

ANATHING-BASE V1.2 production hints

Please read this document – it contains important hints for pcb production and assembly !

General pcb production parameters:

material	FR4
boardsize	240 x 202 mm
thickness	1.6 mm
layers	2
soldermask	white / cold white
silkprint	black
copper	1 oz
minimum spacing	6 mil
minimum track width	6 mil
minimum drill size	0.3mm
test	flying probe
surface	HAL leadfree
border	must be clean milled outline – no rails, no broken edges

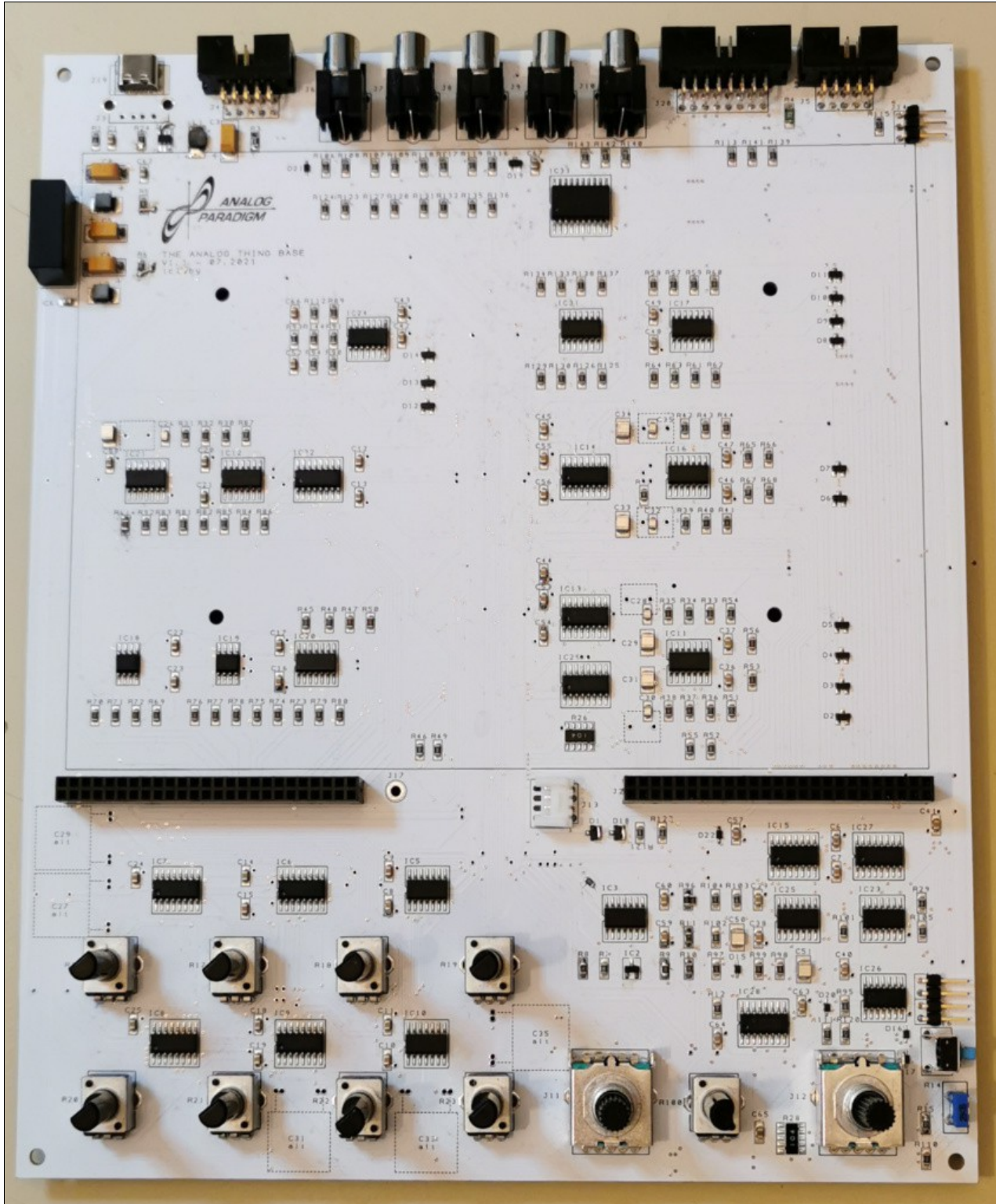
Files containing in production zip:

Bottom_Copper.gbr	copper layer (bottom)
Bottom_Paste Mask/Stencil.gbr	mask for solderpaste for producing stencil (bottom)
Bottom_Solder Mask.gbr	soldermask layer (bottom)
Bottom_Silkscreen.gbr	silkscreen layer (bottom)
Top_Copper.gbr	copper layer (top)
Top_Solder Mask.gbr	soldermask layer (top)
Top_Silkscreen.gbr	silkscreen layer (top)
Drill Data – Through Hole	drill data and milling data for plated holes and longholes
Drill Data – Through Hole Unplated	drill data and milling data unplated, board outline
(BOM).csv	bill of materials and description of parts
Component Positions.csv	component positions of all parts in mil (1/1000 inch)
ANATHING-BASE_V12_doc.pdf	this document

Pictures of the final produced board

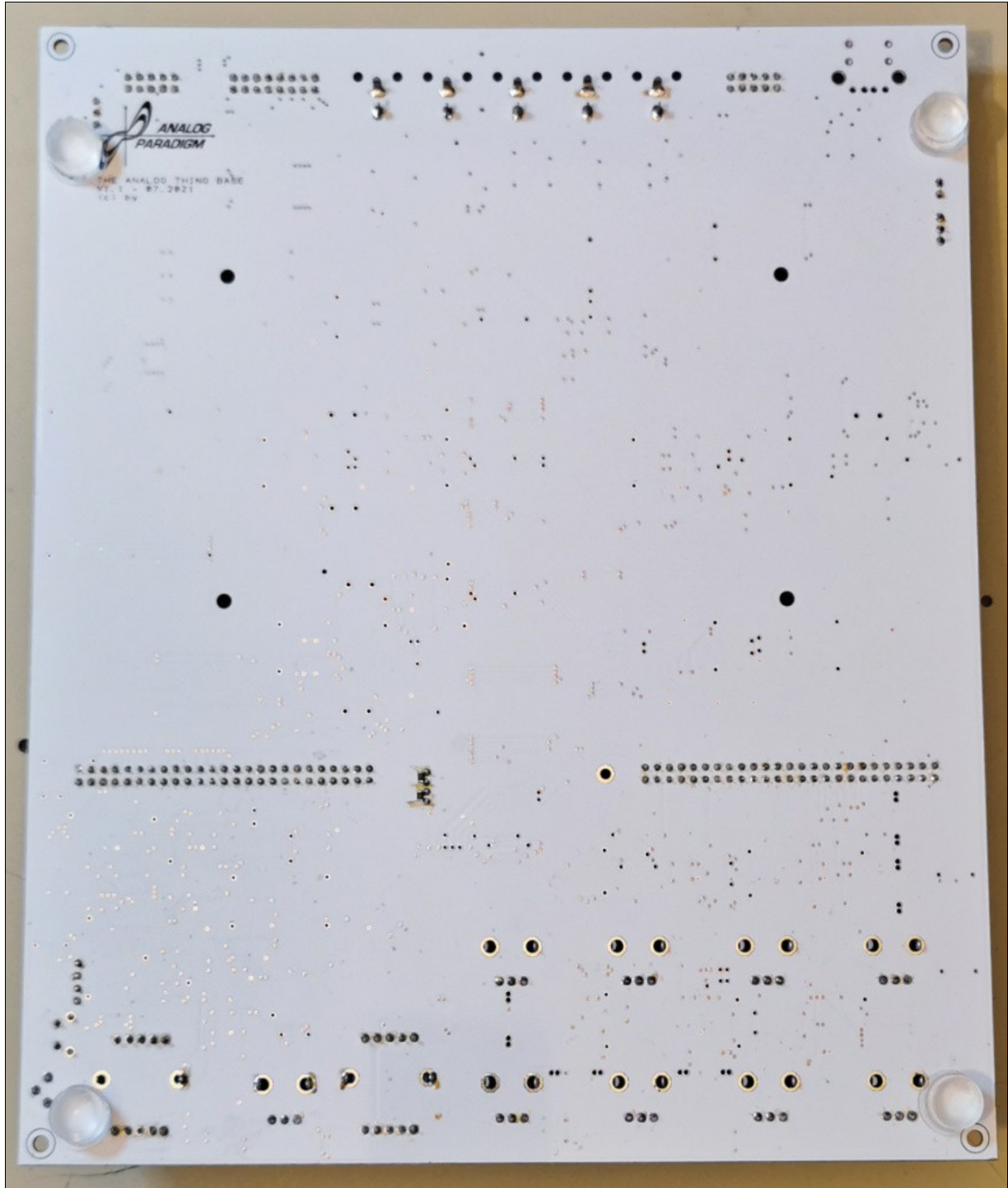
Front-View (Top layer shown)

