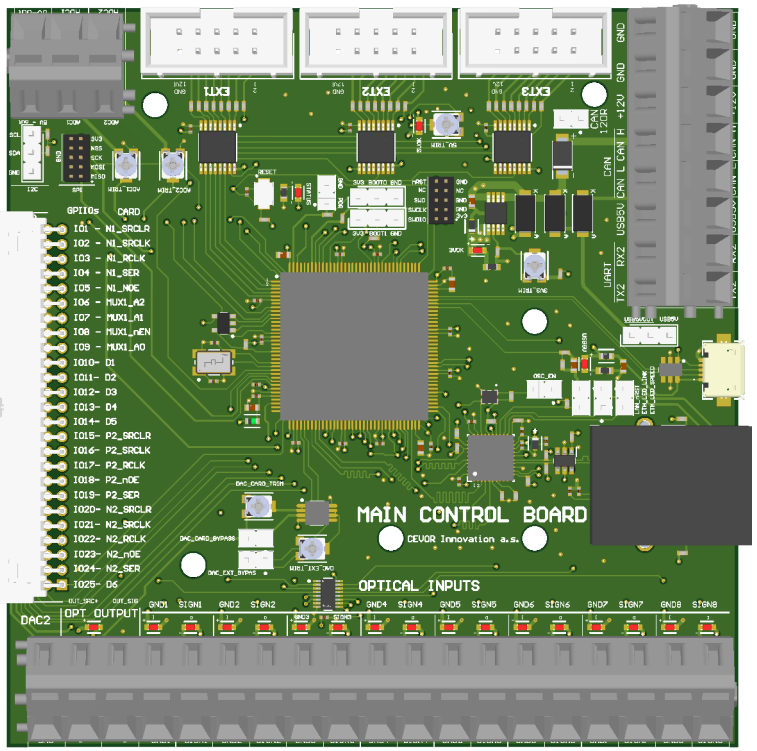
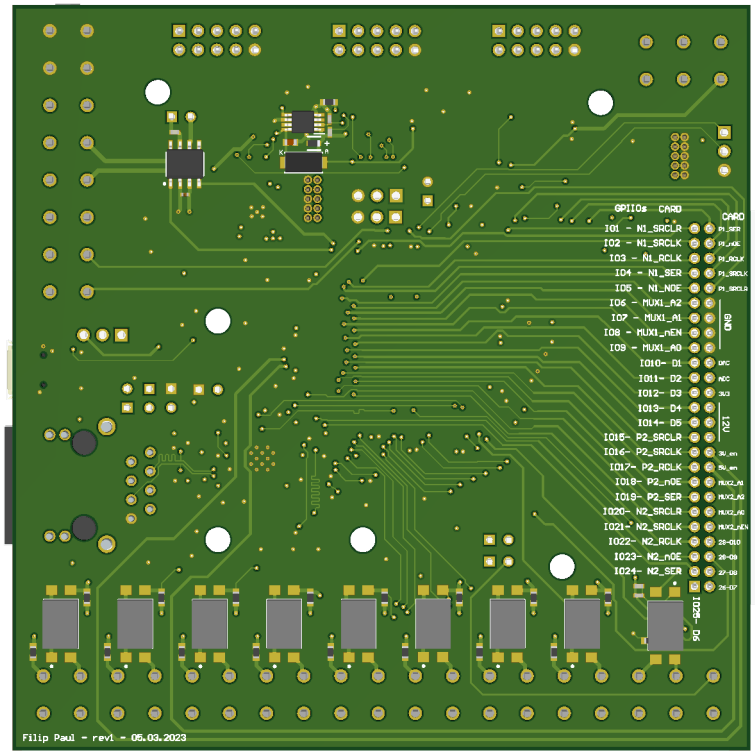
MAIN CONTROL BOARD

