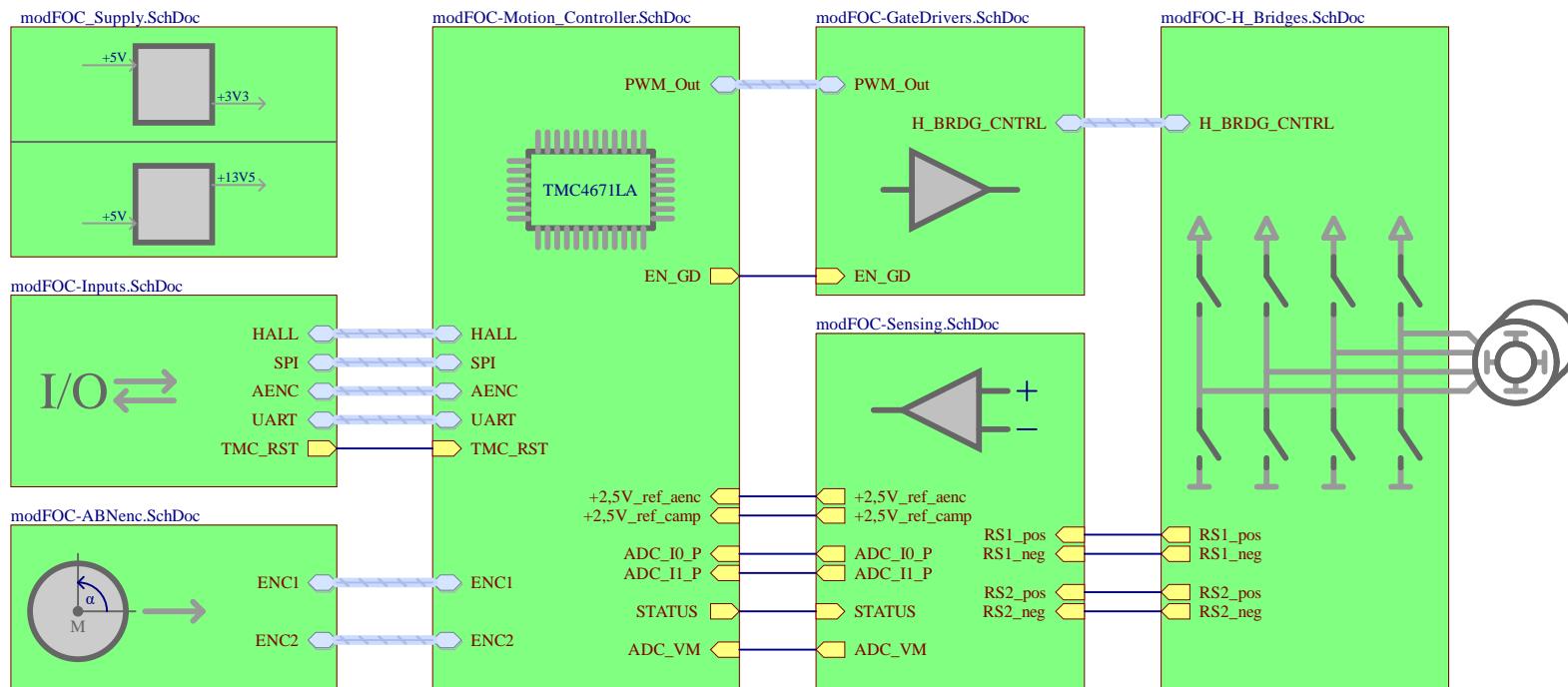


A



B

C

D

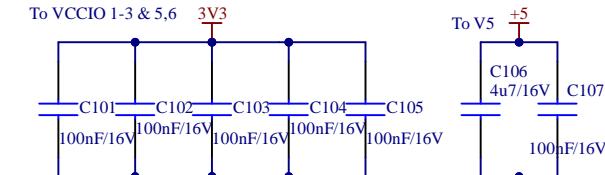
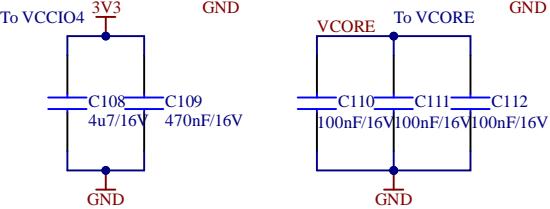
A