Attention – this picture shows a previous version – the actual version has round corners (!)



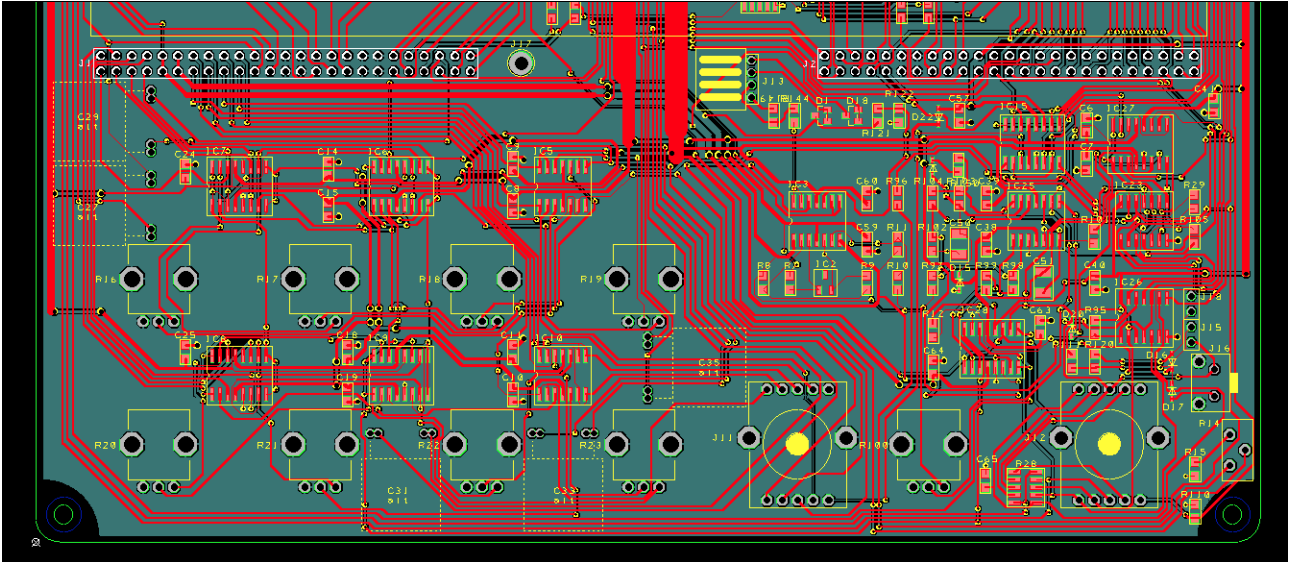
Back-View (Bottom layer shown)

Attention – this picture shows a previous version – the actual version has round corners (!)