Realistic View

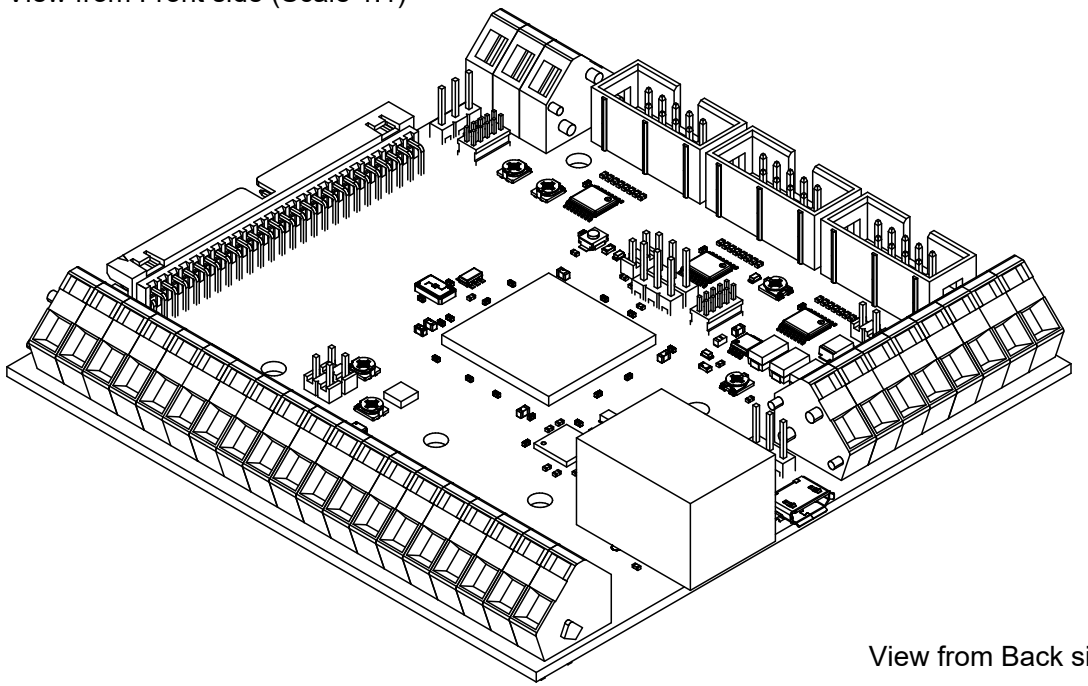


Realistic View

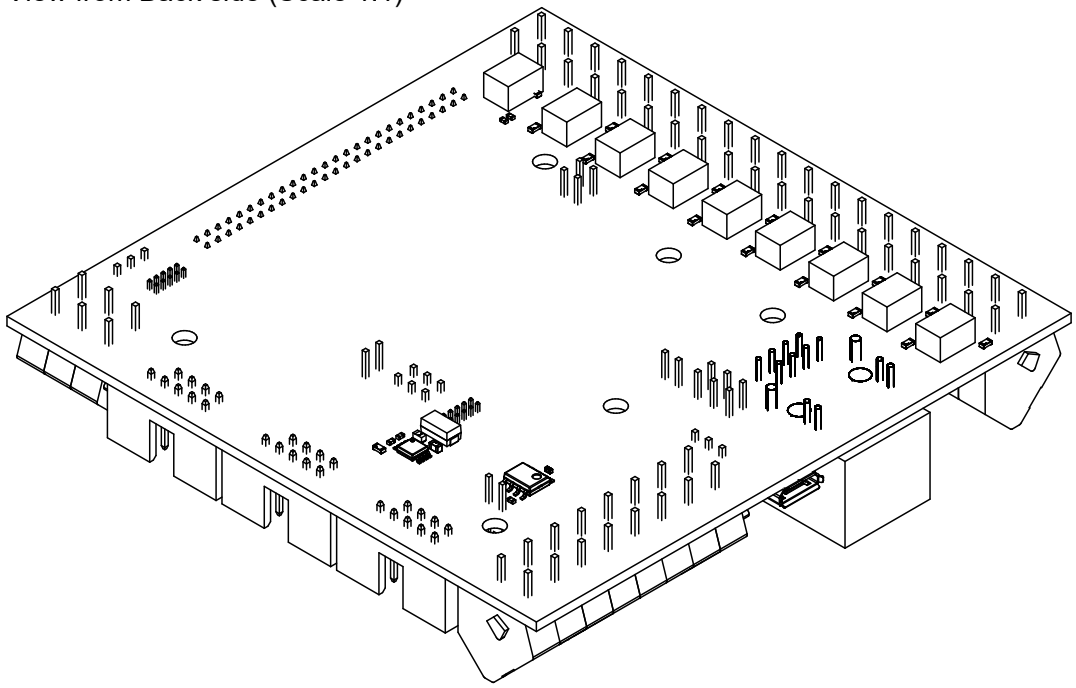