B

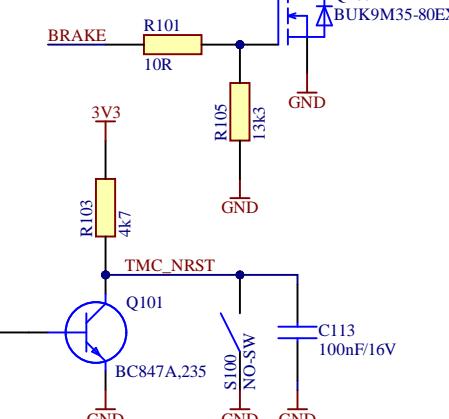
C

D

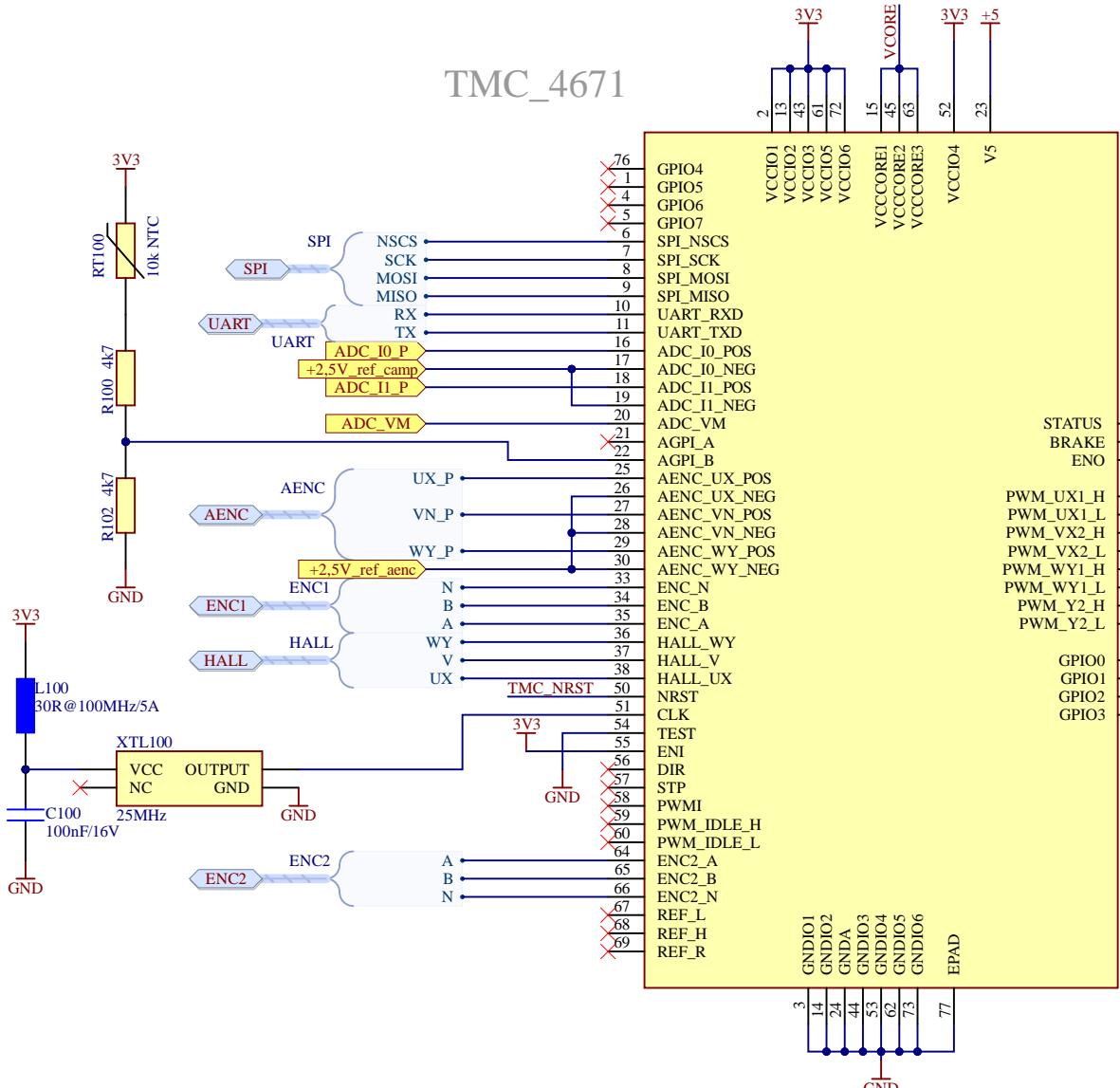
Decoupling_Caps

IC 100
Motion Ctrl

Connect
braking resistor
here



TMC_4671

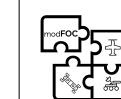
Title **modFOC-Motion_Controller**

Size: A4 Number: 1 Revision: 2.0

Date: 28.03.2022 Time: 14:33:07 Sheet 1 of 5

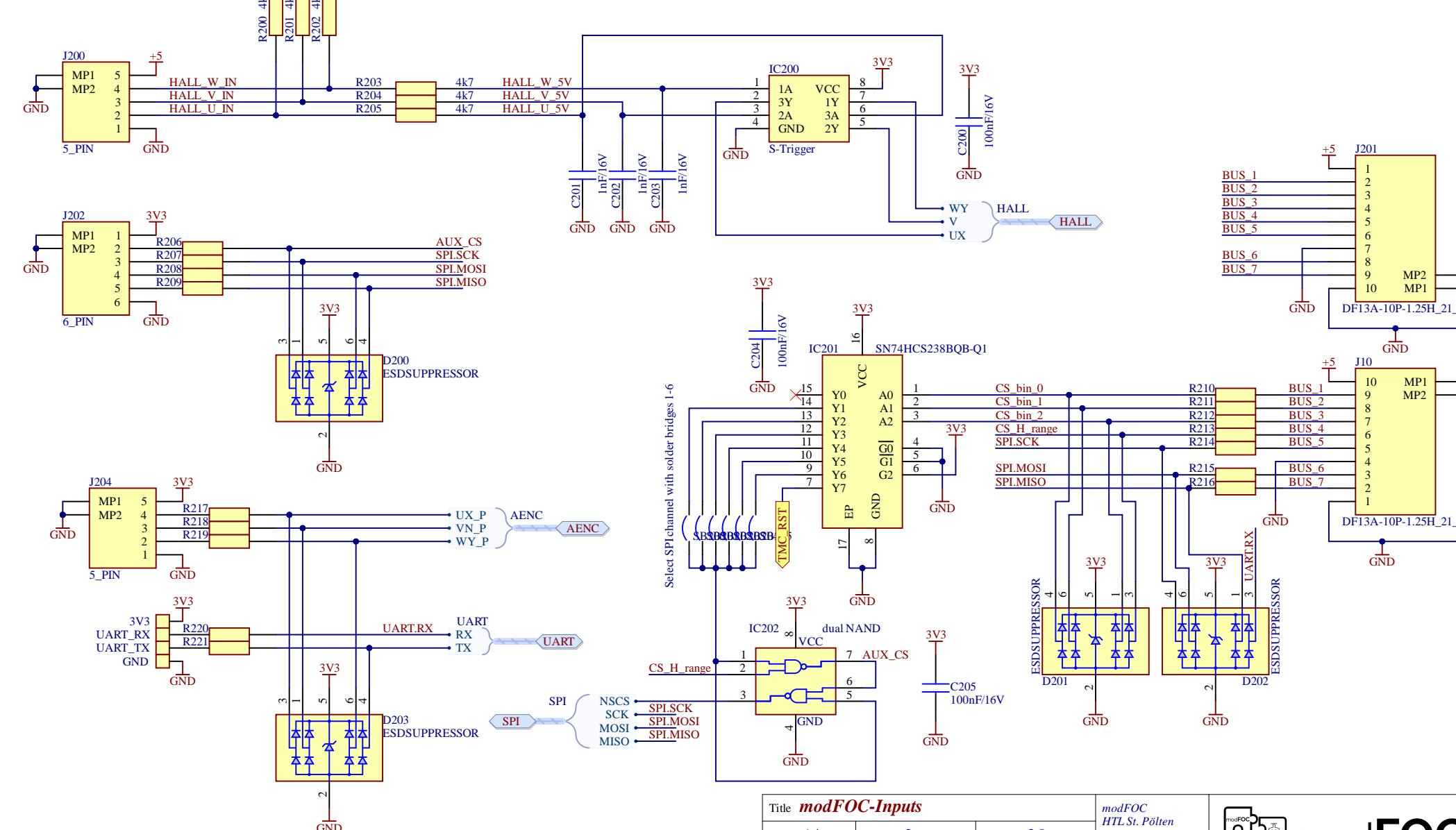
File: modFOC-Motion_Controller.SchDoc

modFOC
HTL St. Pölten
