

1

2

3

4

A

A

TMC4671-BOB_V1.2

B

B

U [1]_Communication & Inputs
[1]_Communication & Inputs.SchDoc



U [2]_Encoder & Hall
[2]_Encoder & Hall.SchDoc



U [3]_Sensing & Output
[3]_Sensing & Output.SchDoc



U [4]_PSU
[4]_PSU.SchDoc



ChangeLog
ChangeLog.SchDoc



C

C

D


D

1

2

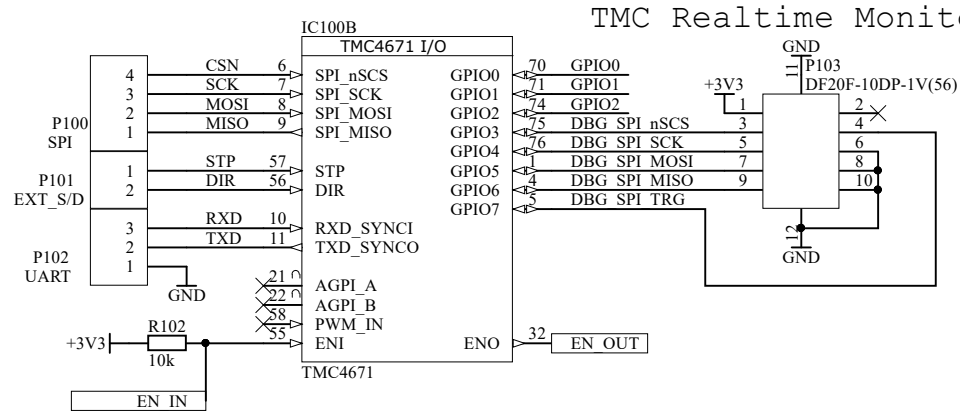
3

4

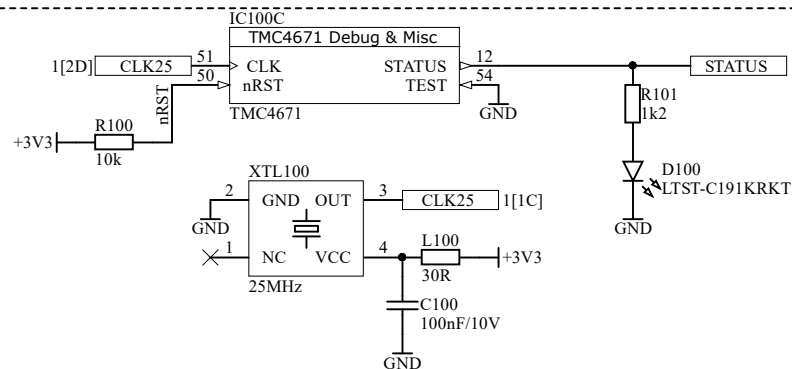
Title: TMC4671-BOB_V1.2			 TRINAMIC MOTION CONTROL
Size: A4	Project: TMC4671-BOB	Version: 1.4	
Date: 2/27/2020	Time: 11:40:34 AM	Sheet 0 of 6	
File: TMC4671-BOB_V1.4.SchDoc			