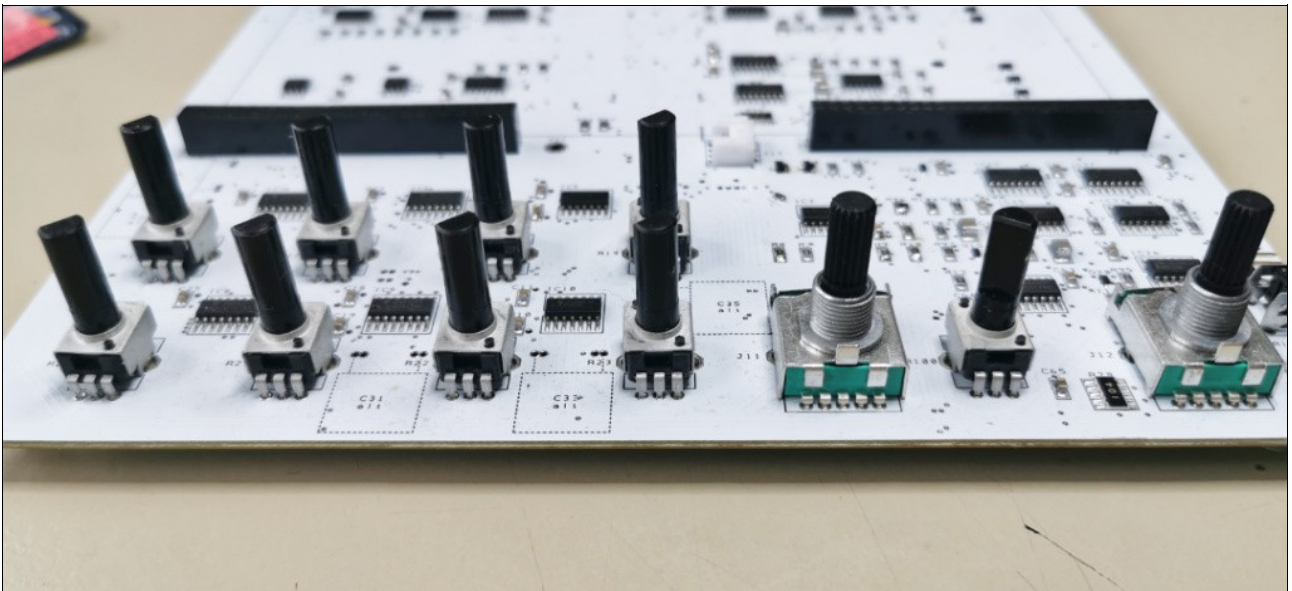
Detail 1:

The connectors J1 and J2 must be mounted precisely. These are the main connectors to the corresponding ANATHING-BASE pcb. The position is marked white in the layout.