Mathias Giller



modFOC

digital Hall input



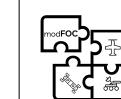
Title **modFOC-Inputs**

Size: A4 Number:2 Revision:2.0

Date: 28.03.2022 Time: 14:33:08 Sheet 2 of 7

File: modFOC-Inputs.SchDoc

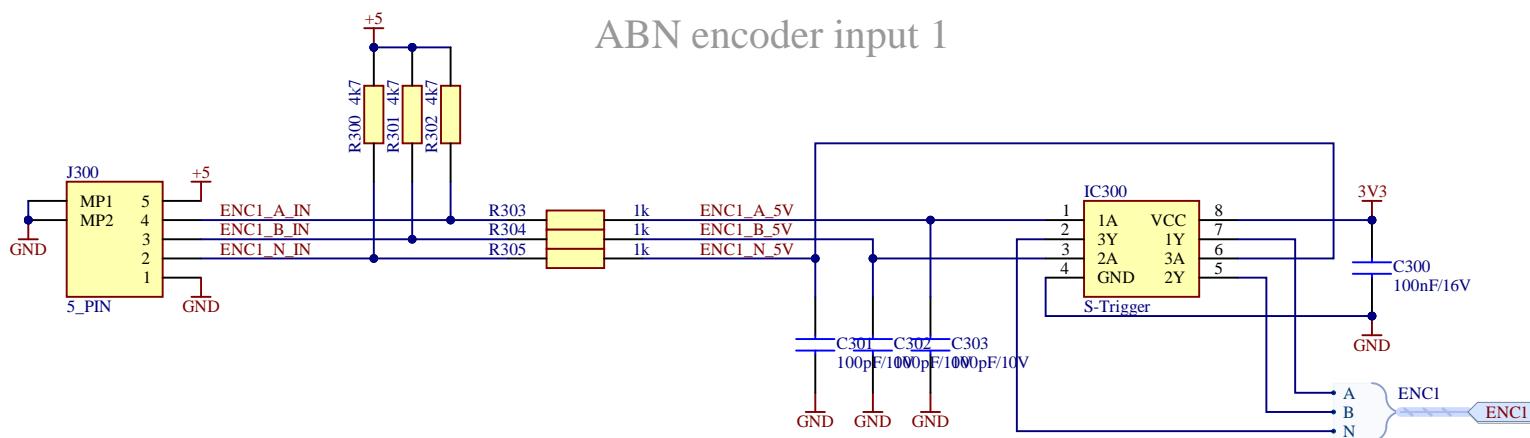
modFOC
HTL St. Pölten
Mathias Giller



modFOC

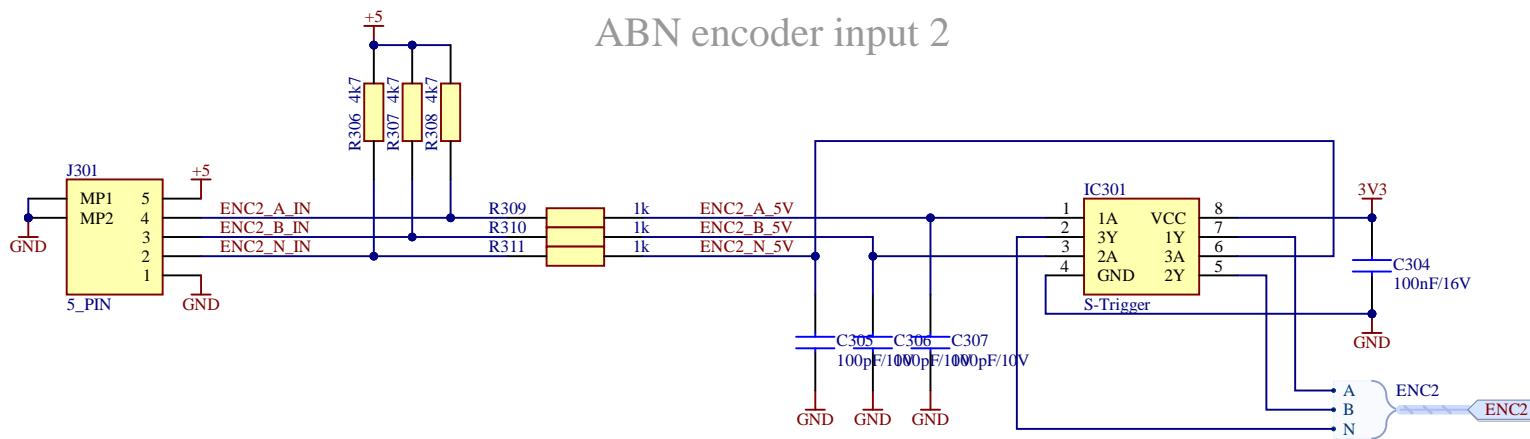
A

ABN encoder input 1



B

ABN encoder input 2



C

D

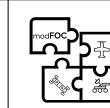
