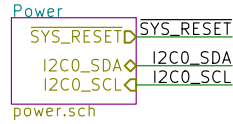
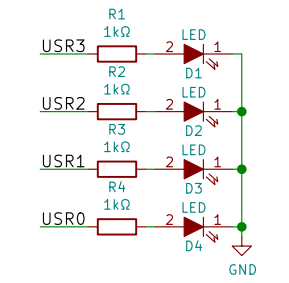


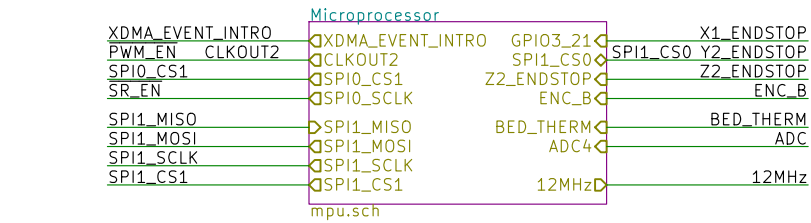
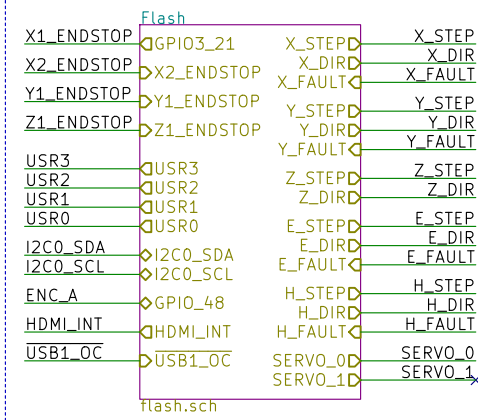
Power



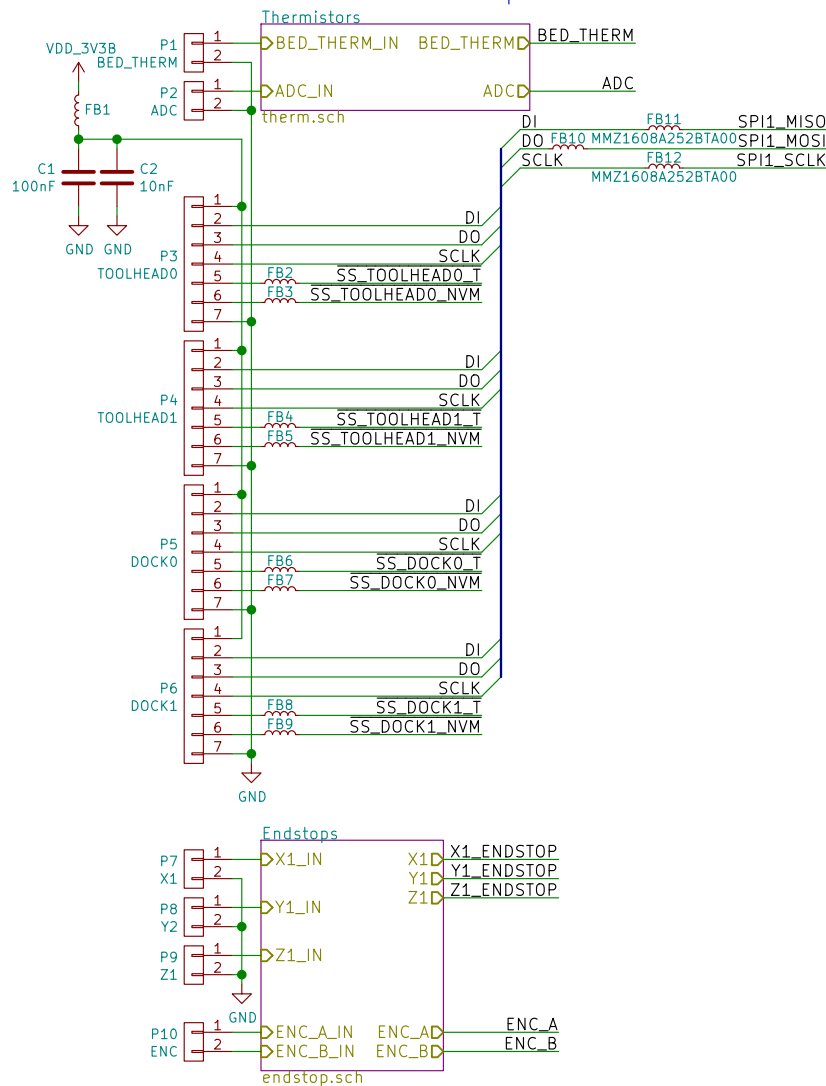
User LEDs



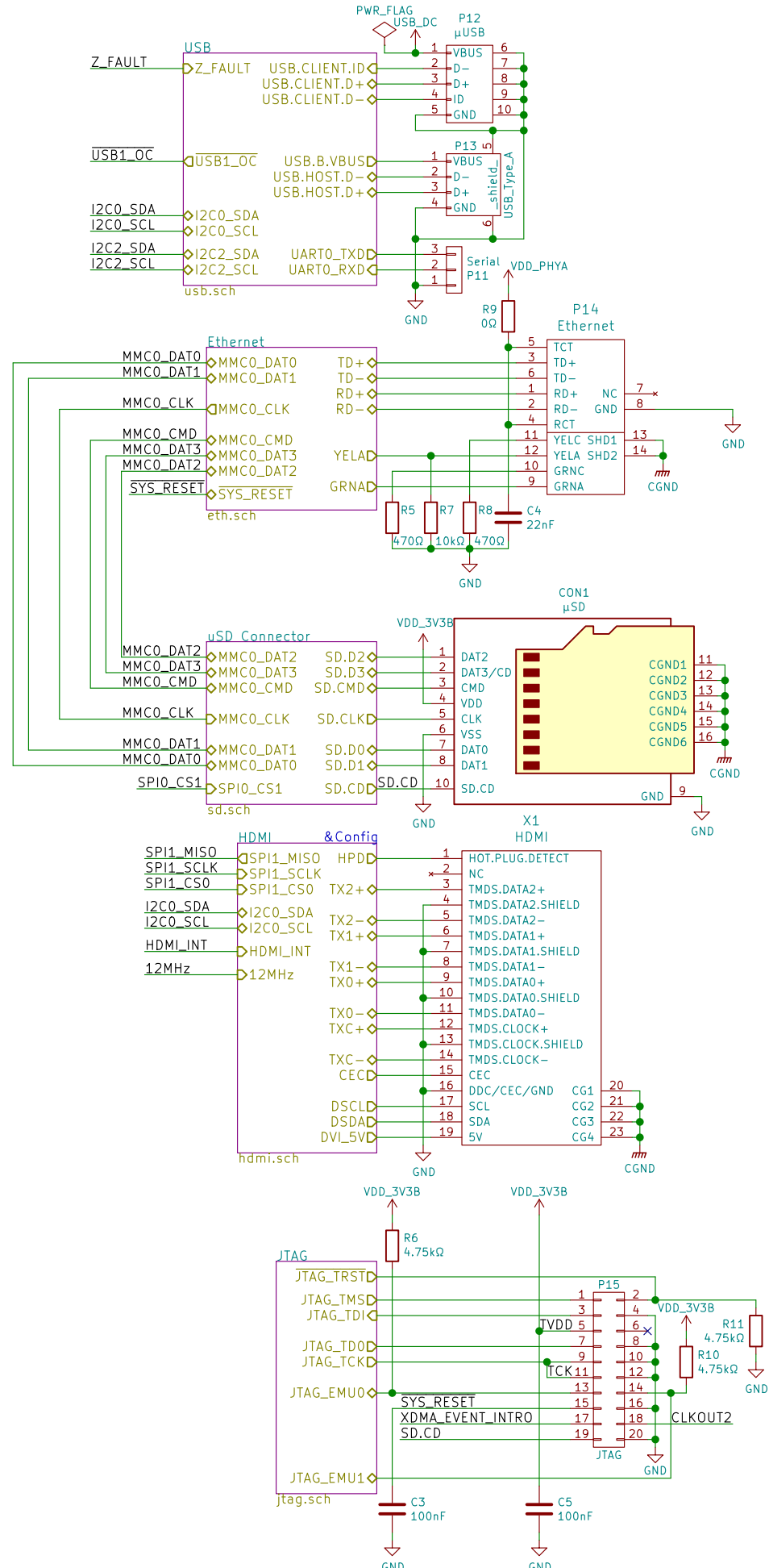
eMMC



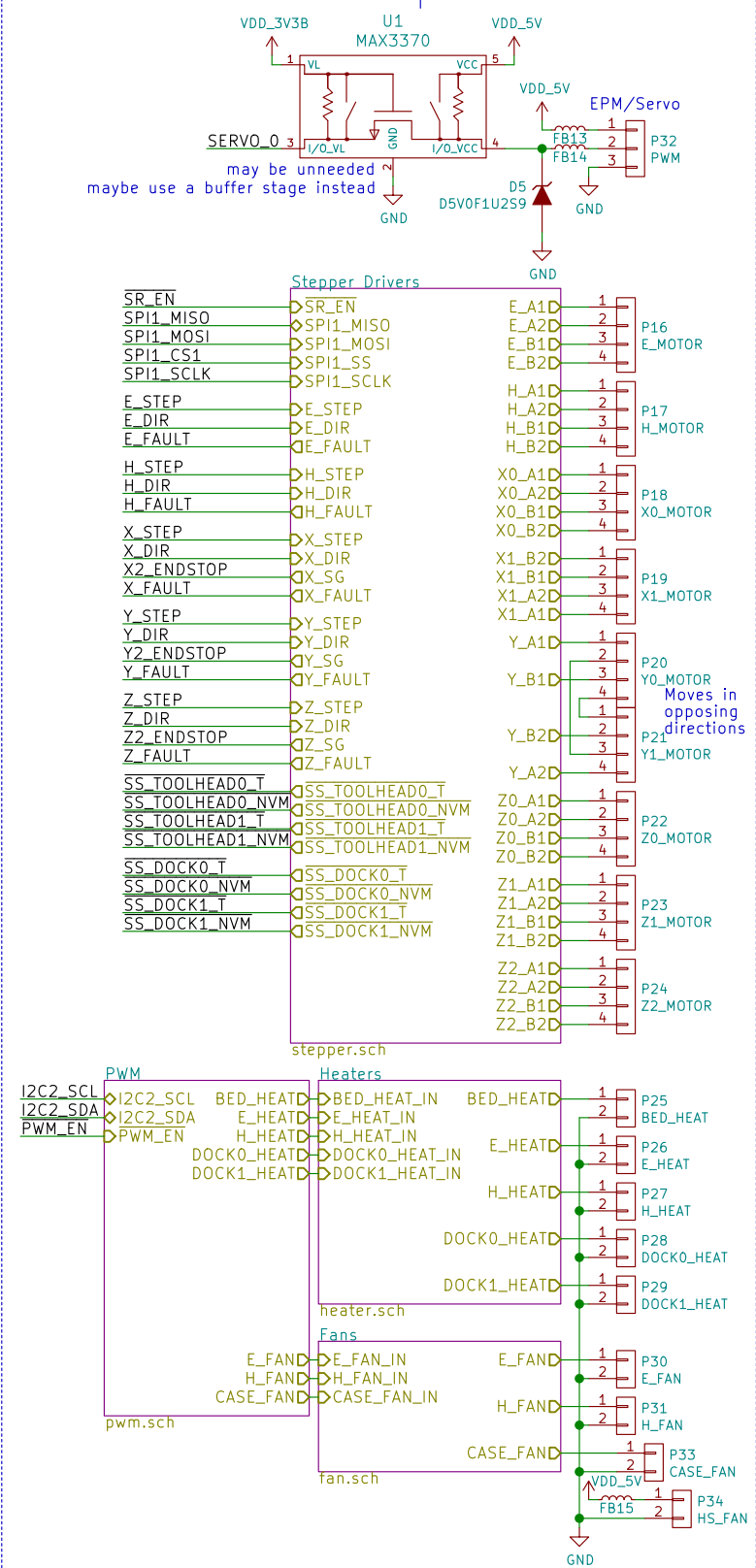
Feedback Input



Interfaces



Output



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Aleph Objects Inc.