Communication & Inputs

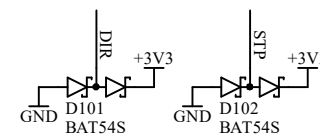
TMC4671 I/O



Clock & Misc



STEP/DIR TVS



Title: Communication & Inputs

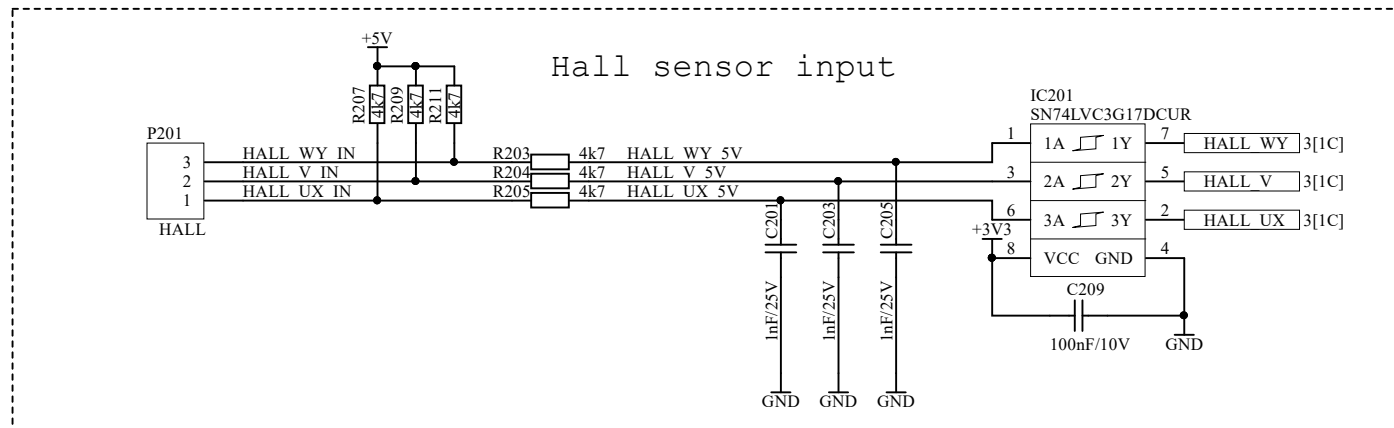
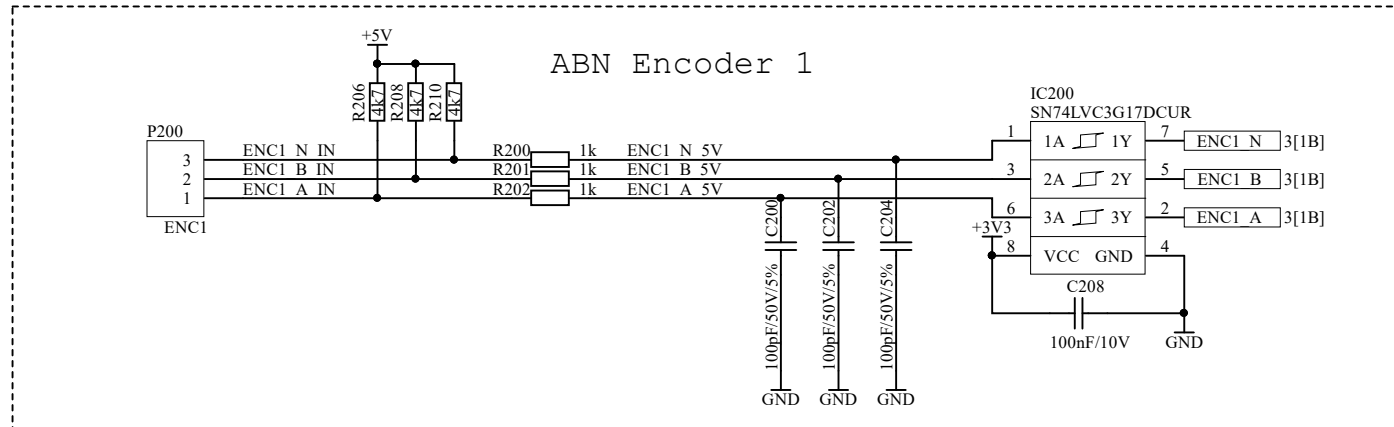
Size: A4 Project: TMC4671-BOB Version: 1.4

Date: 2/27/2020 Time: 11:40:34 AM Sheet 1 of 6

File: [1] Communication & Inputs.SchDoc



Encoder & Hall sensor inputs



Title: Encoder & Hall sensor inputs

Size: A4 Project: TMC4671-BOB Version: 1.4

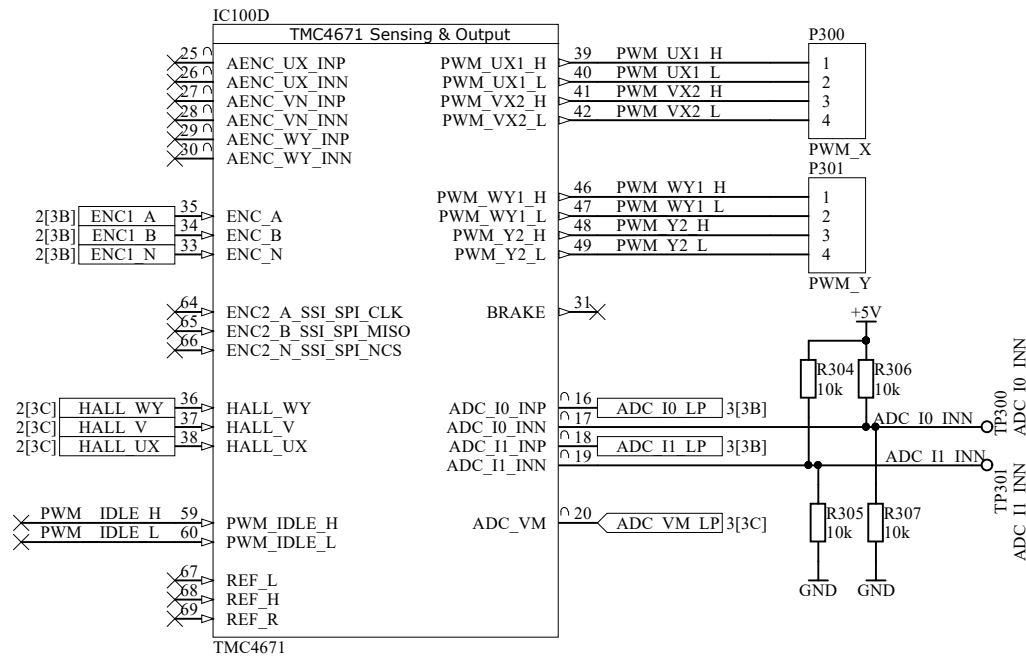
Date: 2/27/2020 Time: 11:40:34 AM Sheet 2 of 6