Title ***modFOC-ABNenc***

Size: A4 Number:3 Revision:2.0

Date: 28.03.2022 Time: 14:33:08 Sheet 3 of 7

File: modFOC-ABNenc.SchDoc

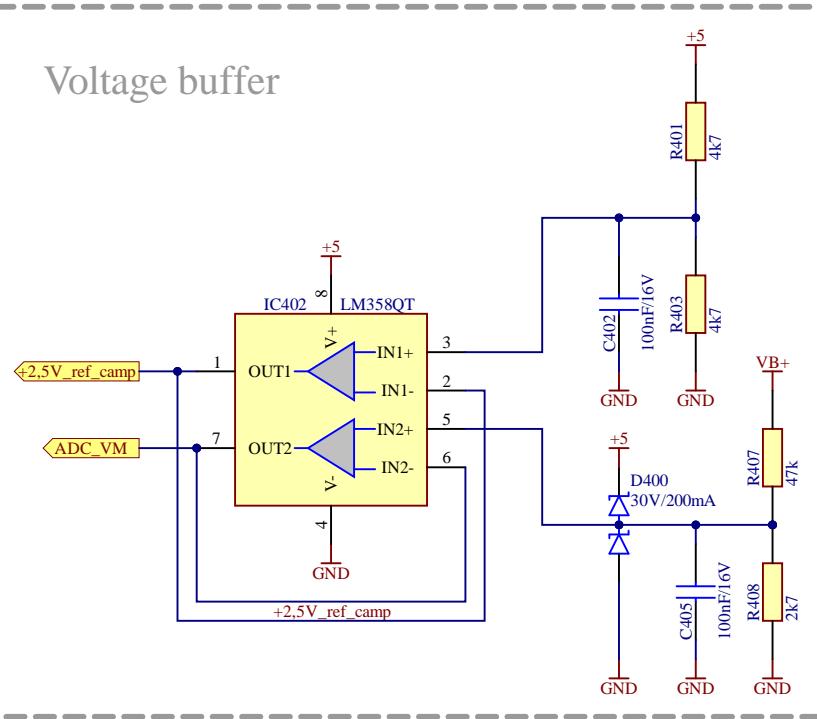
modFOC
HTL St. Pölten
Mathias Giller



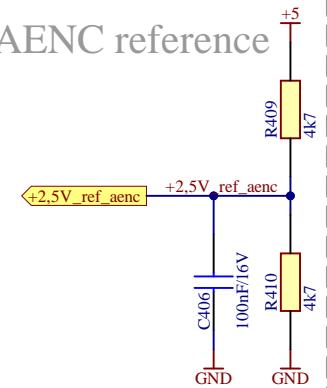
modFOC

A

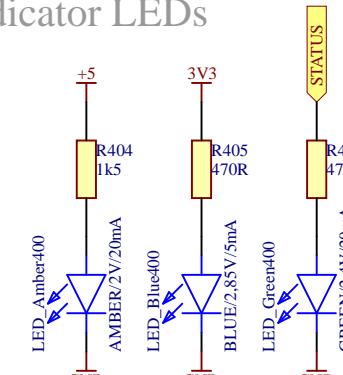
Voltage buffer



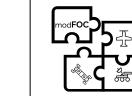
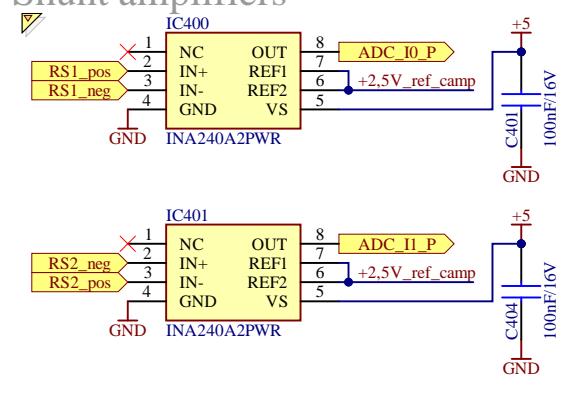
AENC reference



