# ANATHING-FRONT 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 | 3.0 mm (important !) |
| 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 | immersion gold (!) |
| tolerance of big plated holes | 2.1mm +/- 0.1mm (final size) |
| 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-FRONT_V12_doc.pdf | this document |

Pictures of the final produced board

## Front-View (Top layer shown)

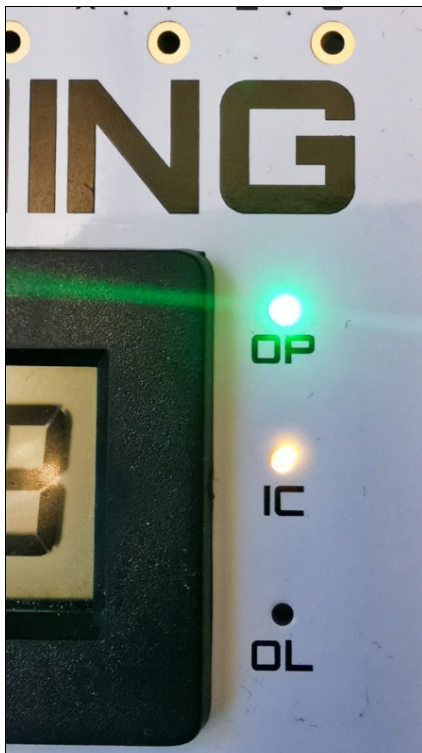**Attention – this picture shows a previous version – the actual version has round corners (!)**

**Back-View (Bottom layer shown)**

**Attention – this picture shows a previous version – the actual version has round corners (!)**
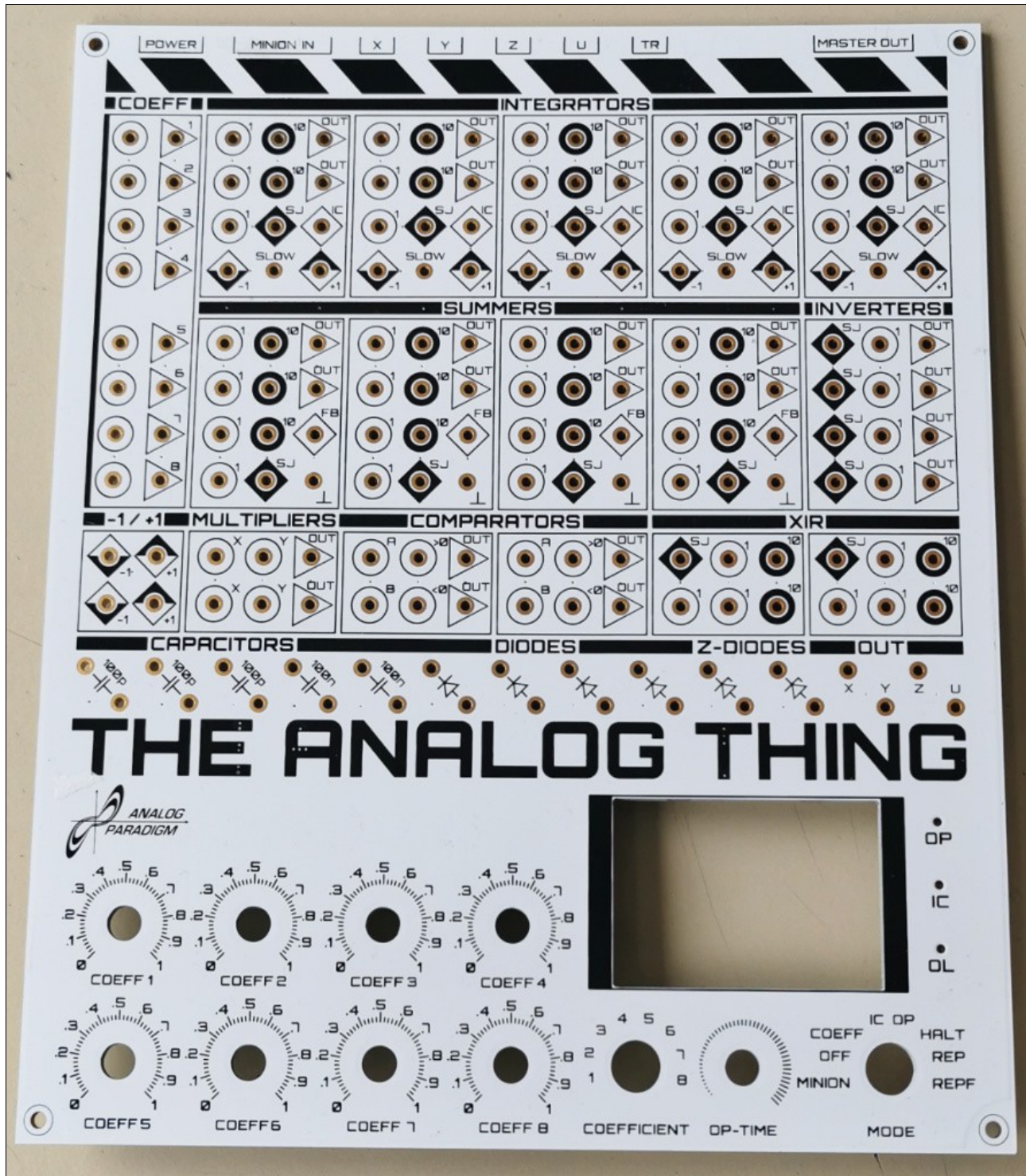
## Detail 1:

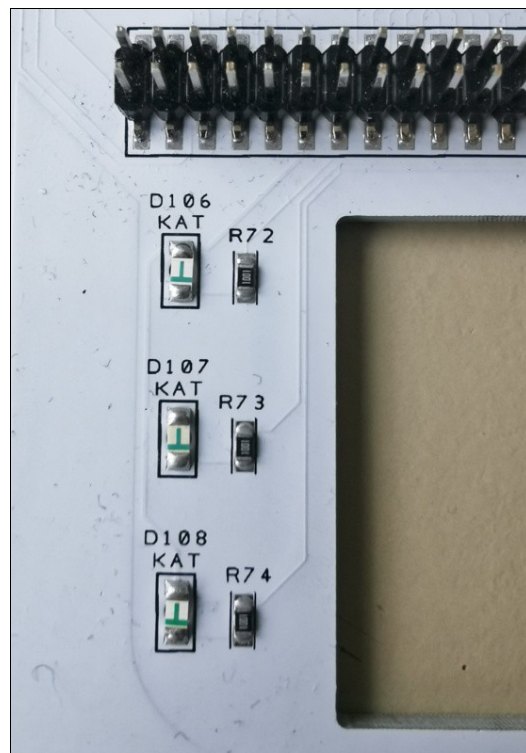The assembled parts J1 and J2 must be mounted precisely. These are the main connectors to the corresponding ANATHING-BASE pcb.
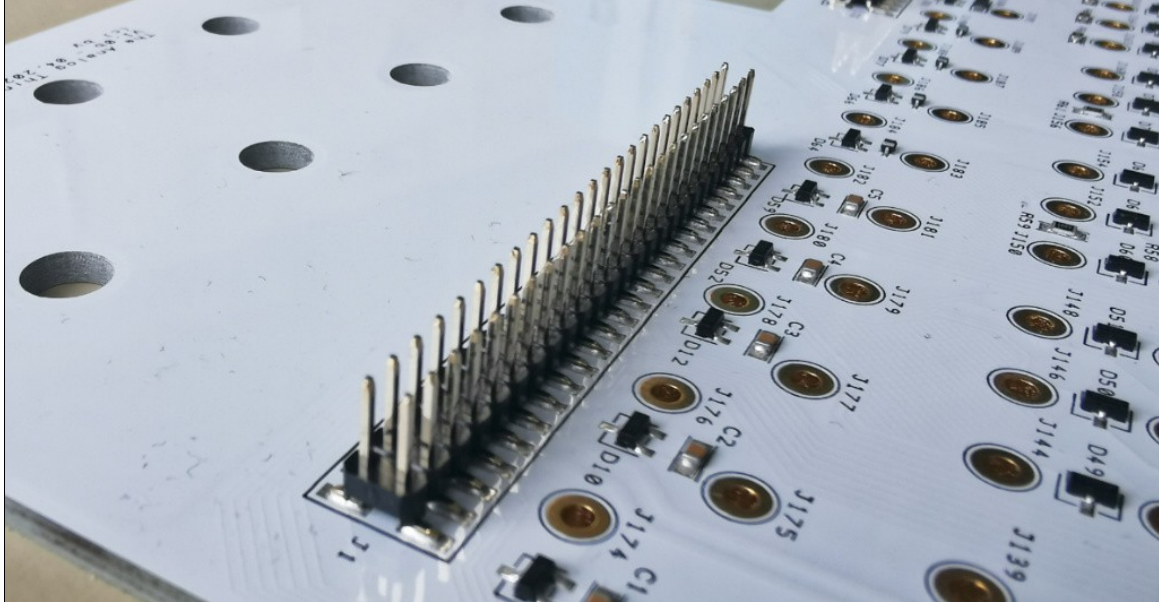