Version 1.0 - Designed by Filip Paul

View from Front side (Scale 1:1)

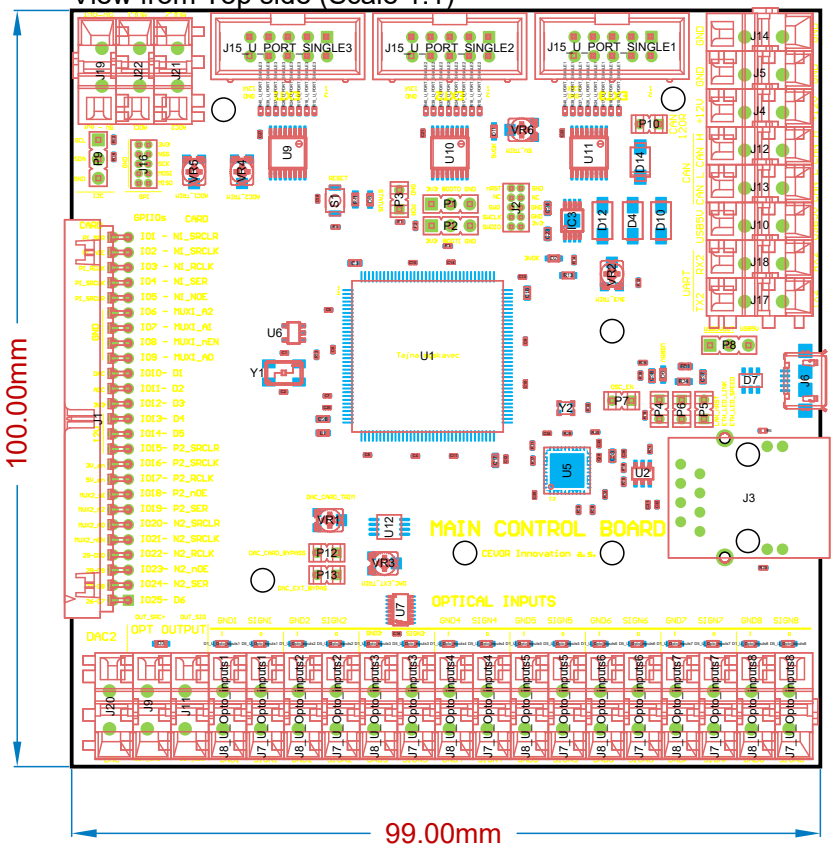


View from Back side (Scale 1:1)