Sheet: /

File: KiMBo.sch

Title: KiMBo

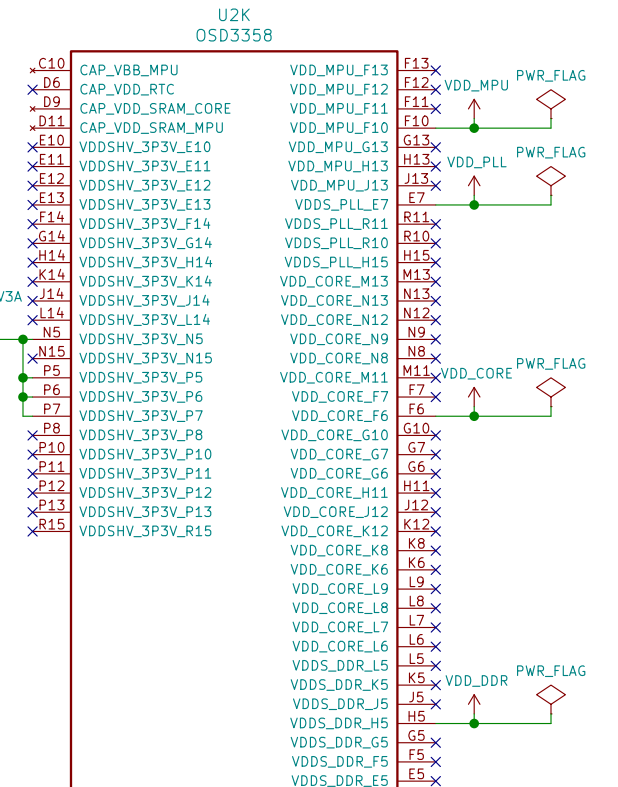
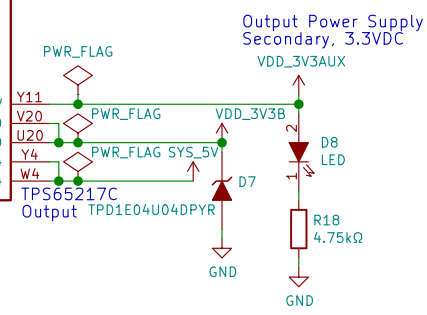
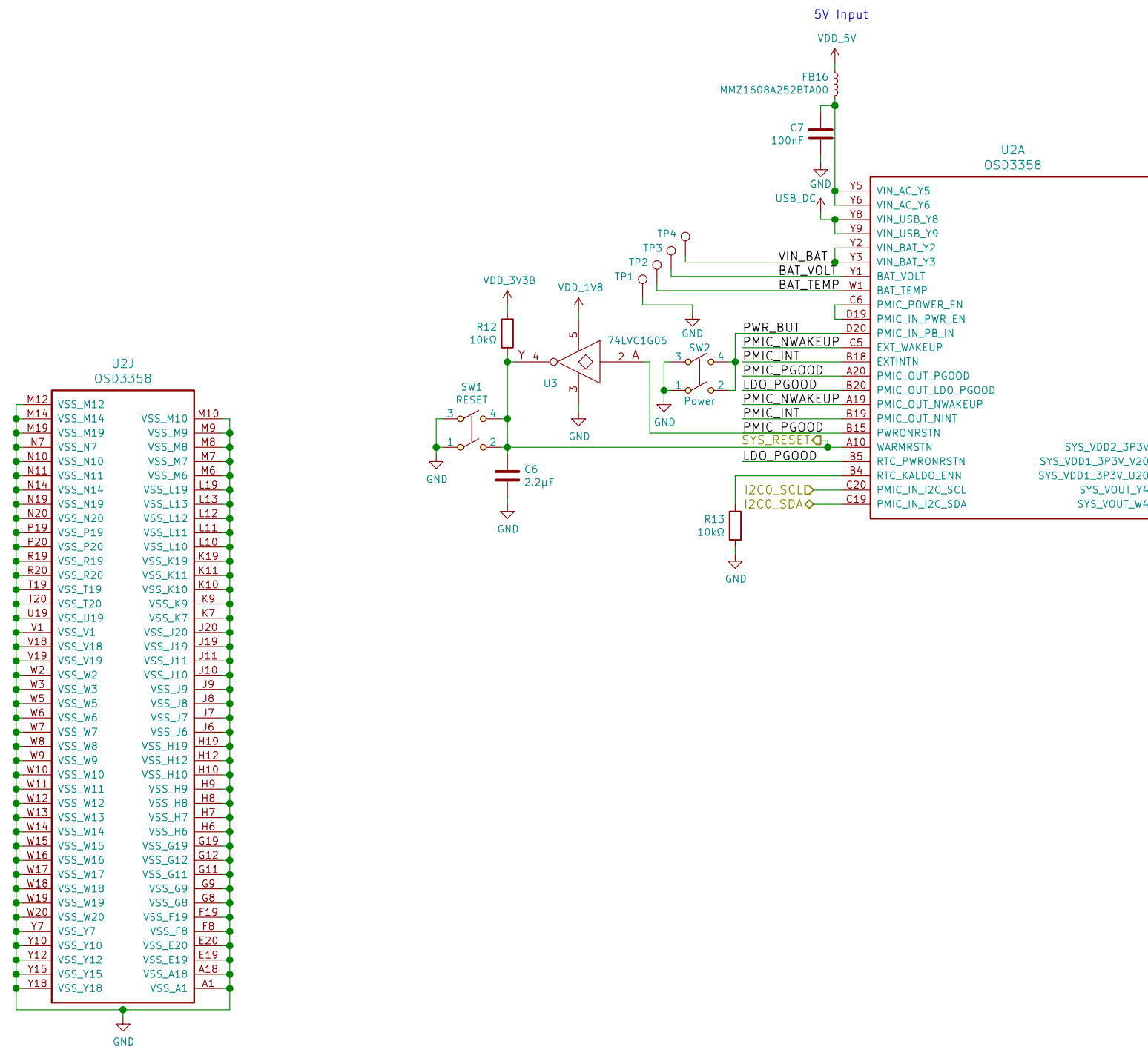
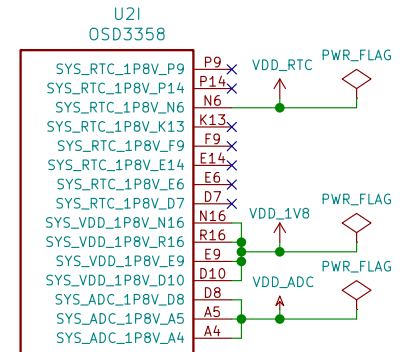
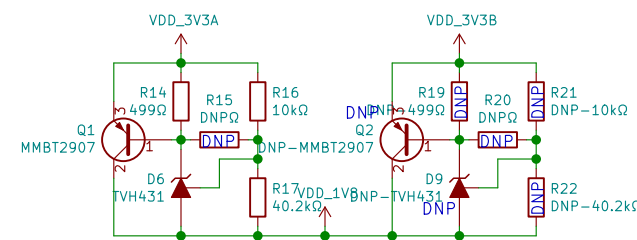
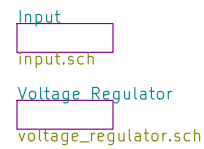
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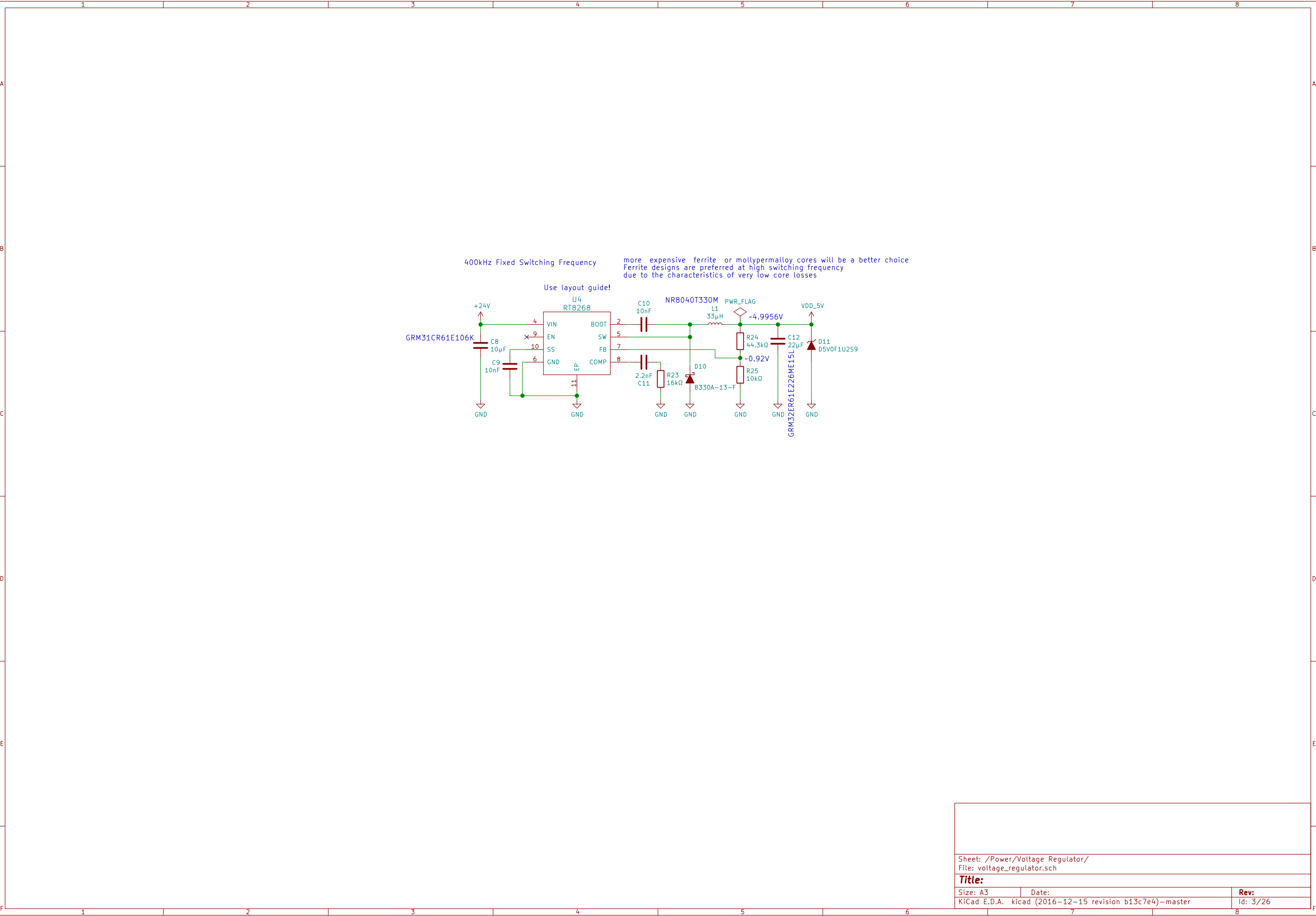
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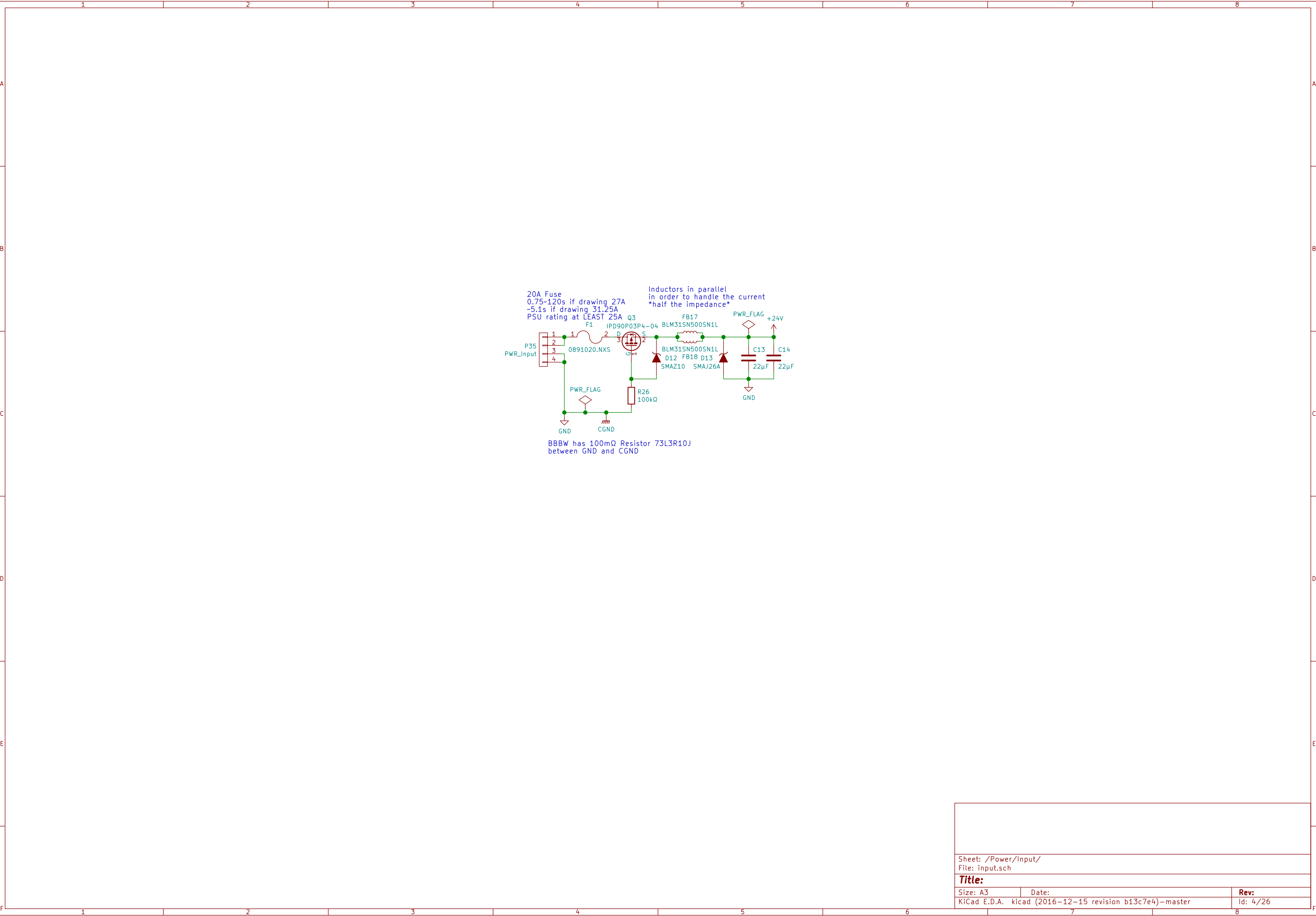
Rev:

KiCad E.D.A. kicad (2016-12-15 revision b13c7e4)-master

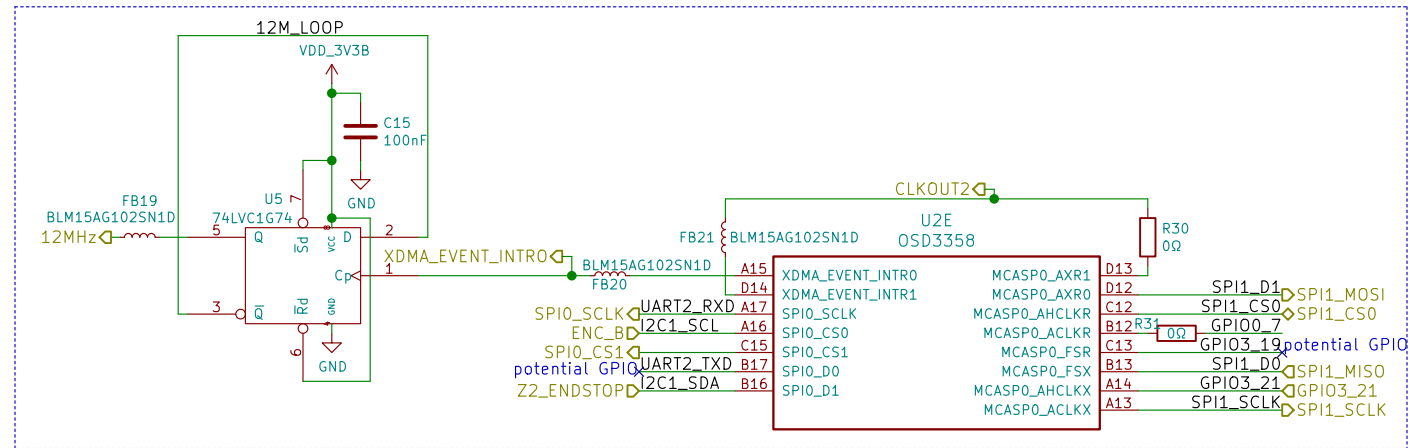
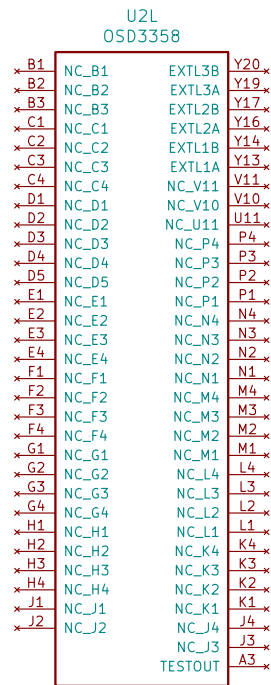
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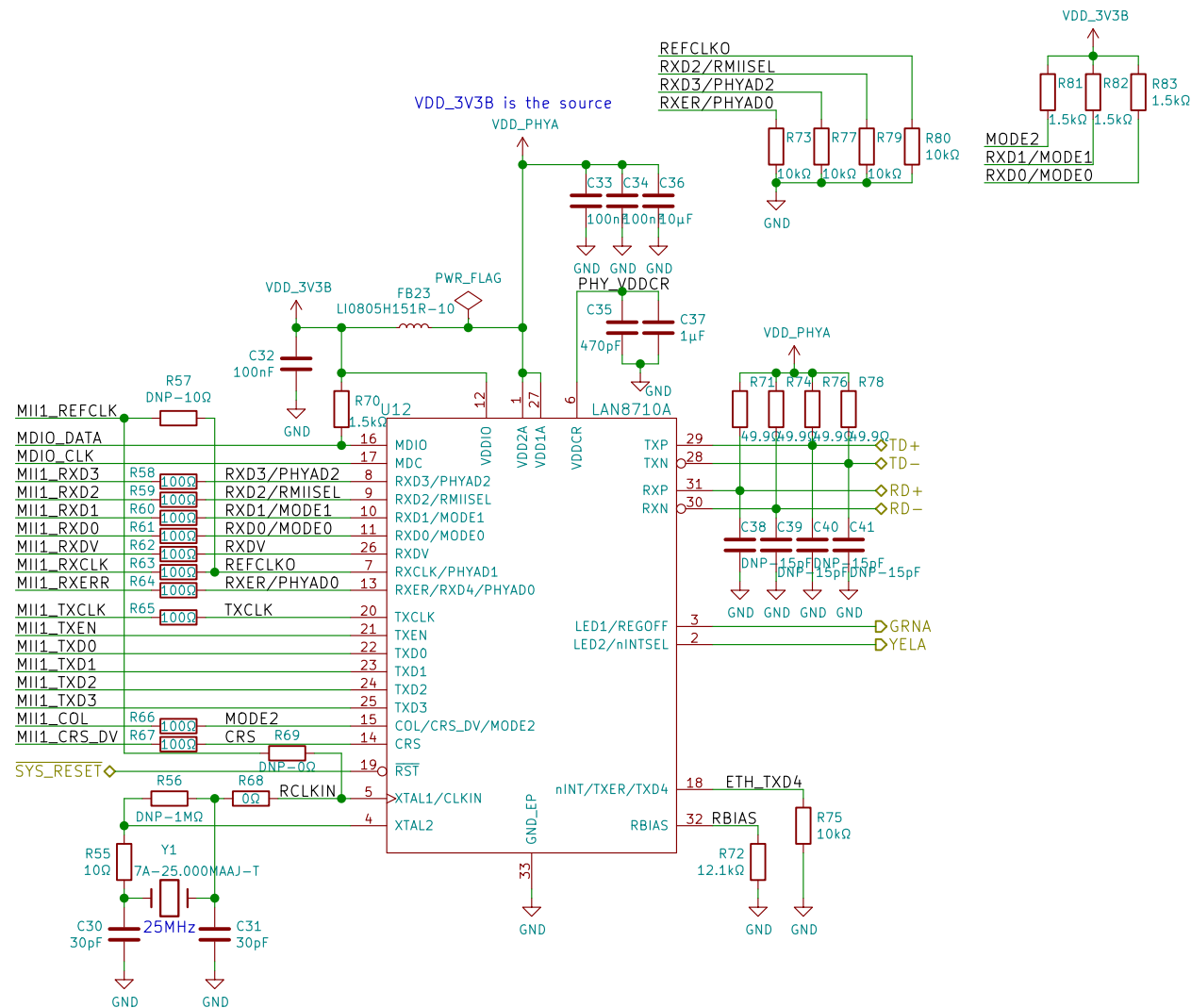
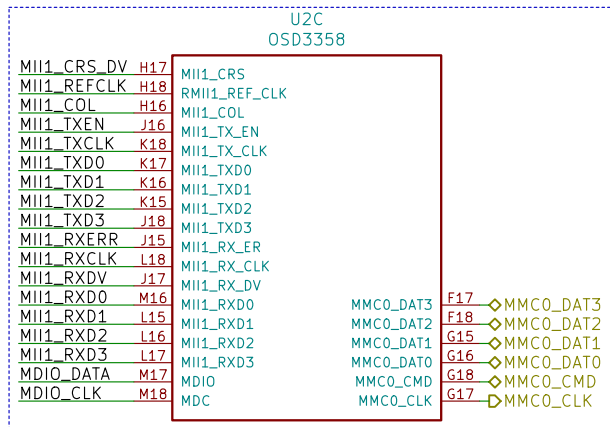