## Detail 2:

The LEDs must be mounted correctly and mounted – cathode is upper. These are special reverse mount LEDs and soldered on the bottom layer but shine through the board.

| Top layer | Bottom layer |
| --- | --- |

Pictures of the Inolux IN-S124 series LEDs.



## Detail 3:

The around 200 gold plated holes are used with 2mm patch cables. It is important, that the final size is 2.1mm +/- 0.1mm in diameter.
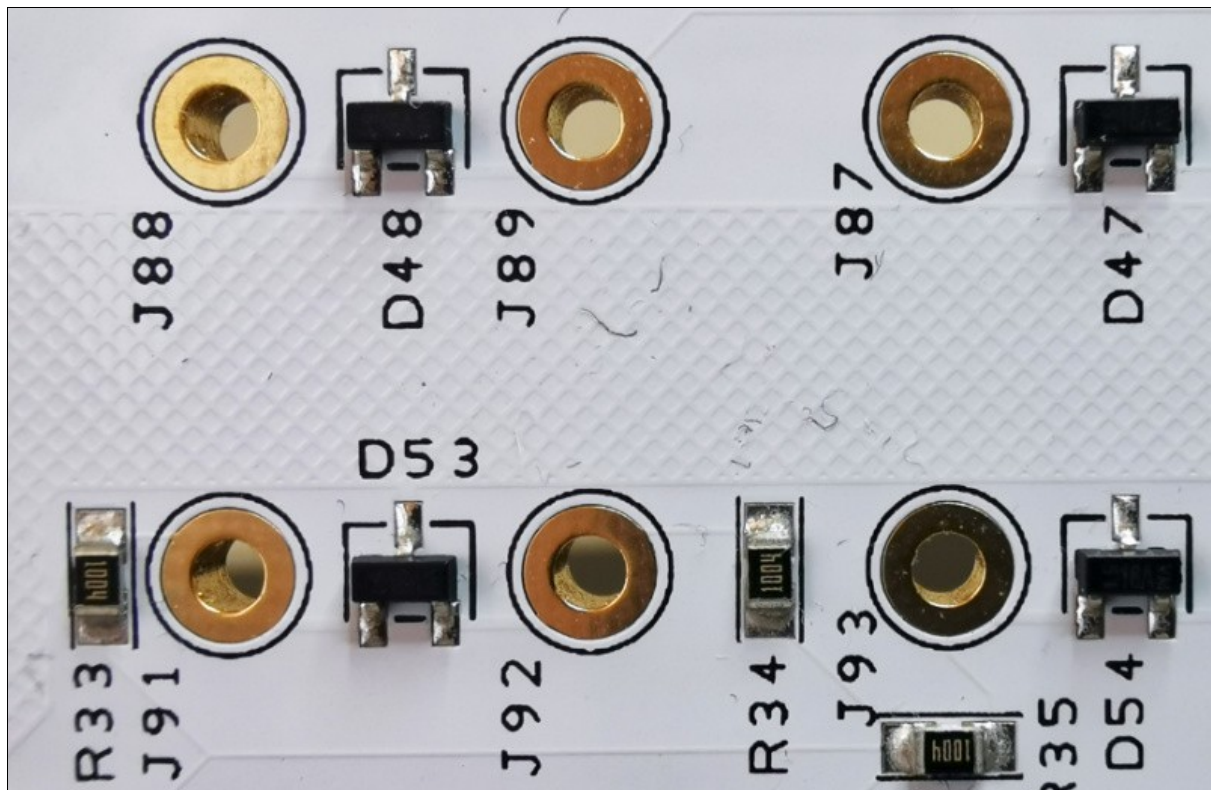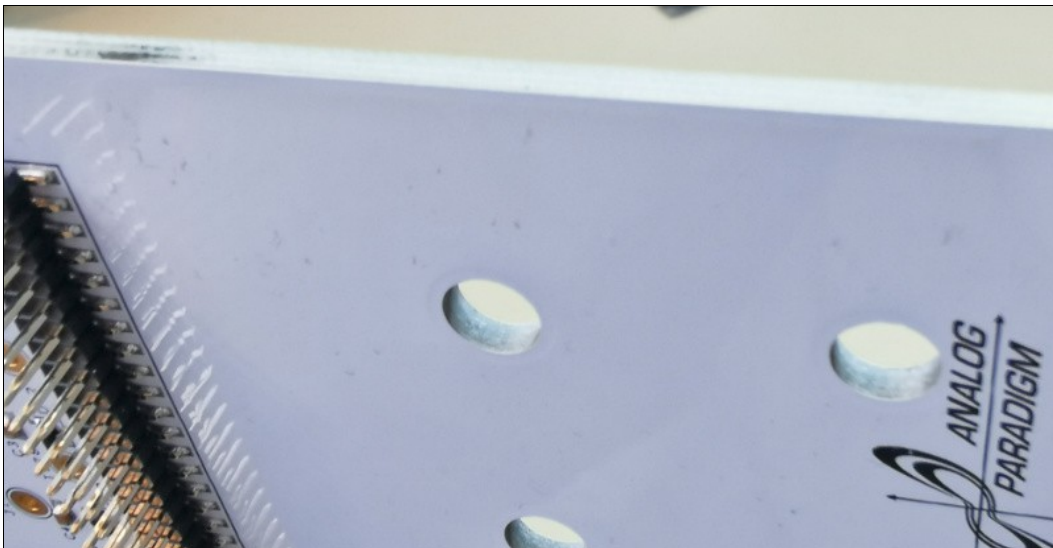
Here are the typical cables used with this pcb later.
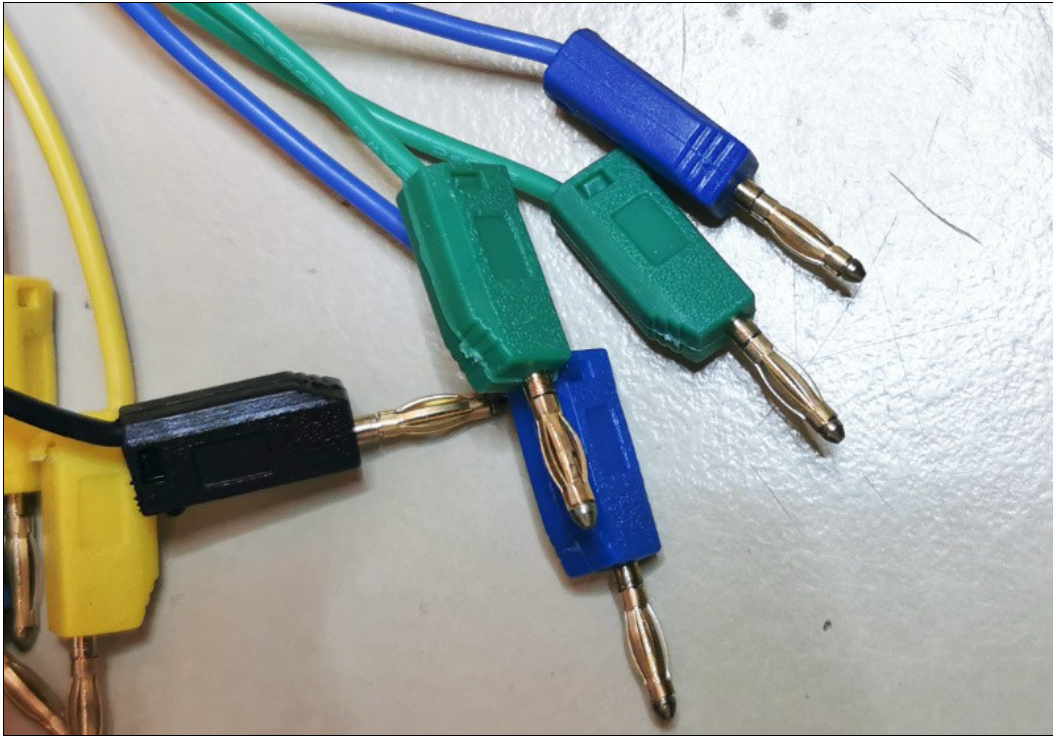


**Detail 4:**

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.

Round corner shown below (all 4 corners).