File: [2] Encoder & Hall.SchDoc

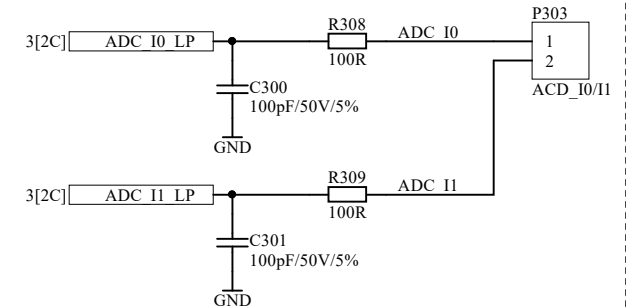


Sensing & Output

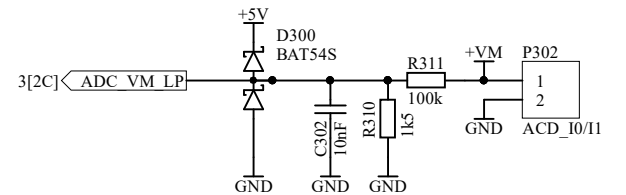
TMC4671 Sensing & Output



ADC Filter



VM ADC Filter



Title: Sensing & Output

Size: A4

Project: TMC4671-BOB

Version: 1.4

Date: 2/27/2020

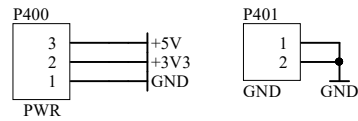
Time: 11:40:34 AM Sheet 3 of 6

File: [3] Sensing & Output.SchDoc

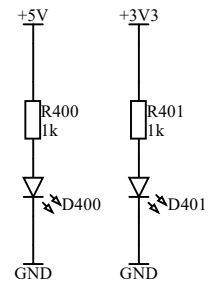


PSU

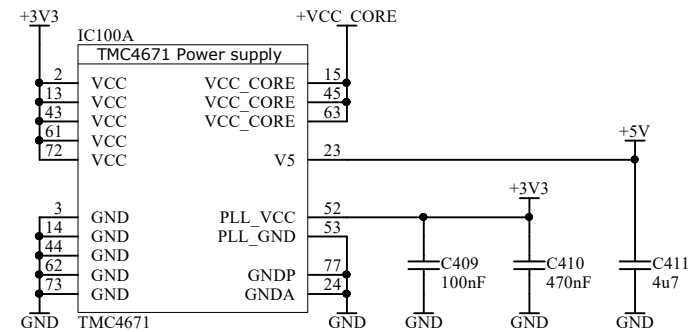
Power input



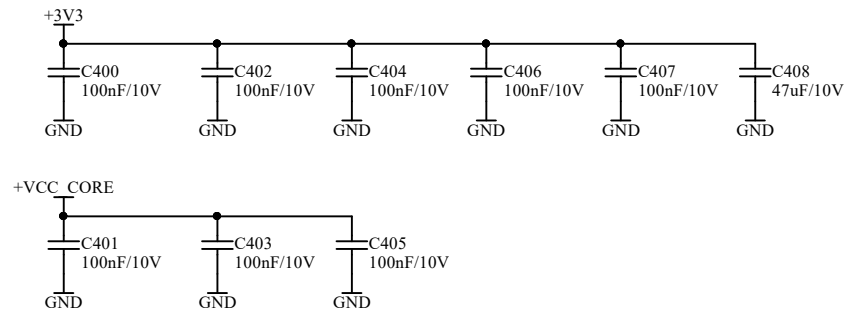
Power indicators




TMC power



Bypass capacitors



Title: PSU			
Size: A4	Project: TMC4671-BOB	Version: 1.4	
Date: 2/27/2020	Time: 11:40:35 AM Sheet 4 of 6		
File: [4] PSU.SchDoc			



ChangeLog

V1.0 - Initial design

25.09.2017 - Fixed XTL100 FOX924B pinout bug (swapped pins 3 & 4).

V1.1 - Silkscreen and layout fixes

05.10.2017 - Improved layout for better top side silkscreen readability.

V1.2 - Bugfix

04.12.2017 - Connected ENI via a pull-up resistor to VCCIO.

21.12.2017 - Changed Top and Bottom copper thickness to 0.035mm.

- Reduced TMC4671 footprint pad widths by 0.7mil.

22.12.2017 - Increased TMC4671 pad clearances from 6mil to match pad spacing 8.5mil.

V1.3 - Bugfixes

03.09.2019

- Removed SRV05-4 protection ICs.


- Removed R300-R303 from PWM_IDLE_L/H pins (left unconnected).

- Moved all 4k7 pull-ups next to pinheaders on page 4.

- Changed encoder filter values to 1k/100pF.

- Changed hall sensor and reference input filter values to 4k7/1nF.

V1.4 - 27.02.2020 Bugfix for shorted 3V3 and GND polygons

Title: ChangeLog			 TRINAMIC MOTION CONTROL
Size: A4	Project: TMC4671-BOB	Version: 1.4	
Date: 2/27/2020	Time: 11:40:35 AM Sheet 5 of 6		
File: ChangeLog.SchDoc			