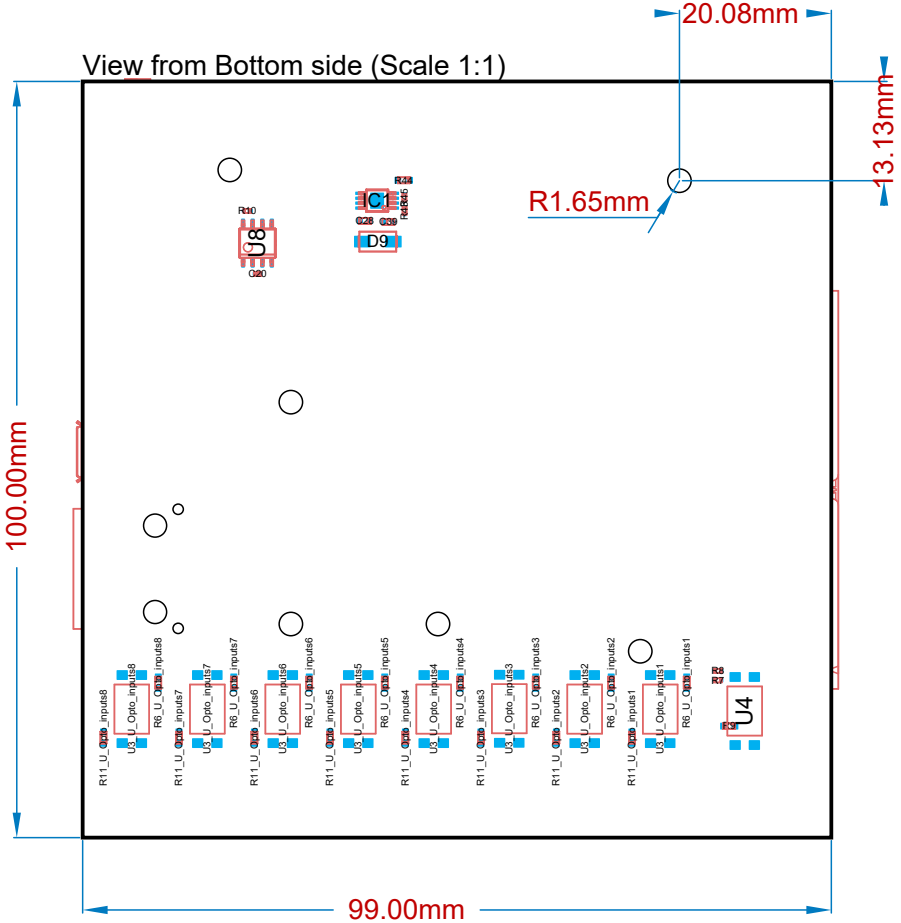


ASSEMBLY DRAWING

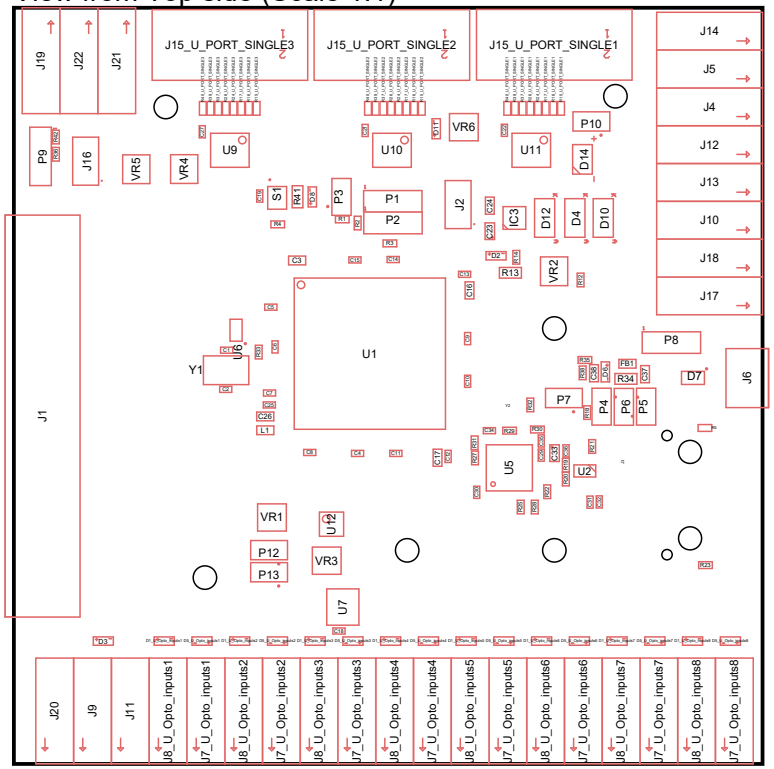
View from Top side (Scale 1:1)