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Sheet: /Ethernet/
File: eth.sch

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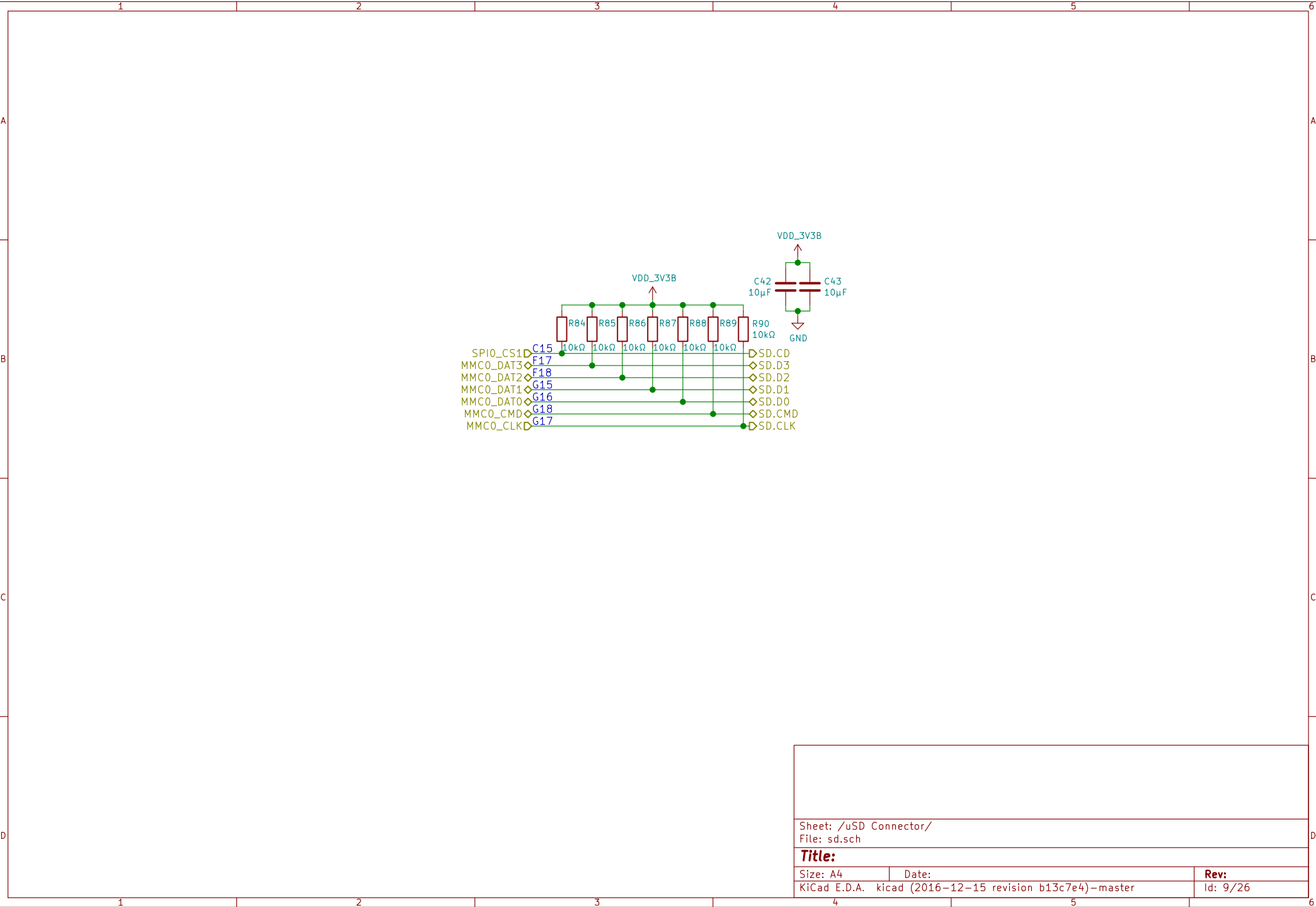
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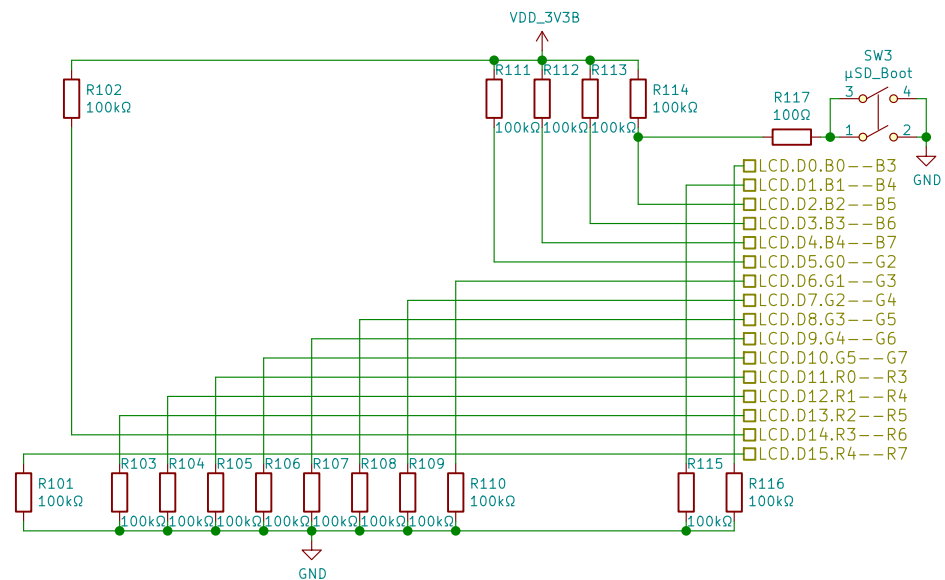
KiCad E.D.A. kicad (2016-12-15 revision b13c7e4)-master

Rev:

Id: 8/26



Sheet: /uSD Connector/ File: sd.sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad (2016-12-15 revision b13c7e4)-master		Id: 9/26

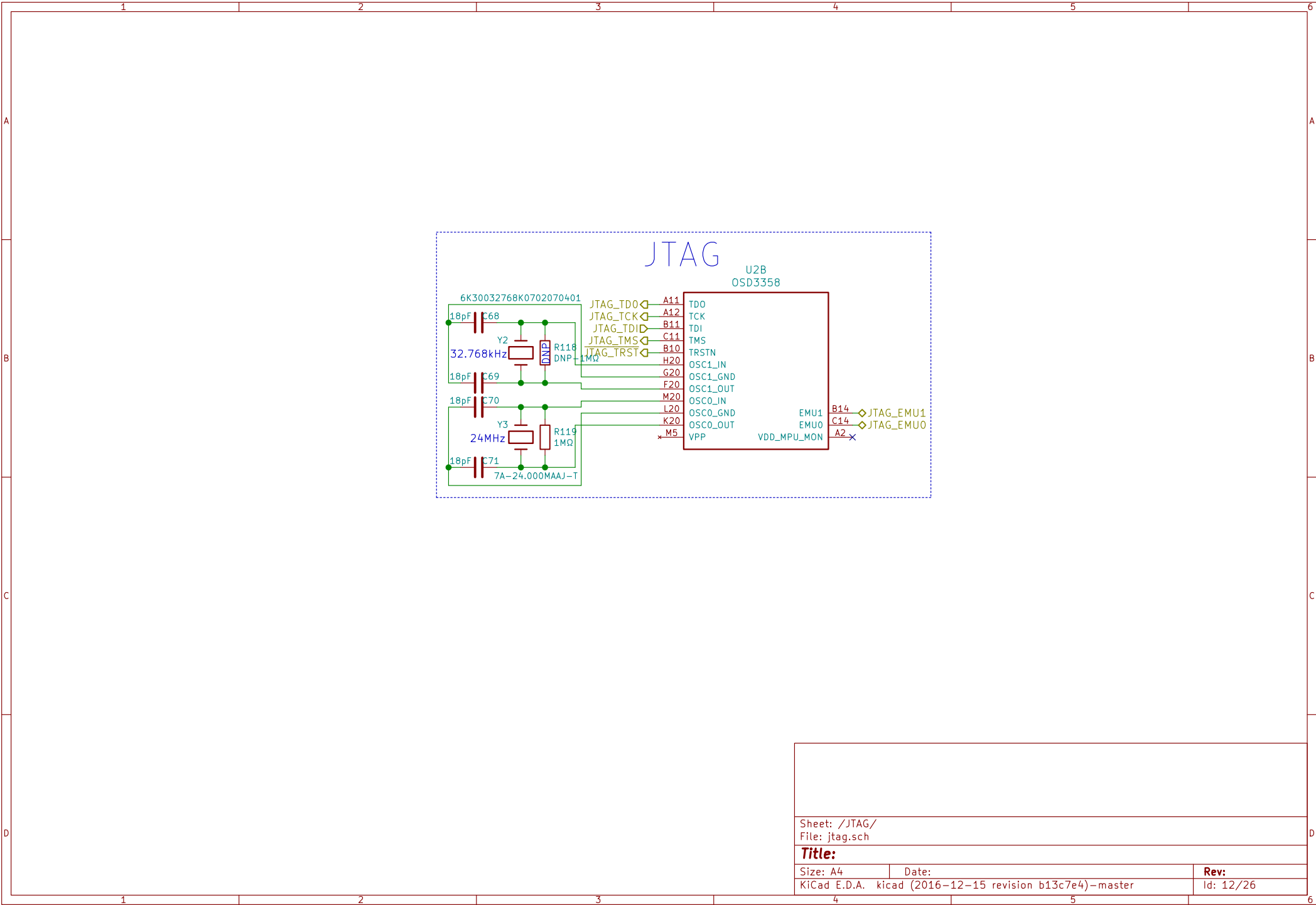


Sheet: /HDMI/Configuration/
File: config.sch

Title:

Size: A4 Date: KICad E.D.A. kicad (2016-12-15 revision b13c7e4)-master

Rev: Id: 11/26



Sheet: /JTAG/
File: jtag.sch

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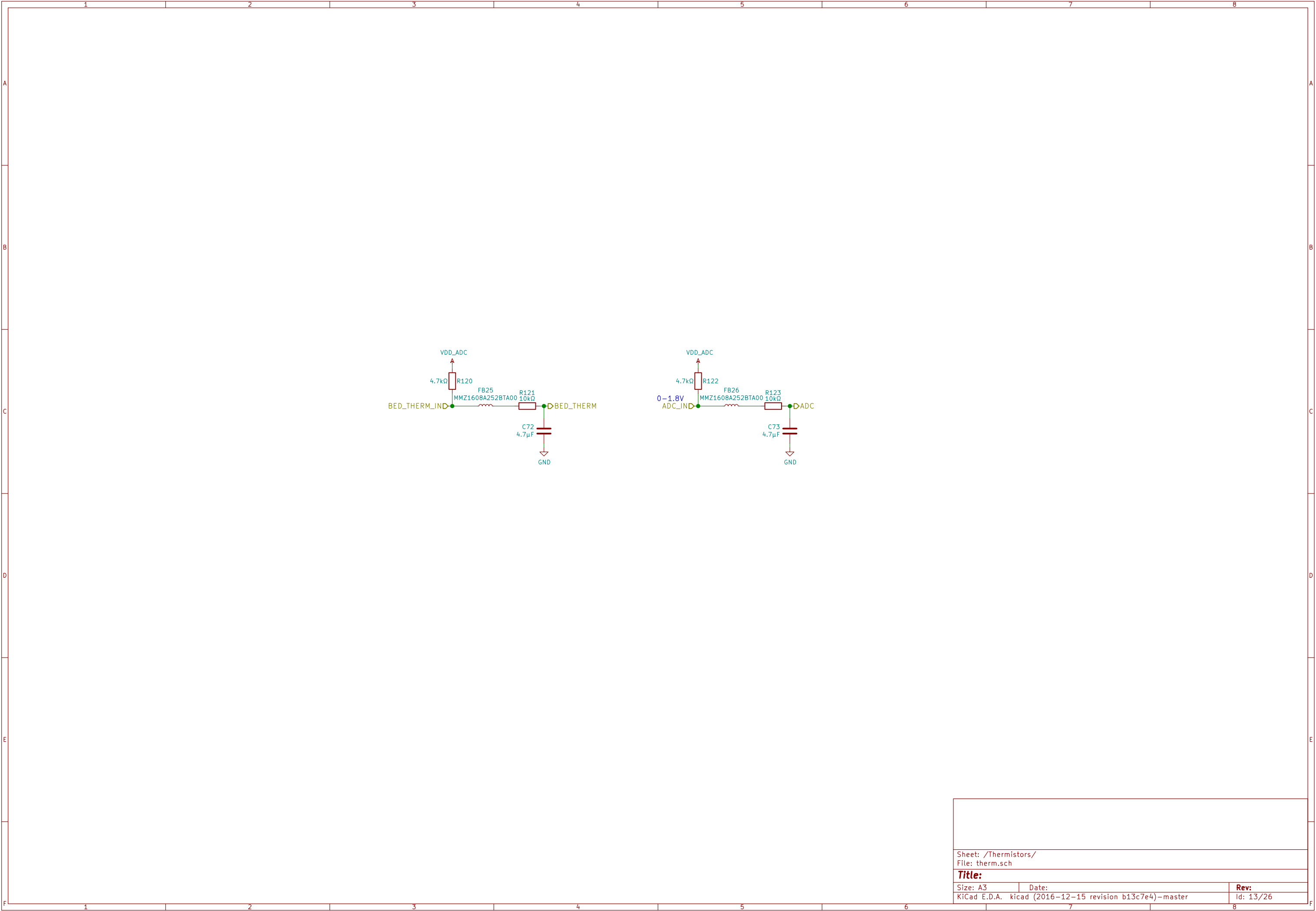
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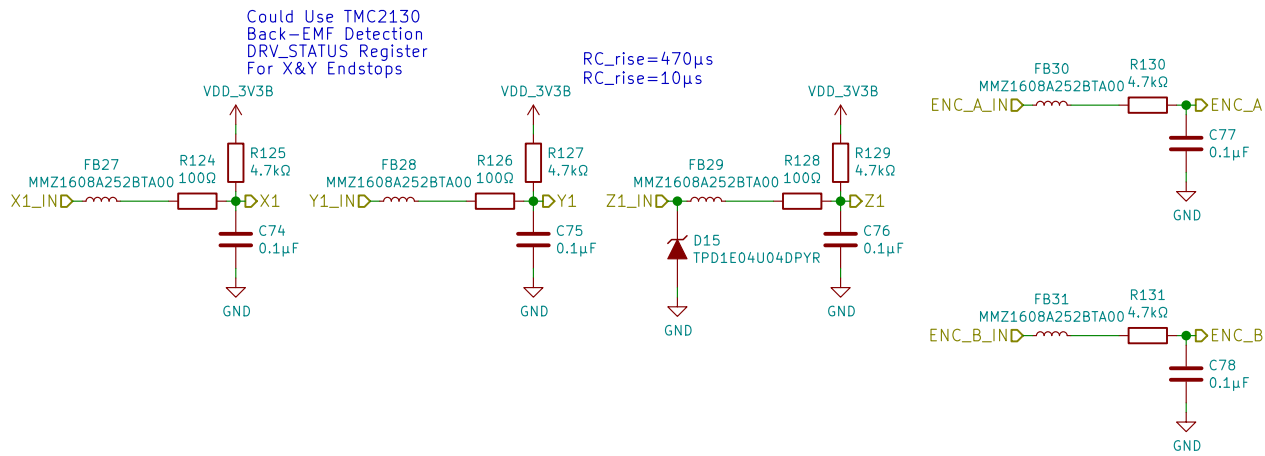
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KiCad E.D.A. kicad (2016-12-15 revision b13c7e4)-master

Rev:

Id: 12/26

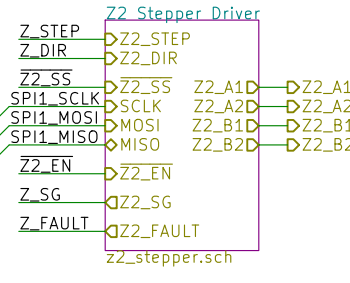
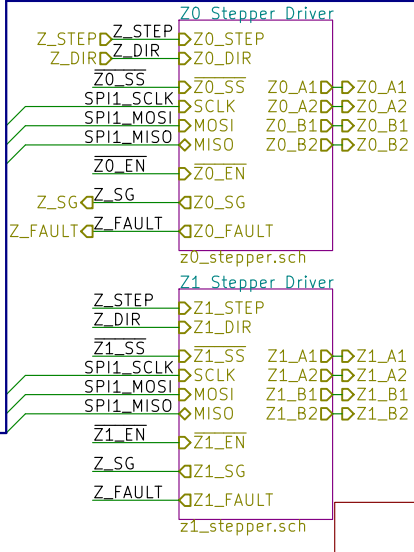
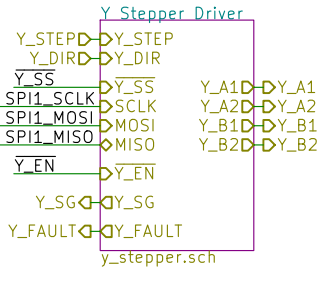
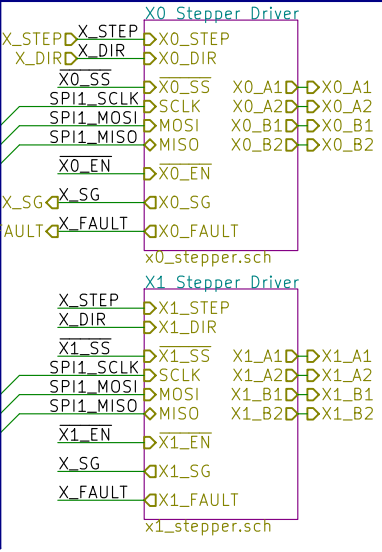
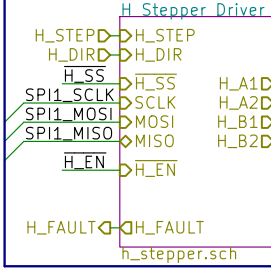
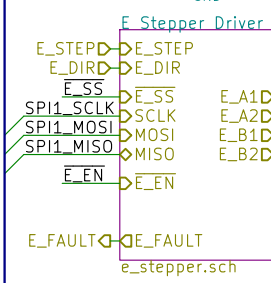
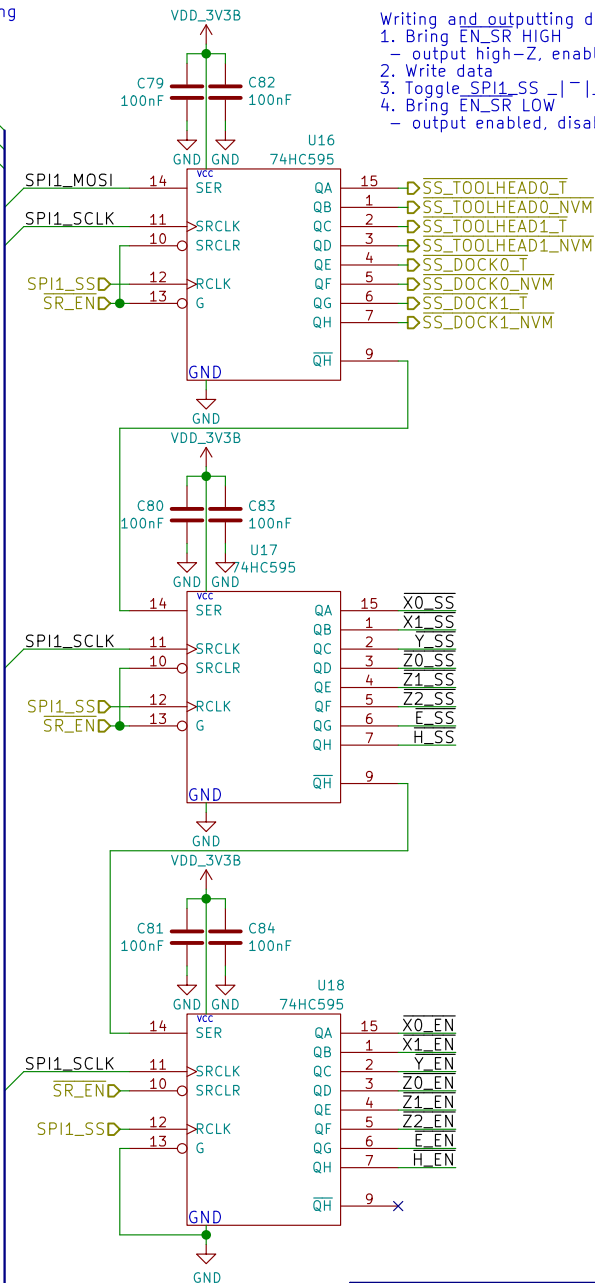


