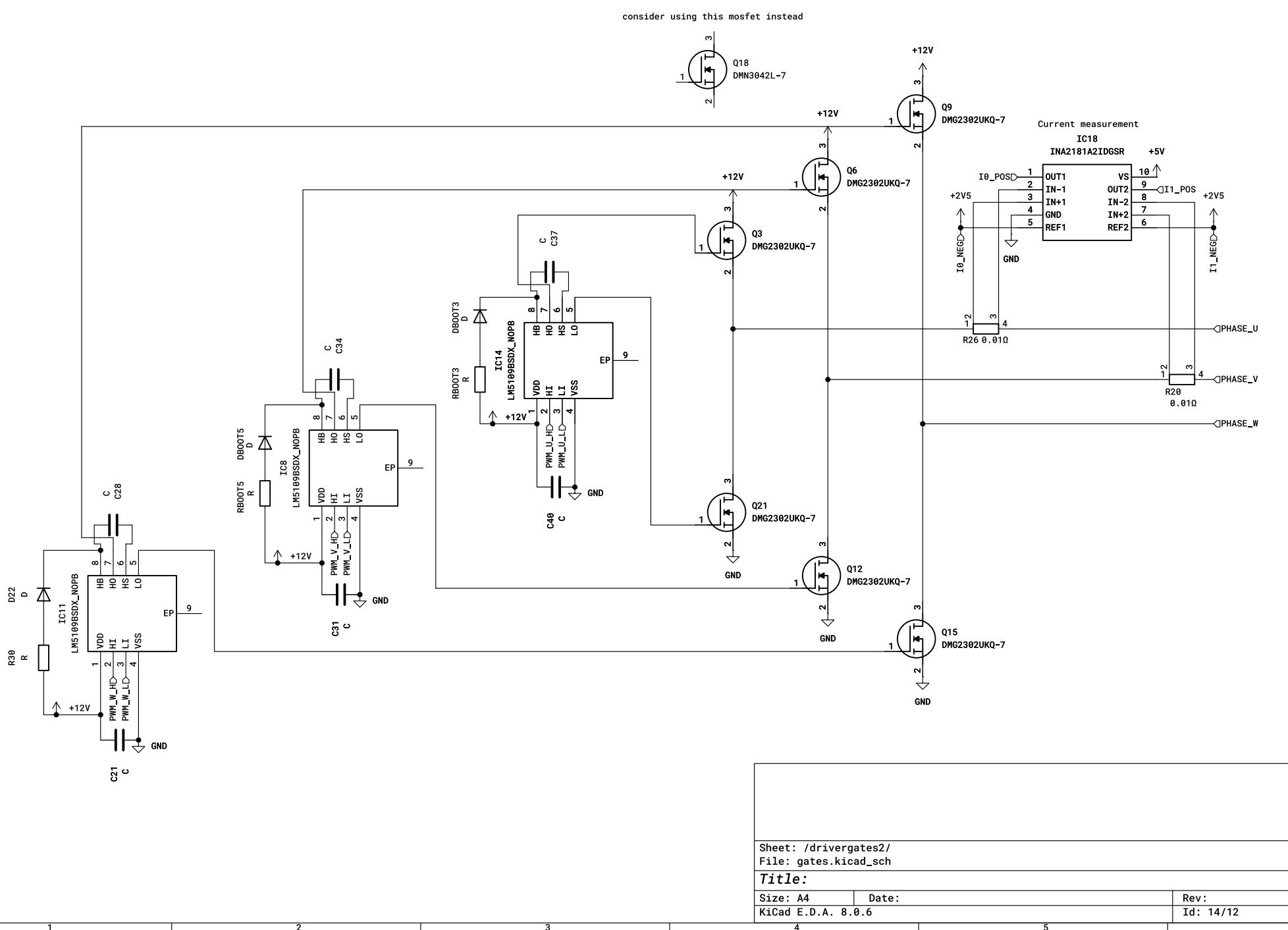
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Rev:  
KiCad E.D.A. 8.0.6 Id: 10/12

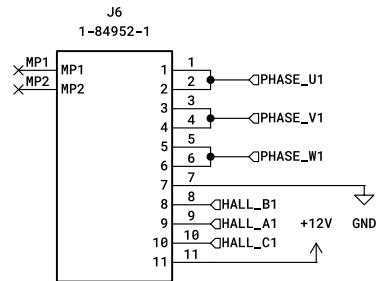
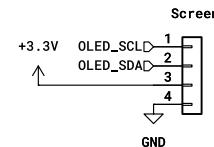


U4  
TMC4671-LA

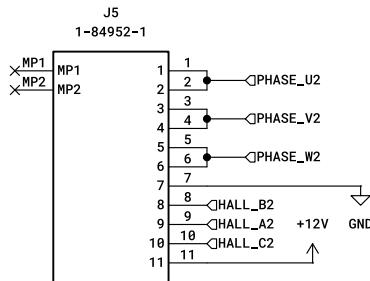
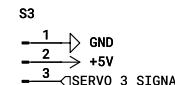
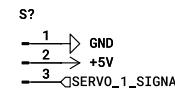


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Rev:  
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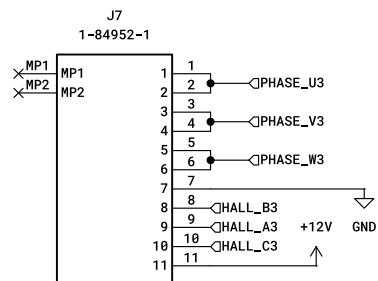


**Motor Headers****Debug**

MP1 &amp; MP2 are mounting pins

**Servo Headers**

MP1 &amp; MP2 are mounting pins



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

Title:

Size: A4 Date:  
KiCad E.D.A. 8.0.6

Rev:  
Id: 15/12