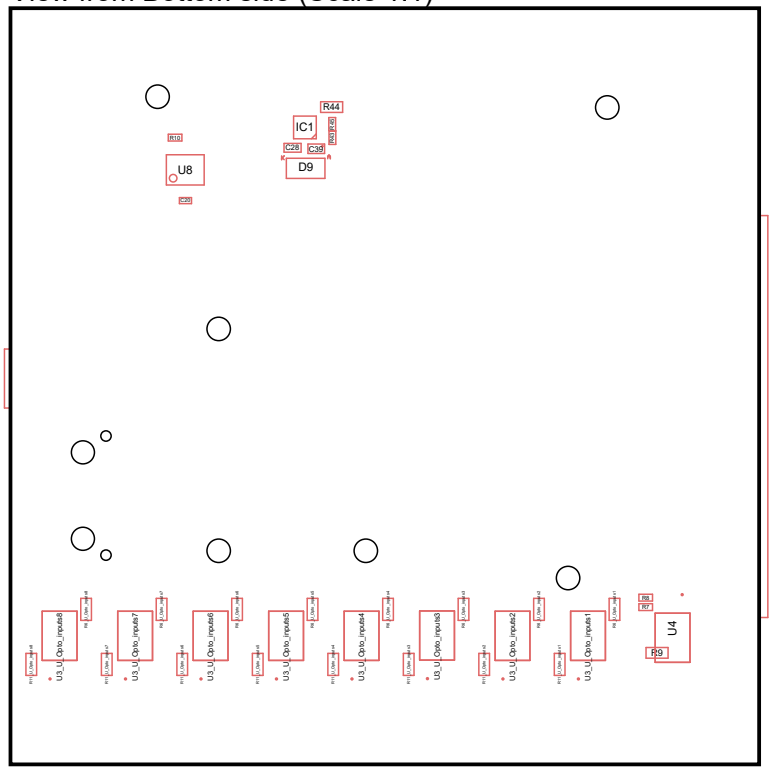
View from Bottom side (Scale 1:1)



View from Top side (Scale 1:1)



View from Bottom side (Scale 1:1)

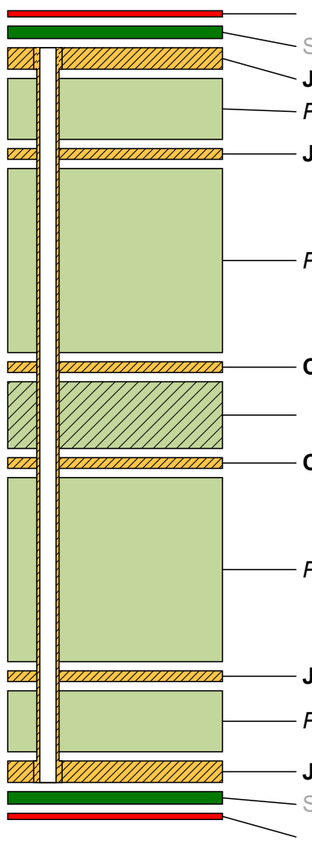


FABRICATION DRAWING

Impedance control stackup:
USB (top layer):
USB_D_P and USB_D_N -> 90 Ohms diff, 50 GND

ETHERNET (top layer:
TD_P and TD_N -> 100Ohms diff, 50 GND
TD_P and RD_N -> 100Ohms diff, 50GND