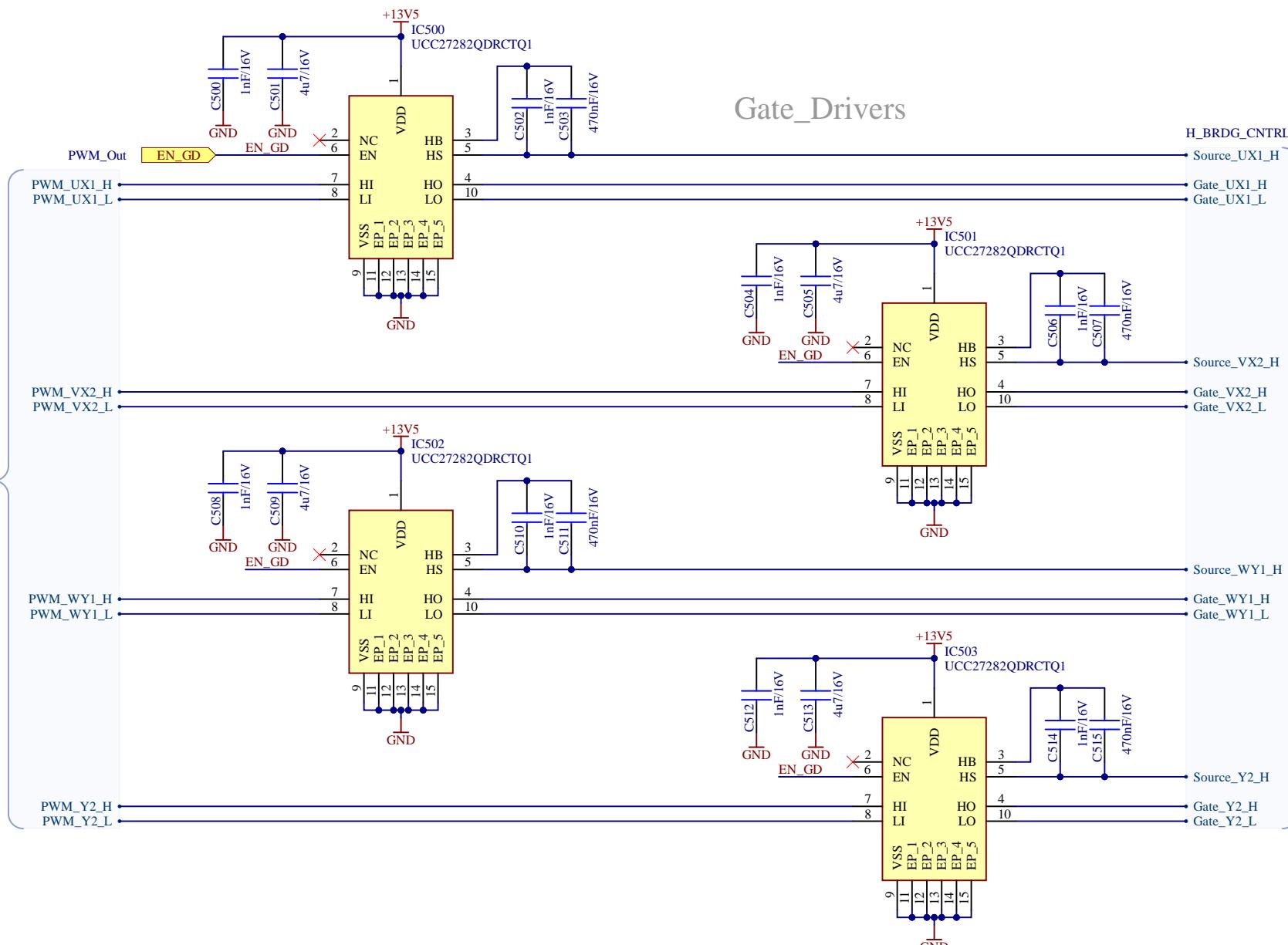
Indicator LEDs



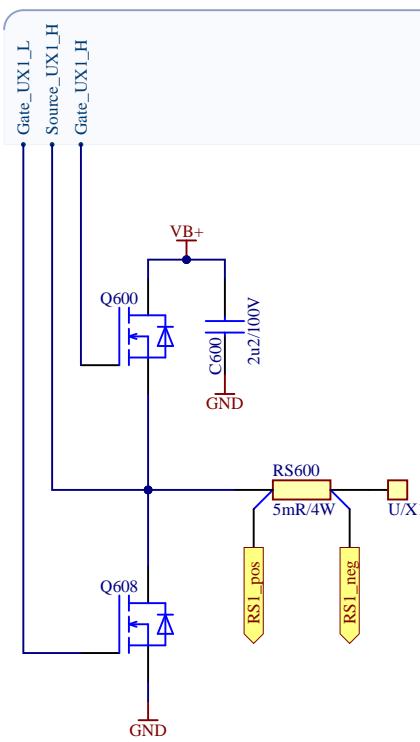
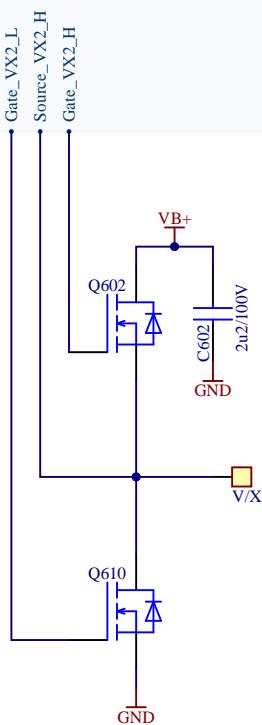
Shunt amplifiers



Gate_Drivers



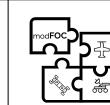
A

H_BRDG_CNTRL**H_BRDG_CNTRL**Title **modFOC-H-Bridges**

Size: A4 Number:6 Revision:2.0

Date: 28.03.2022 Time: 14:33:10 Sheet 6 of 7

File: modFOC-H_Bridges.SchDoc

 modFOC
 HTL St. Pölten
 Mathias Giller

modFOC

A

B

C

D

A

B

C

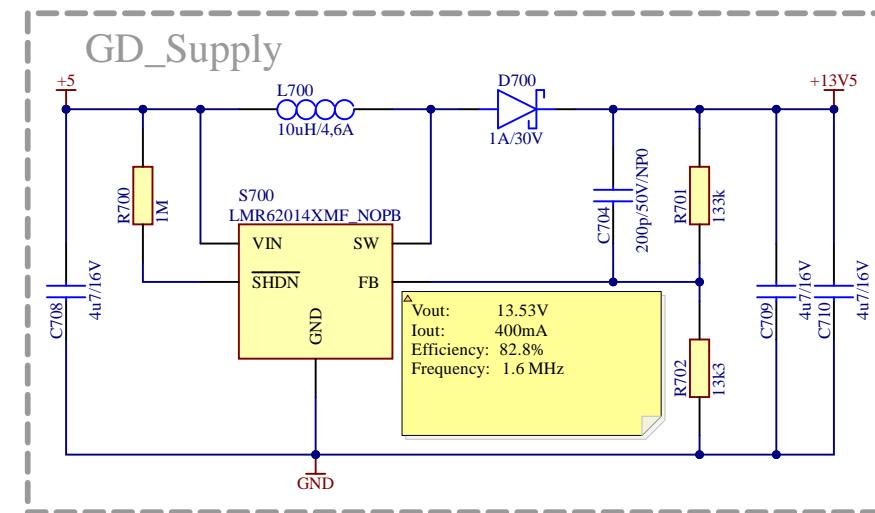
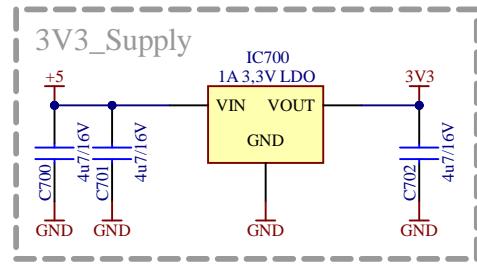
D