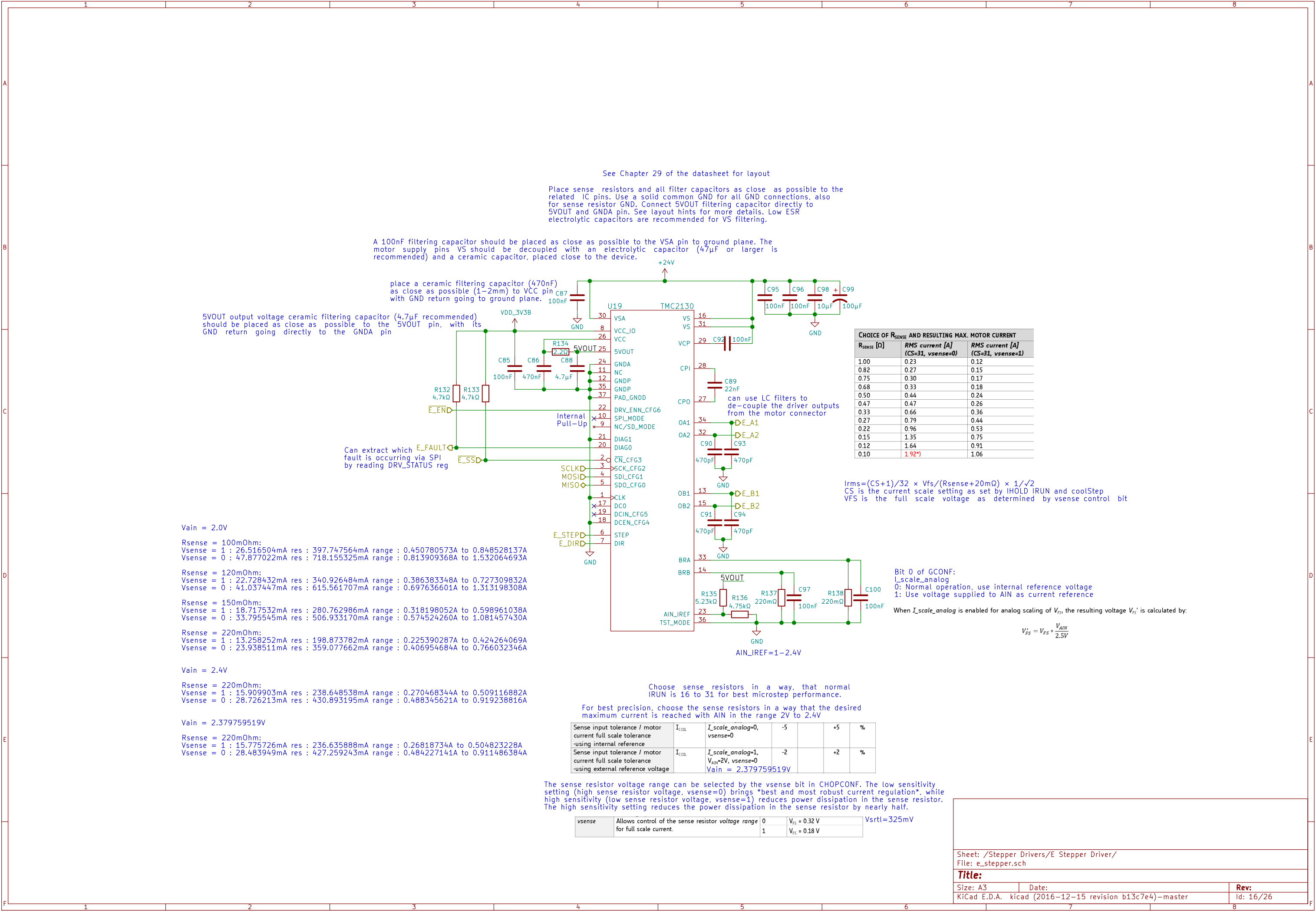


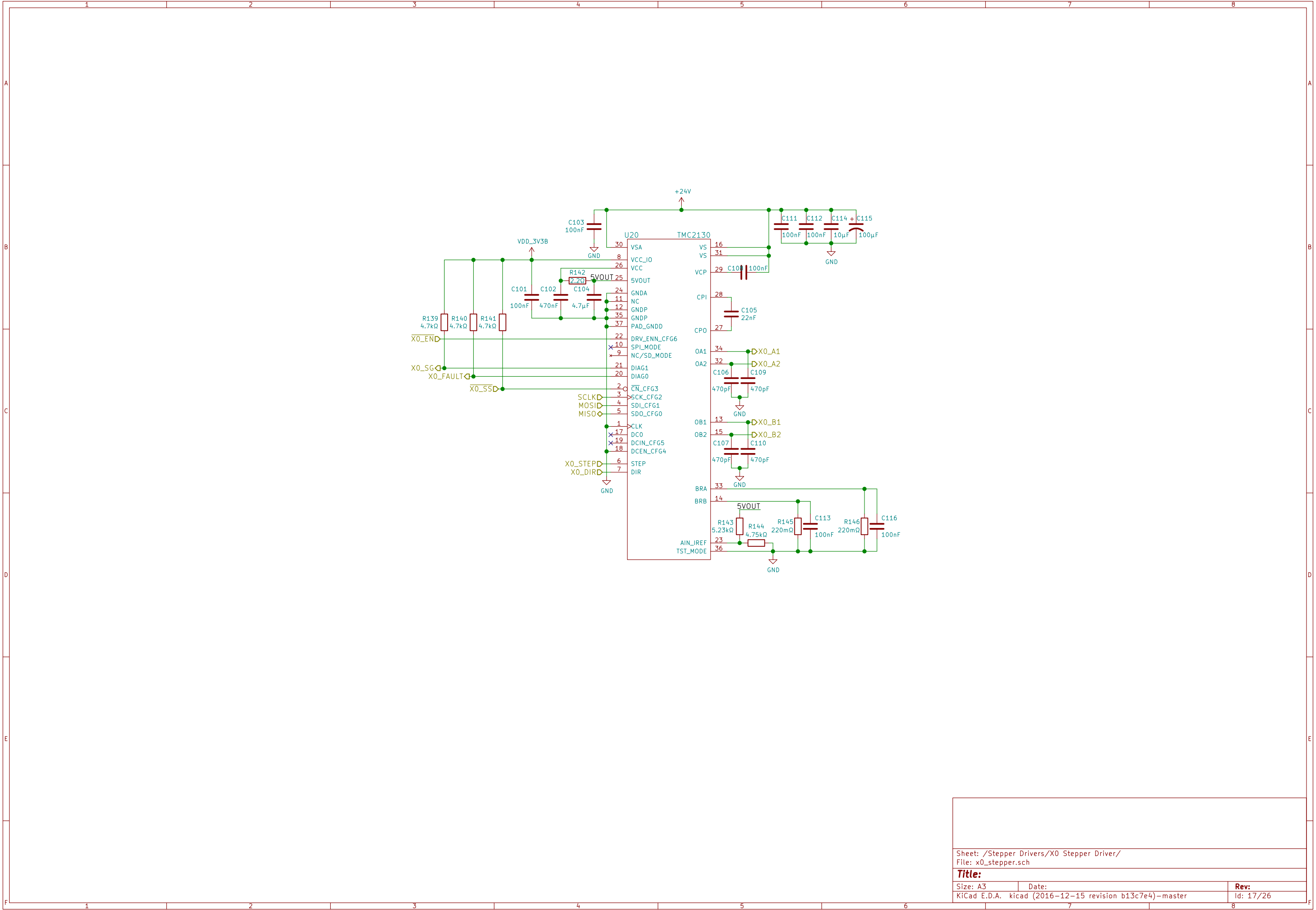
When EN_SR transitions from LOW to HIGH each D-FF of the shift-register come out of their reset states and the output is set to high-Z, ready for writing
When EN_SR transitions from HIGH to LOW each D-FF of the shift-register goes into their reset states and the output is enabled, SS/EN selected
SPI1_SS captures the data in the shift register and is ready to be driven by the second stage of D-FFs