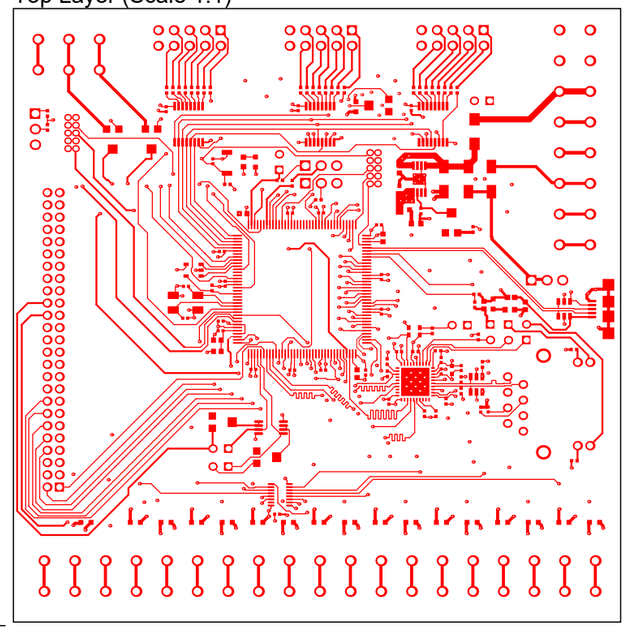
Layer Stack Legend



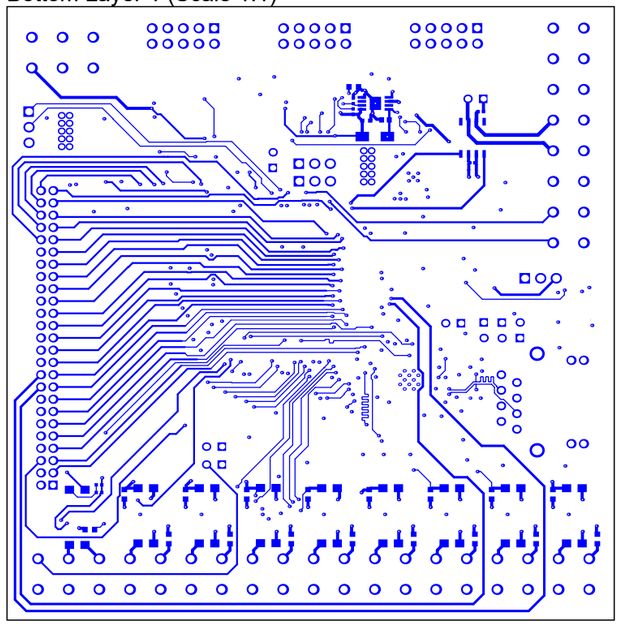
Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.02mm	Solder Resist	Solder Mask	GTS
JLC_6_TOP	**Top Layer**	**0.04mm**		**Signal**	**GTL**
Prepreg		*0.10mm*	*JLC3313*	*Dielectric*	
JLC_6_INNER	**Inner Layer 2(GND)**	**0.02mm**		**Signal**	**G1**
Prepreg		*0.55mm*	*JLCcore*	*Dielectric*	
Copper	**Inner Layer 3**	**0.02mm**		**Signal**	**G2**
		0.11mm	*LC2116*	*Dielectric*	
Copper	**Inner Layer 4**	**0.02mm**		**Signal**	**G3**
Prepreg		*0.55mm*	*JLCcore*	*Dielectric*	
JLC_6_INNER	**Inner Layer 5**	**0.02mm**		**Signal**	**G4**
Prepreg		*0.10mm*	*JLC3313*	*Dielectric*	
JLC_6_TOP	**Bottom Layer 1**	**0.04mm**		**Signal**	**GBL**
Surface Material	Bottom Solder	0.02mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 1.59mm