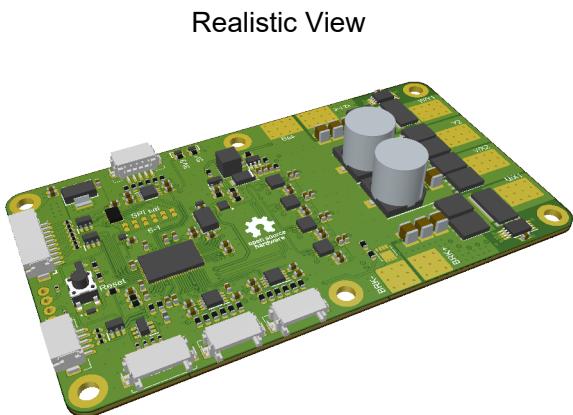
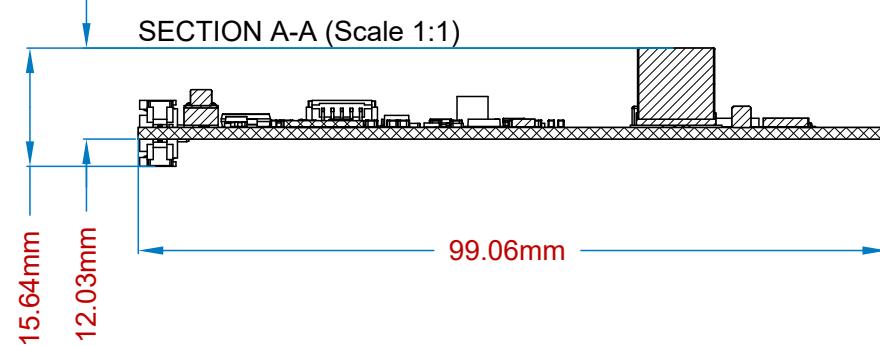
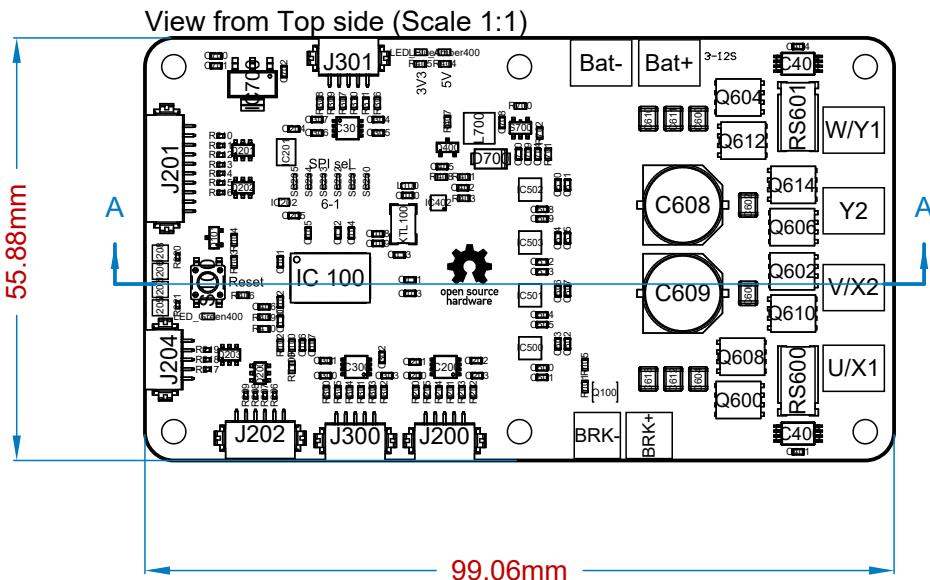
A