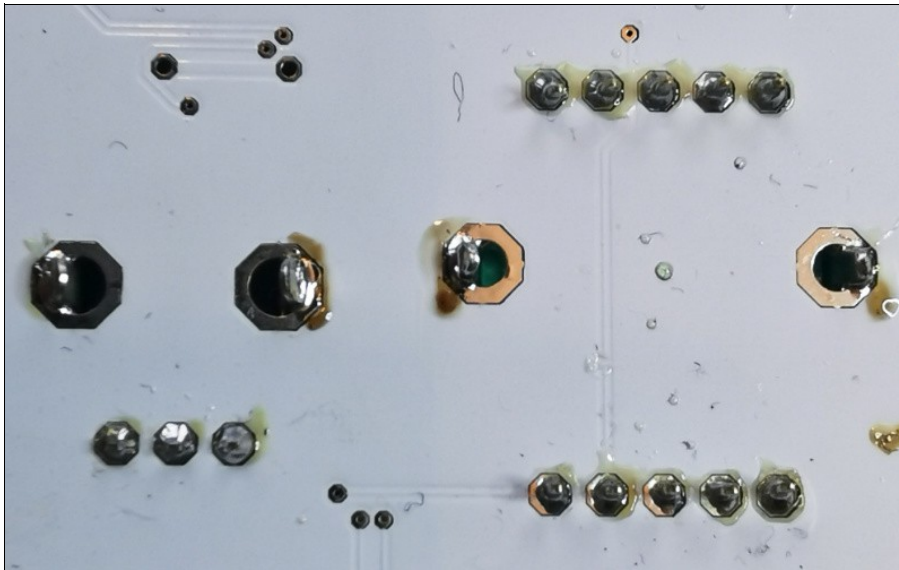


Detail 2:

For the mechanical THT parts like potentiometers and switches, the mechanical pins need to be soldered too for stability reasons (not just the signal pins !).

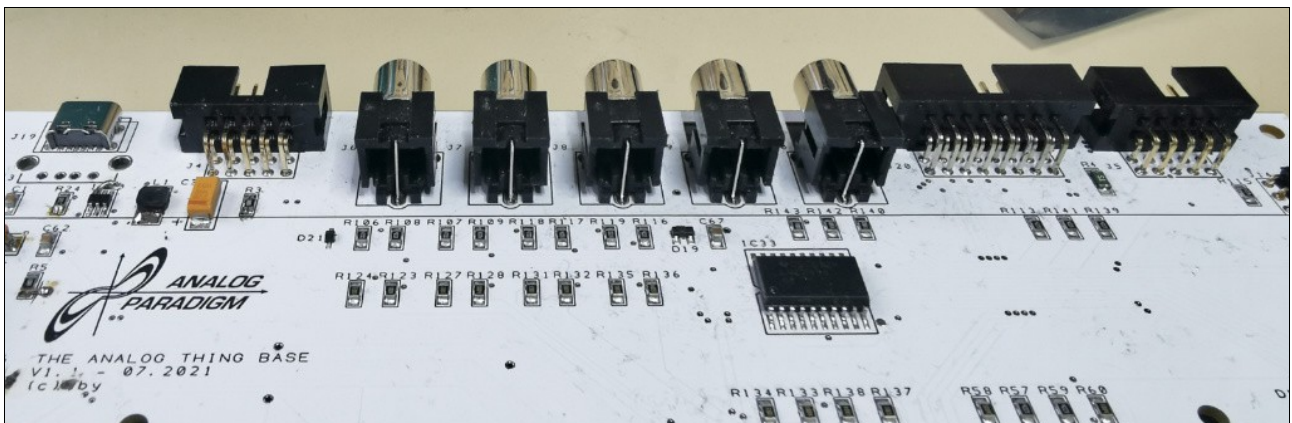


The case pins of switches and potentiometers need to be soldered (if manual soldering is done)

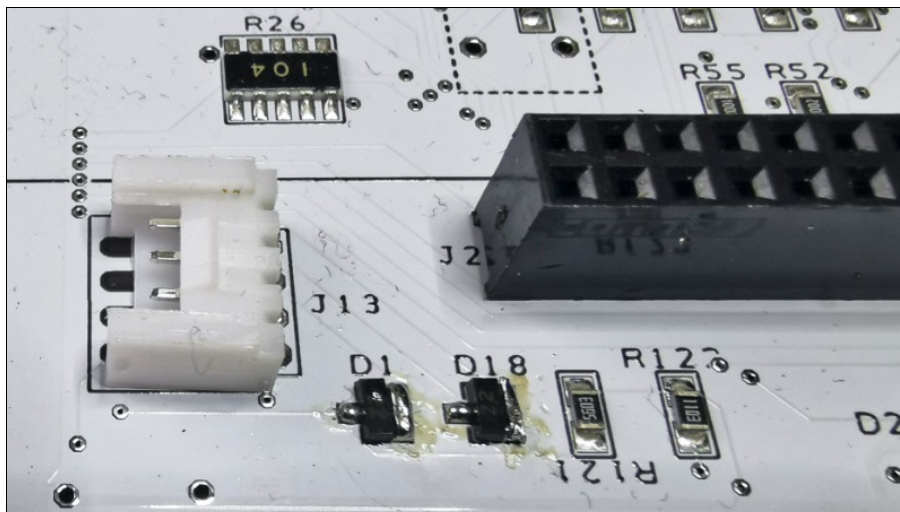


Detail 3:

The connectors are THT parts and placed on the upper side.