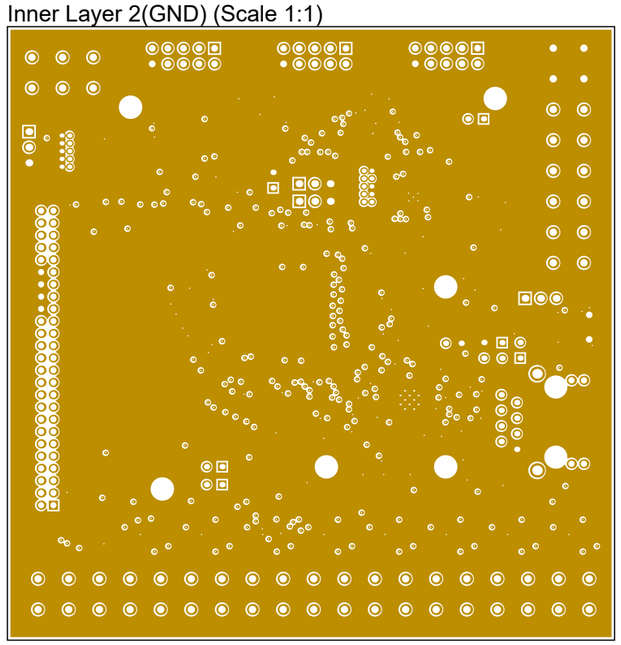
Top Layer (Scale 1:1)



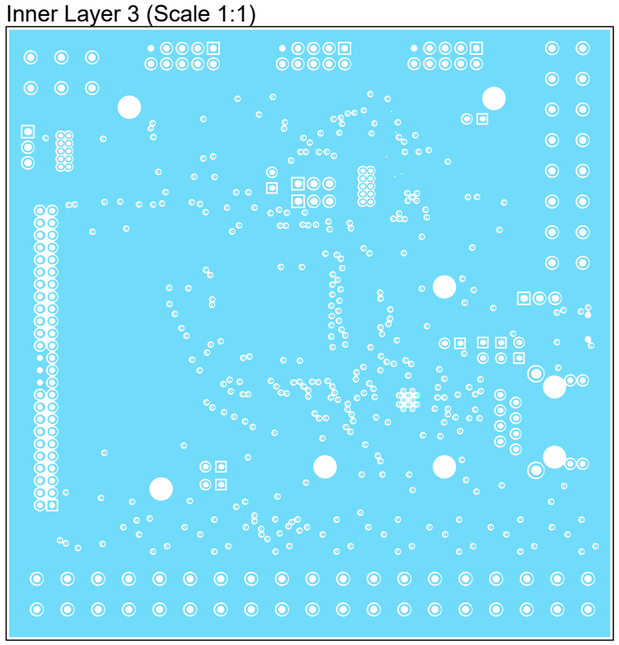
Bottom Layer 1 (Scale 1:1)



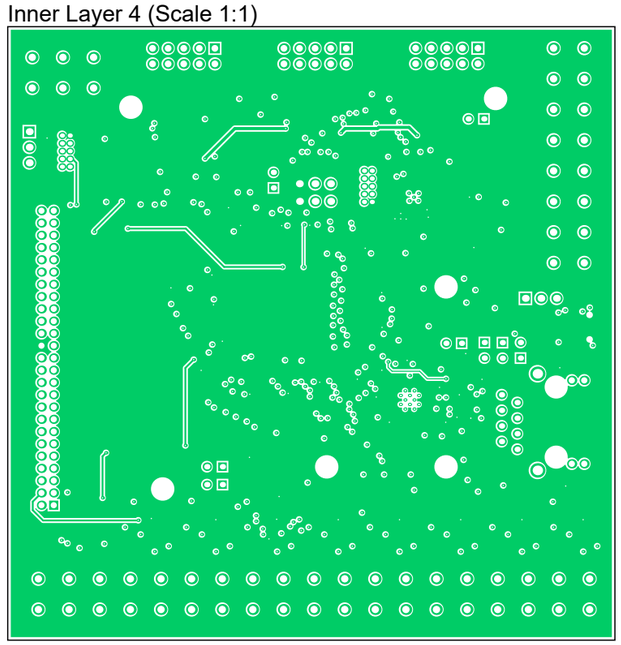
Inner Layer 2(GND) (Scale 1:1)



Inner Layer 3 (Scale 1:1)



Inner Layer 4 (Scale 1:1)



Inner Layer 5 (Scale 1:1)