B

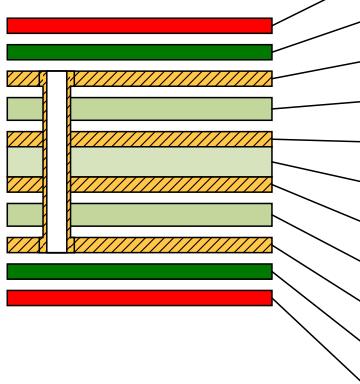
C

D





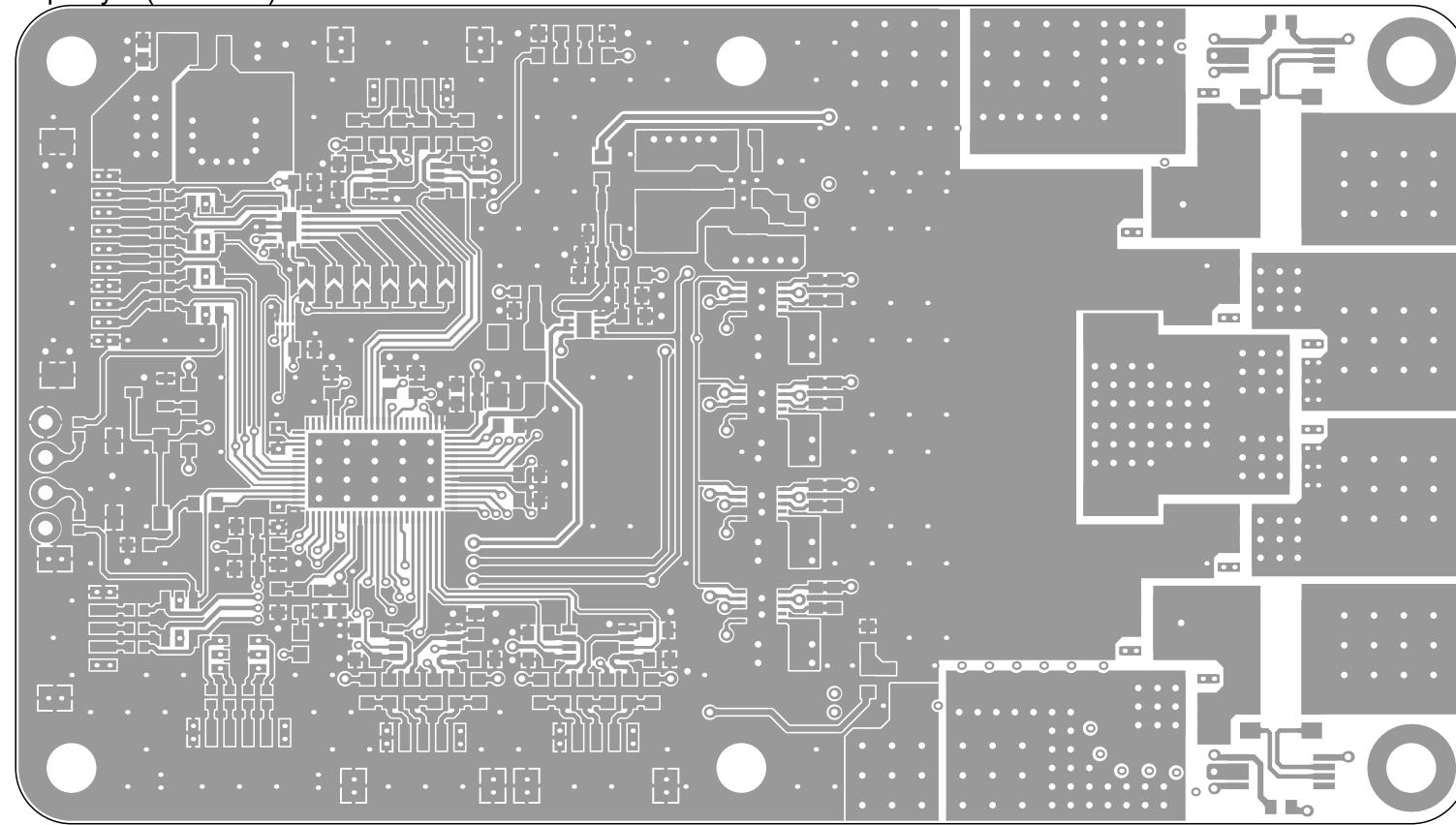
Layer Stack Legend



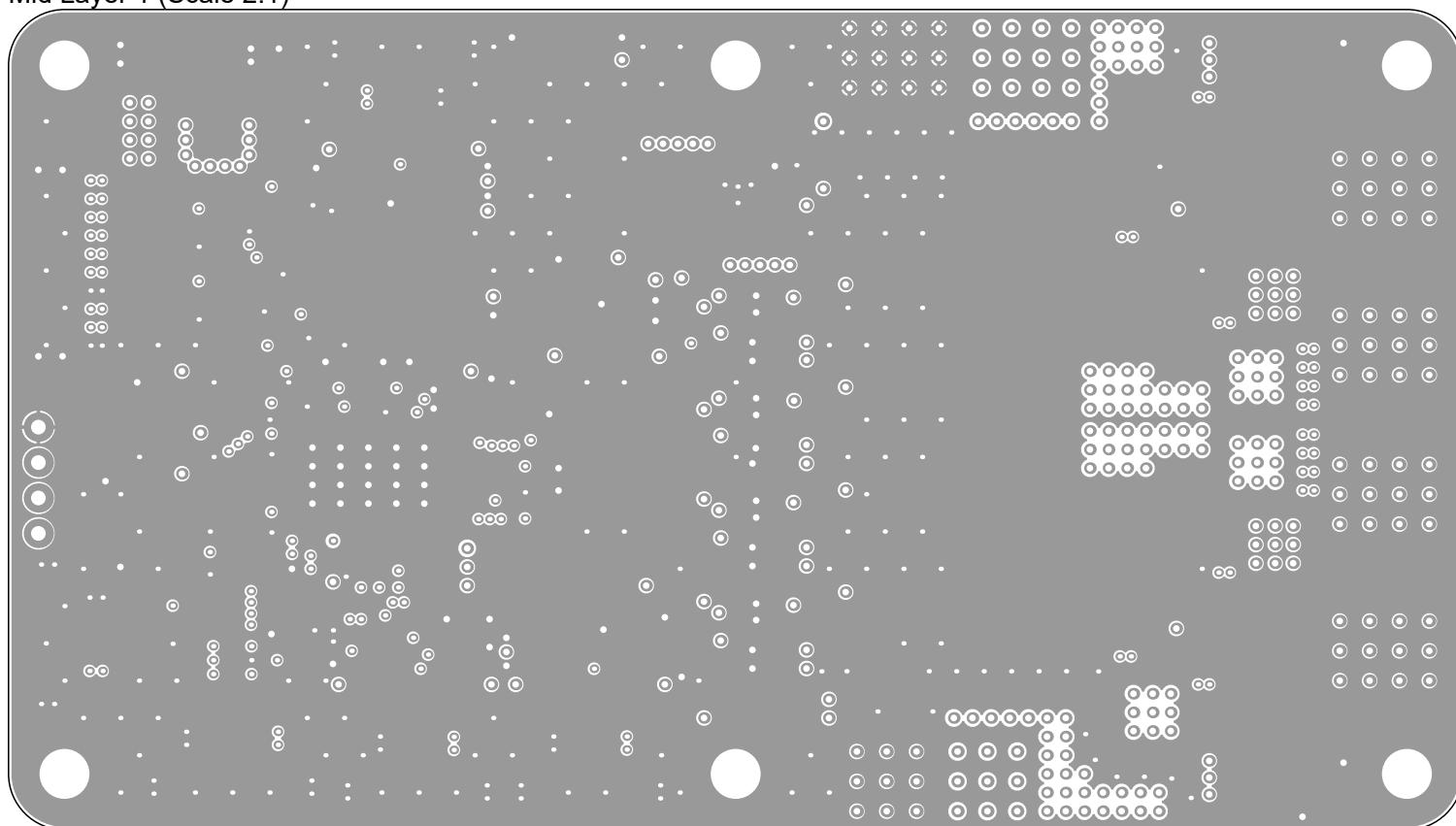
| Material | Layer | Thickness | Dielectric Material | Type | Gerber |
|------------------|------------------|---------------|---------------------|---------------|-------------|
| Surface Material | Top Overlay | | | | Legend |
| Copper | Top Solder | 0.01mm | Solder Resist | GTO | Solder Mask |
| Copper | Top Layer | 0.04mm | | Signal | GTL |
| Prepreg | | 0.18mm | 7628 | | Dielectric |
| Copper | Mid Layer 1 | 0.02mm | | Signal | G1 |
| Core | | 1.06mm | FR-4 | | Dielectric |
| Copper | Mid Layer 2 | 0.02mm | | Signal | G2 |
| Prepreg | | 0.18mm | 7628 | | Dielectric |
| Copper | Bottom Layer | 0.04mm | | Signal | GBL |
| Surface Material | Bottom Solder | 0.01mm | Solder Resist | Solder Mask | GBS |
| | Bottom Overlay | | | Legend | GBO |