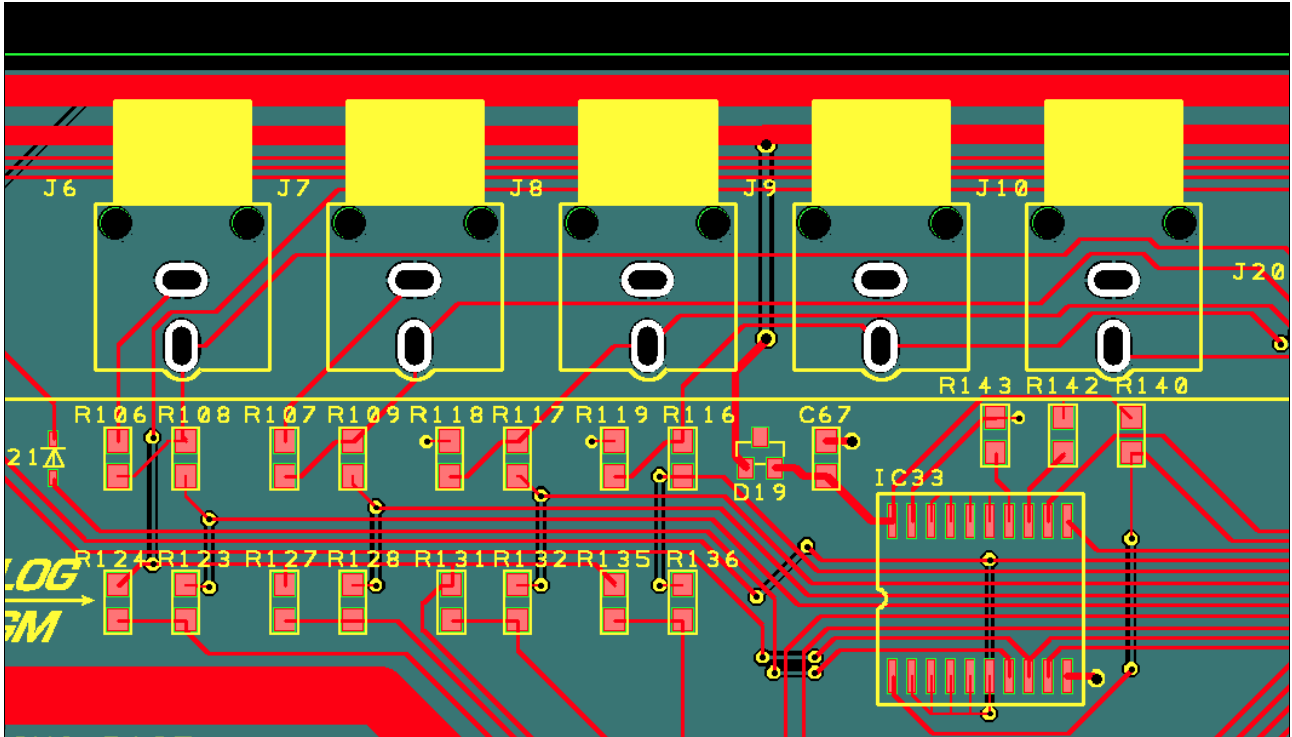


4 pin Grove connector in the middle of the board



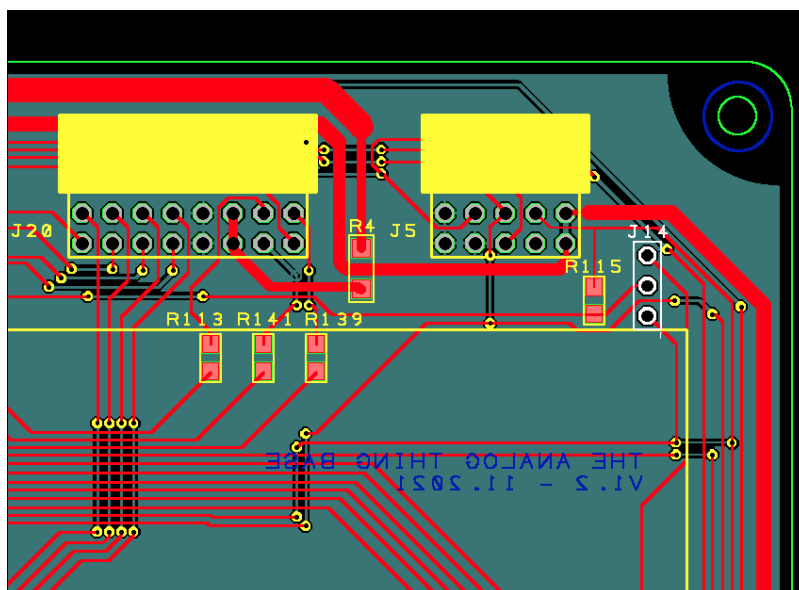
Detail 4:

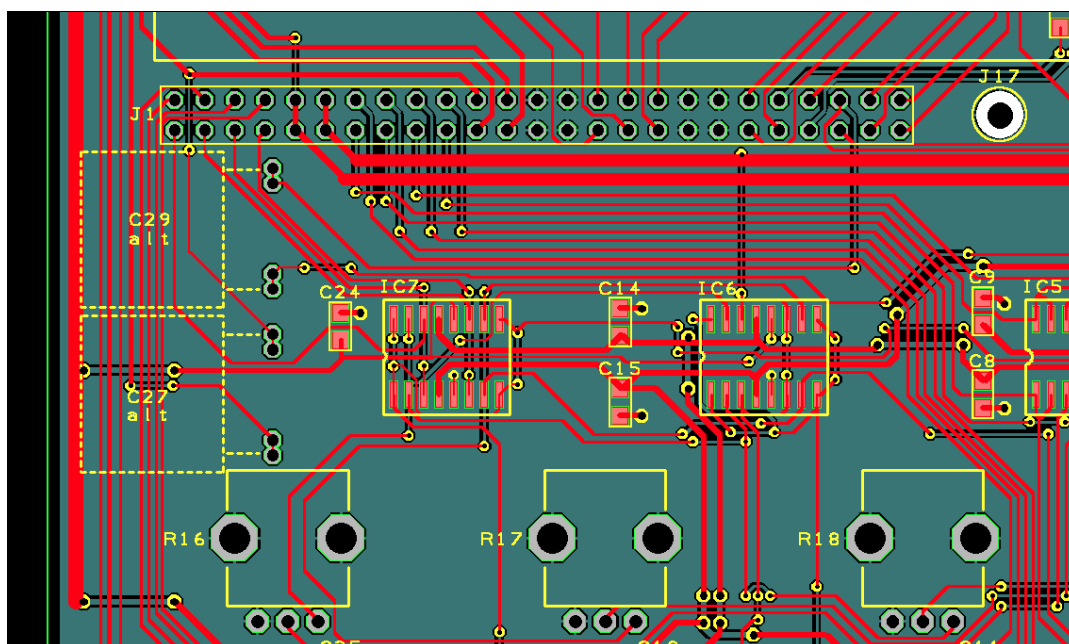
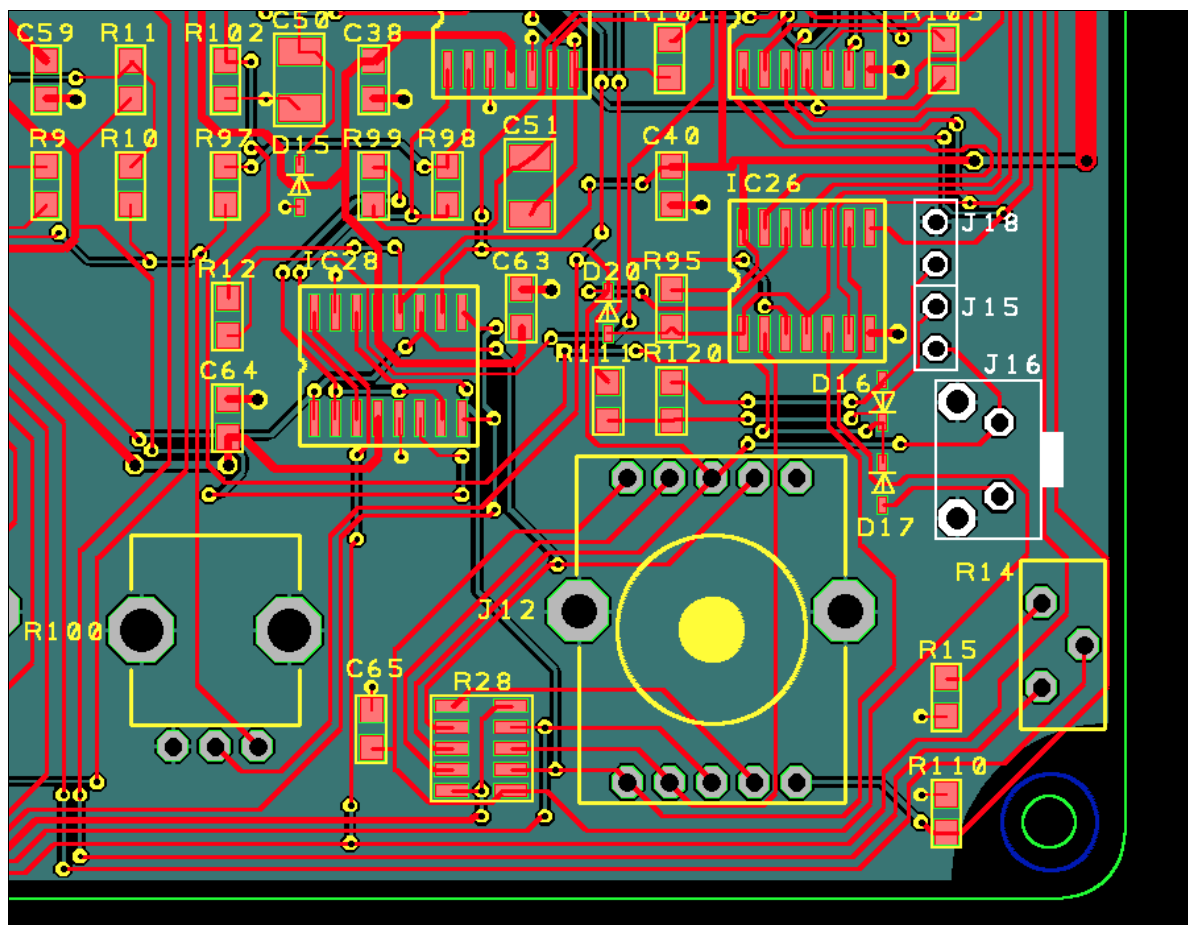
The RCA connectors need long holes, marked white in the pictures. These need to be milled as THT – data contains file „Drill Data – Through Hole“.



Detail 5:

The following parts have to be kept free of solder (white marked). The parts are not assembled by default but may be assembled later by customers on a case-by-case basis. It is named J14, J15, J16, J17, J18.





Detail 6:

The board outline must be milled as a plain surface like seen in the picture. Rails which are needed during assembly must be removed and the surface need to be cleaned (no broken / breakout edges wanted). The corners need a round outline, no pointed corners. The USB-C connector has a milled cutout.