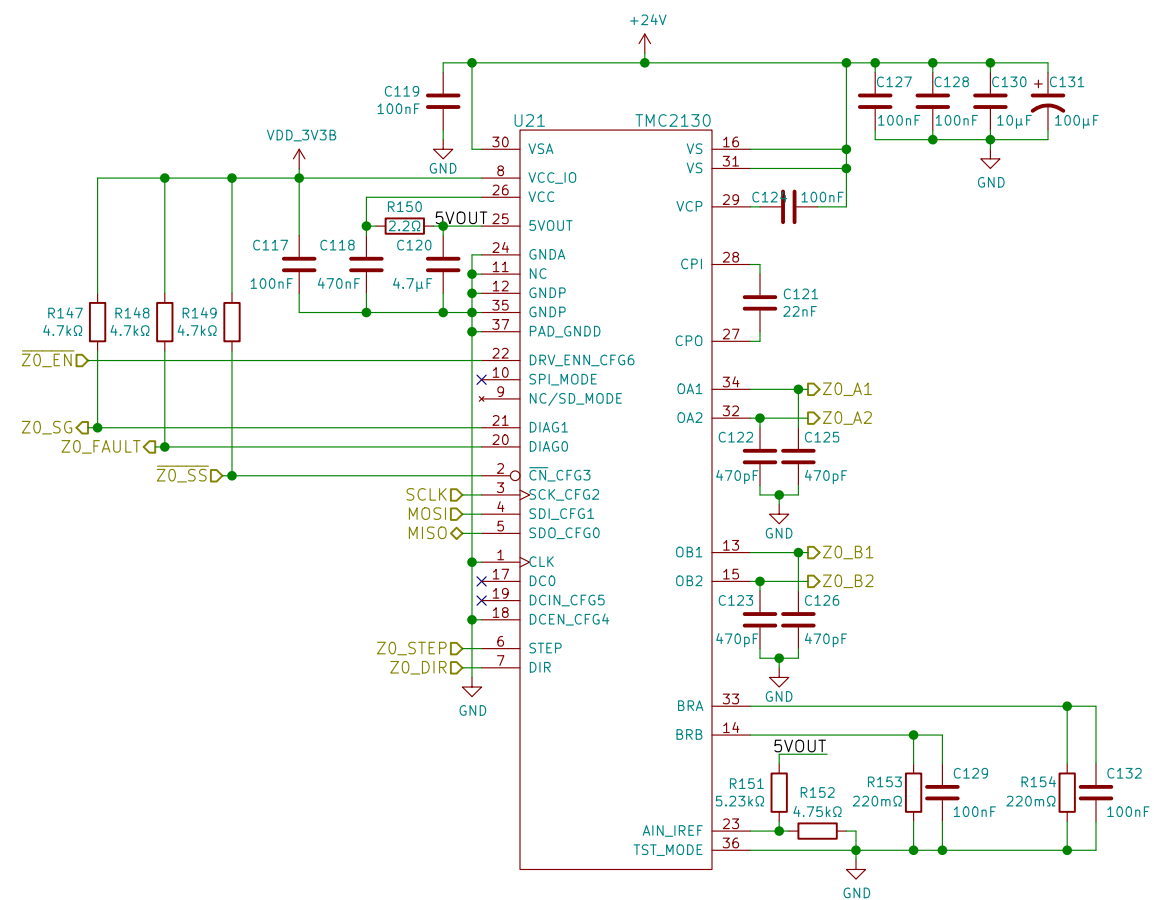
SPI1_SCLK
SPI1_MOSI
SPI1_MISO
check fanout!!!

Writing and outputting data:
1. Bring EN_SR HIGH
- output high-Z, enables all motors
2. Write data
3. Toggle SPI1_SS -|_|-
4. Bring EN_SR LOW
- output enabled, disable specific motors/ready to configure









Sheet: /Stepper Drivers/Z0 Stepper Driver/
File: z0_stepper.sch

Title:

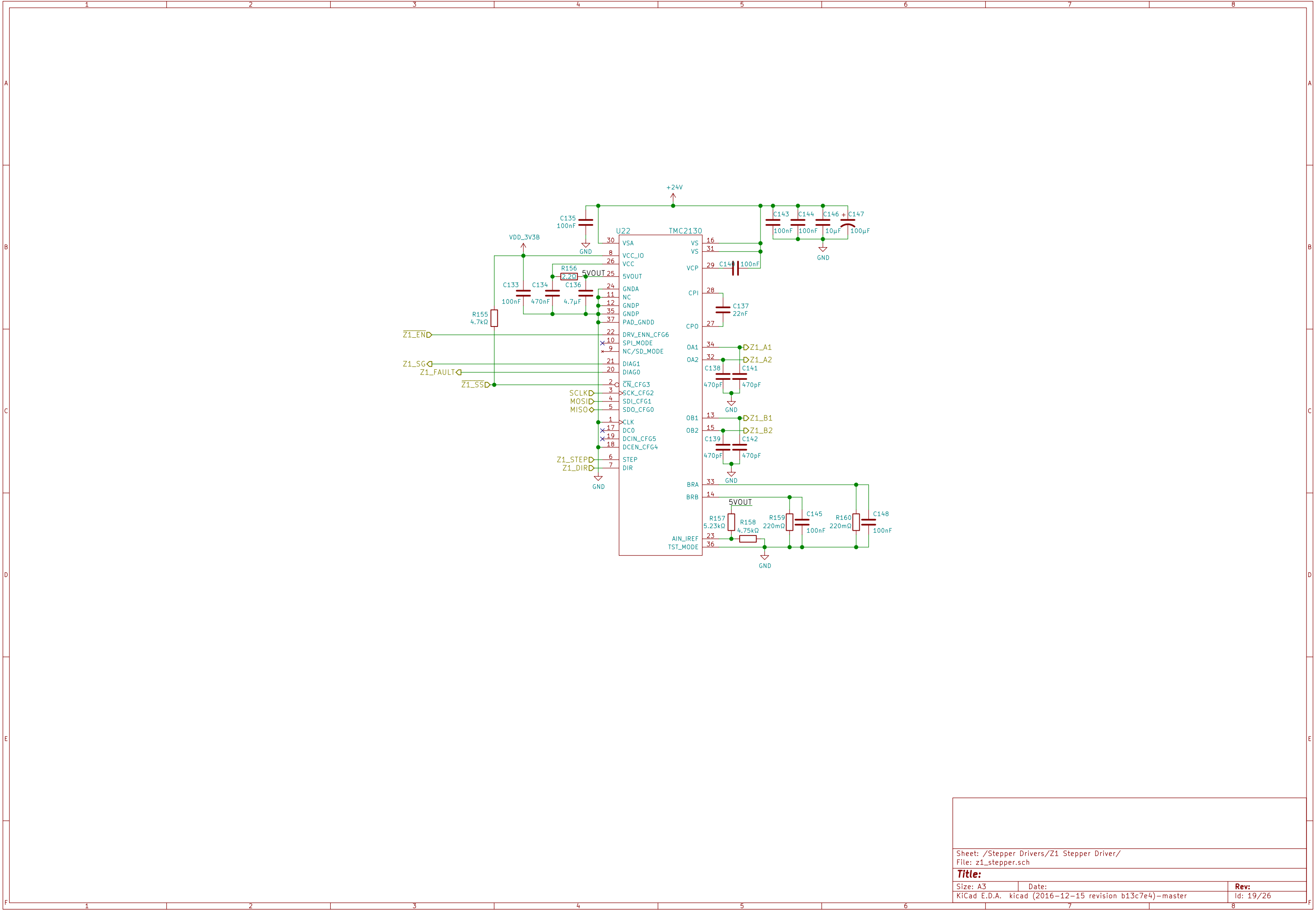
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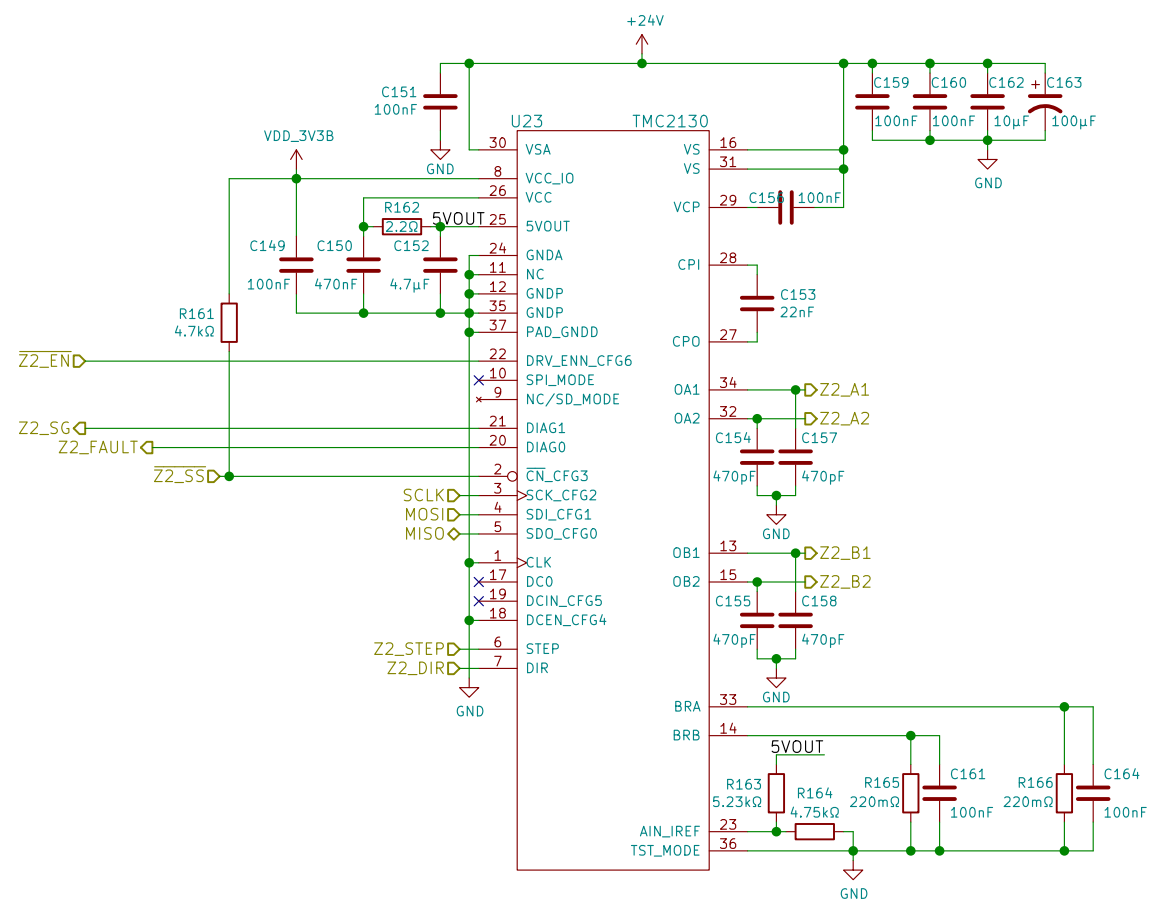
Date:

Rev:

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Id: 18/26

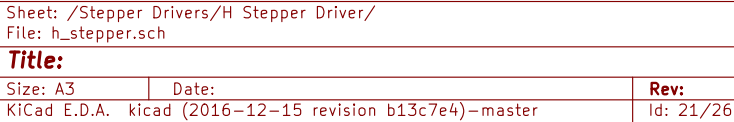


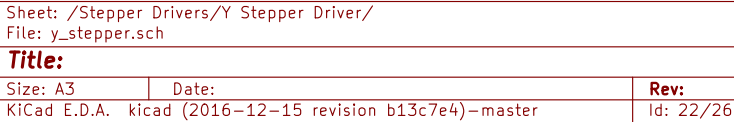


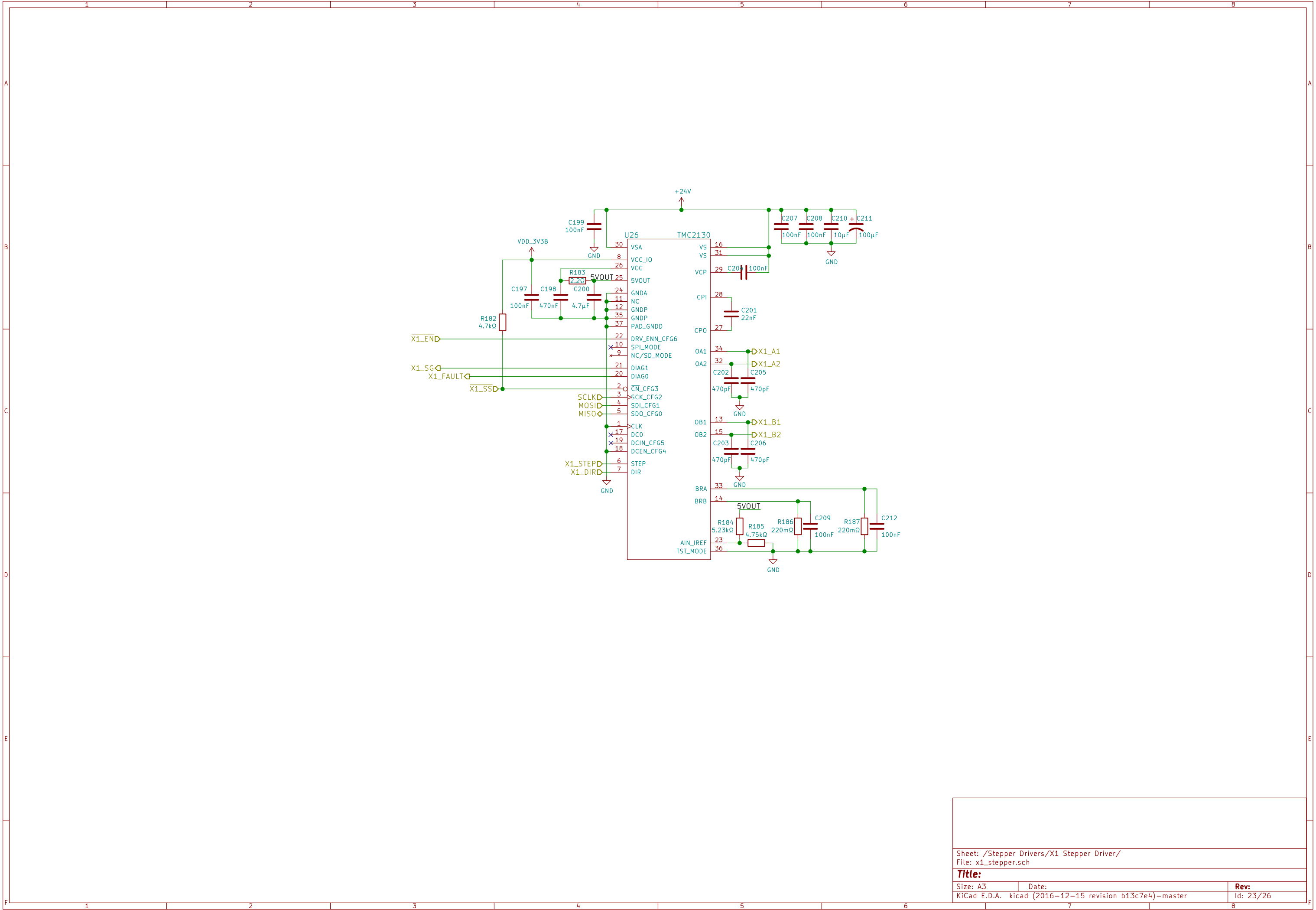
Sheet: /Stepper Drivers/Z2 Stepper Driver/
File: z2_stepper.sch

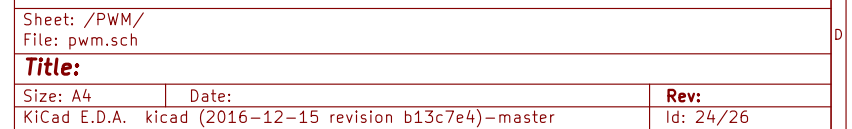
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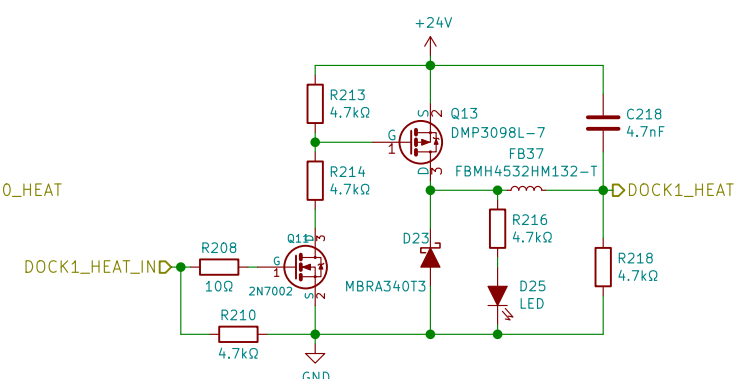
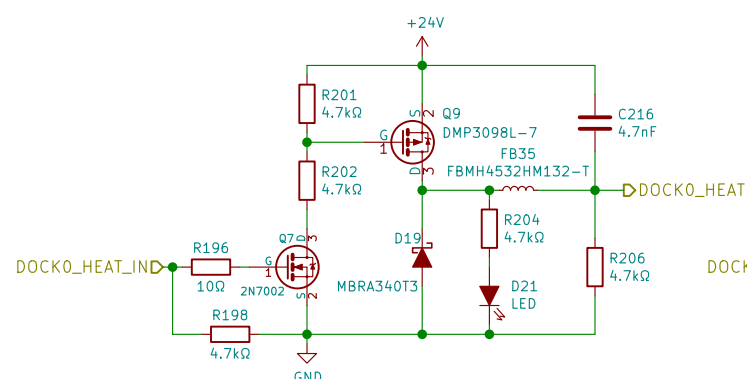
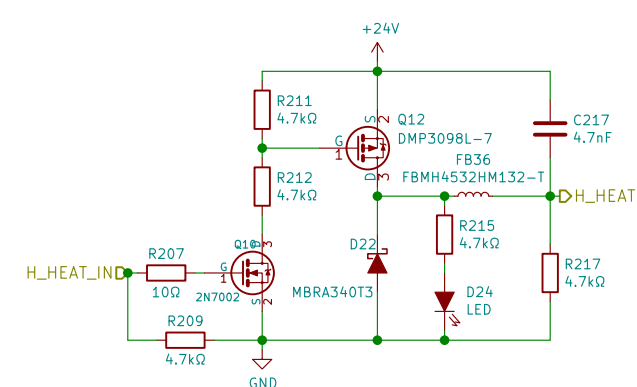
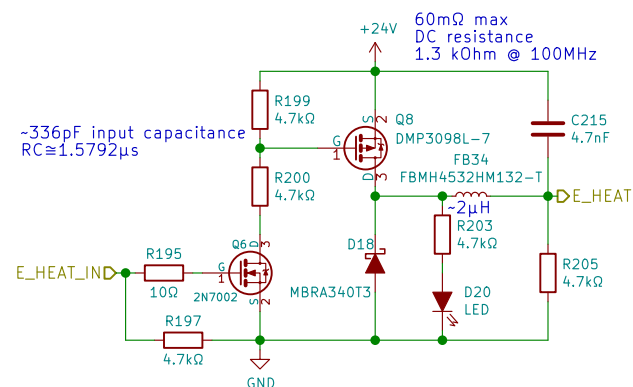
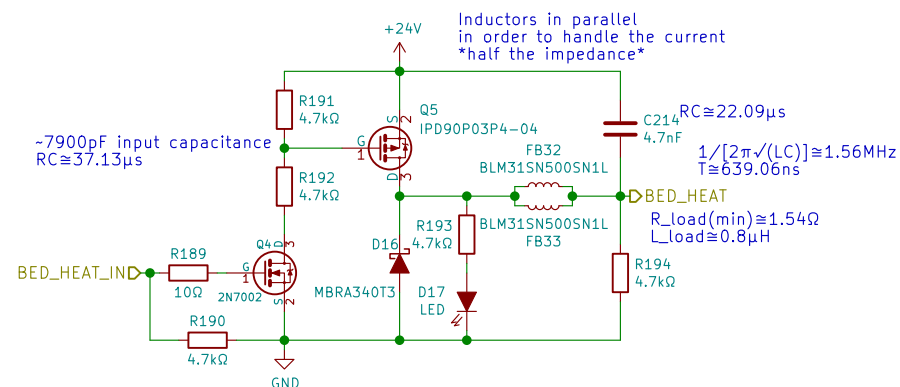
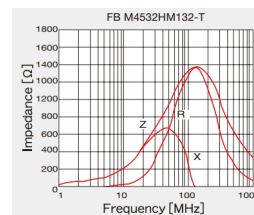
Size: A3	Date:	Rev:
KiCad E.D.A.	kiCad (2016-12-15 revision b13c7e4)-master	Id: 20/26







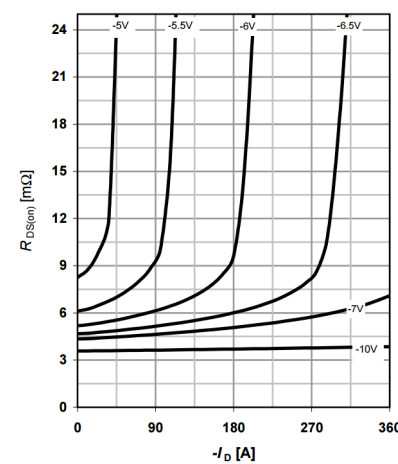




6 Typ. drain-source on-state resistance

$$R_{DS(on)} = (I_D); T_j = 25\text{ }^{\circ}\text{C}$$

parameter: V_{GS}



8 Typ. drain-source on-state resistance

$$R_{DS(on)} = f(T_j); I_D = -90 \text{ A}; V_{GS} = -10 \text{ V}$$