Total thickness: 1.56mm

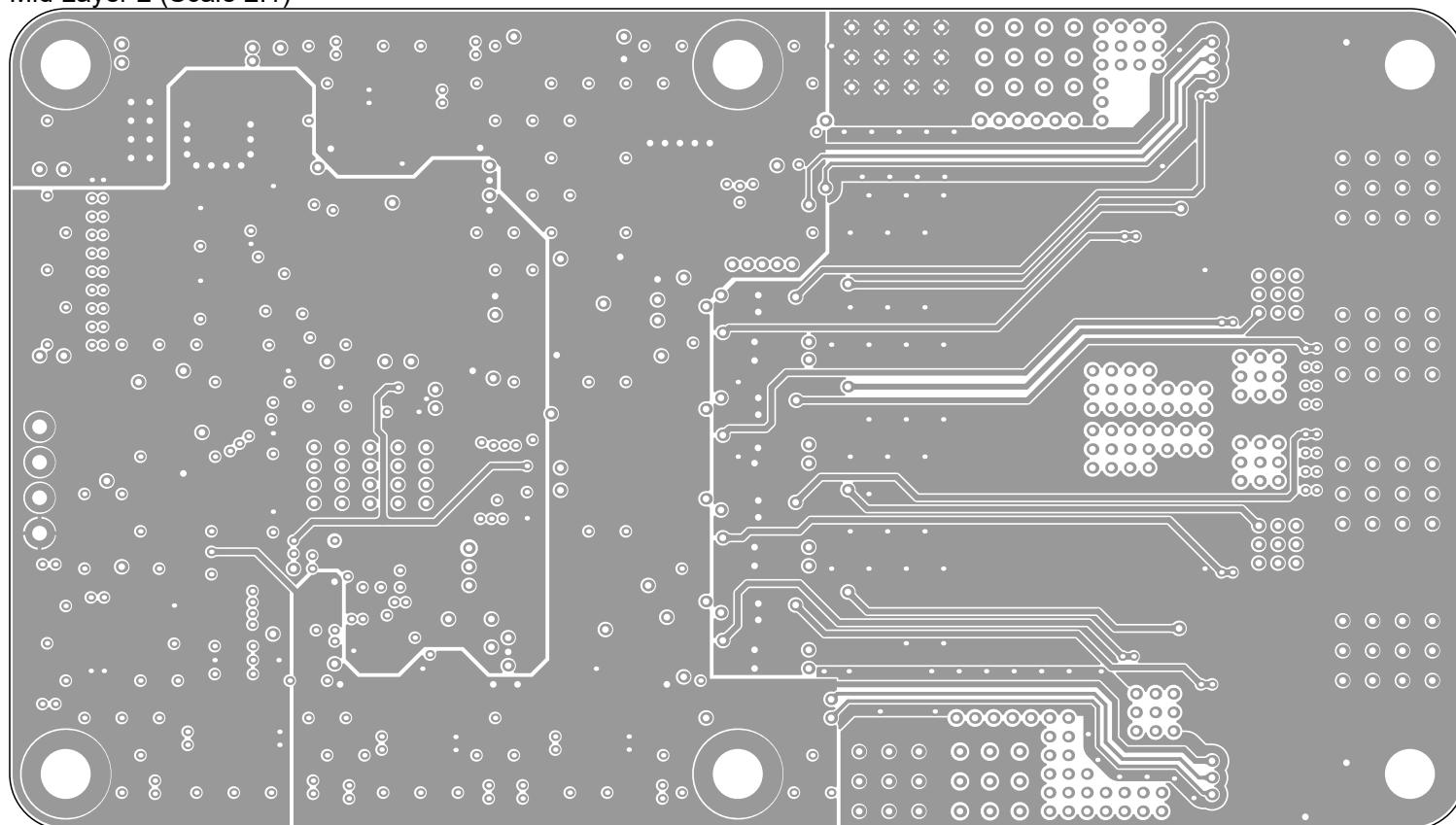
Top Layer (Scale 2:1)



Mid Layer 1 (Scale 2:1)



Mid Layer 2 (Scale 2:1)



Bottom Layer (Scale 2:1)

