PCB

Board size: 12.7x52.96 mm (0.5x2.09 inches)

- This is the size of the rectangle that contains the board
- Thickness: 1.6 mm (63 mils)
- Material: FR4
- Finish: None
- Layers: 2
- Copper thickness: 35 µm

Solder mask: TOP / BOTTOM

- Color: Green

Silk screen: TOP / BOTTOM

- Color: White

Stackup:

Name	Type	Color	Thickness	Material	Epsilon_r	Loss tangent
F.SilkS	Top Silk Screen					
F.Paste	Top Solder Paste					
F.Mask	Top Solder Mask		10			
F.Cu	copper		35			
dielectric 1	core		1510	FR4	4.5	0.020
B.Cu	copper		35			
B.Mask	Bottom Solder Mask		10			
B.Paste	Bottom Solder Paste					
B.SilkS	Bottom Silk Screen					

Important sizes

Clearance: 0.13 mm (5 mils)

Track width: 0.13 mm (5 mils)

- By design rules: 0.13 mm (5 mils)

Drill: 0.4 mm (16 mils)

- Vias: 0.4 mm (16 mils) [Design: 0.4 mm (16 mils)]
- Pads: 0.4 mm (16 mils)
- The above values are real drill sizes, they add 0.1 mm (4 mils) to plated holes (PTH)

Via: 0.5/0.3 mm (20/12 mils)

- By design rules: 0.2/0.3 mm (8/12 mils)
- Micro via: yes [0.2/0.1 mm (8/4 mils)]
- Buried/blind via: yes
- Total: 46 (thru: 46 buried/blind: 0 micro: 0)

Outer Annular Ring: 0.05 mm (2 mils)

- By design rules: 0.11 mm (4 mils)

Eurocircuits class: 7D - Using min drill 0.25 mm for an OAR of 0.13 mm

General stats

Components count: (SMD/THT)

- Top: 48/4 (SMD + THT)
- Bottom: 7/0 (SMD)

Defined tracks:

- 0.09 mm (4 mils)
- 0.13 mm (5 mils)
- 0.2 mm (8 mils)
- 0.3 mm (12 mils)
- 0.4 mm (16 mils)
- 0.5 mm (20 mils)

Used tracks:

- 0.13 mm (5 mils) (5) defined: yes
- 0.2 mm (8 mils) (387) defined: yes
- 0.3 mm (12 mils) (57) defined: yes
- 0.4 mm (16 mils) (28) defined: yes

Defined vias:

Used vias:

- 0.5/0.3 mm (20/12 mils) (Count: 45, Aspect: 3.2 A) defined: no
- 0.6/0.3 mm (24/12 mils) (Count: 1, Aspect: 2.7 A) defined: no

Holes (excluding vias):

- 0.3 mm (12 mils) (4)

- 0.65 mm (26 mils) (2)
- 1.0 mm (39 mils) (13)

Oval holes:

- 0.6x1.2 mm (24x47 mils) (2)
- 0.6x1.7 mm (24x67 mils) (2)

Drill tools (including vias and computing adjusts and rounding):

- 0.4 mm (16 mils) (50)
- 0.65 mm (26 mils) (2)
- 0.7 mm (28 mils) (4)
- 1.1 mm (43 mils) (13)

Schematic

Schematic in SVG format

Figure 1: Schematic in SVG format

PCB Layers

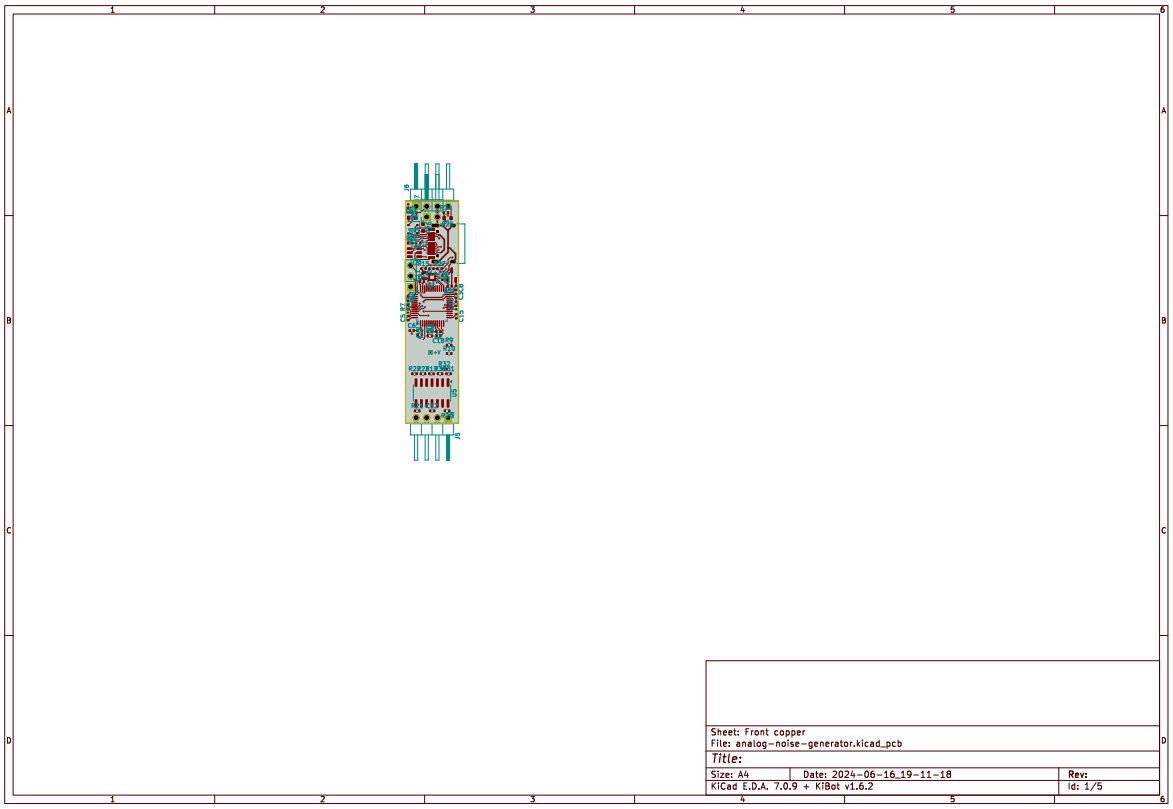

Figure 2: PCB Front copper

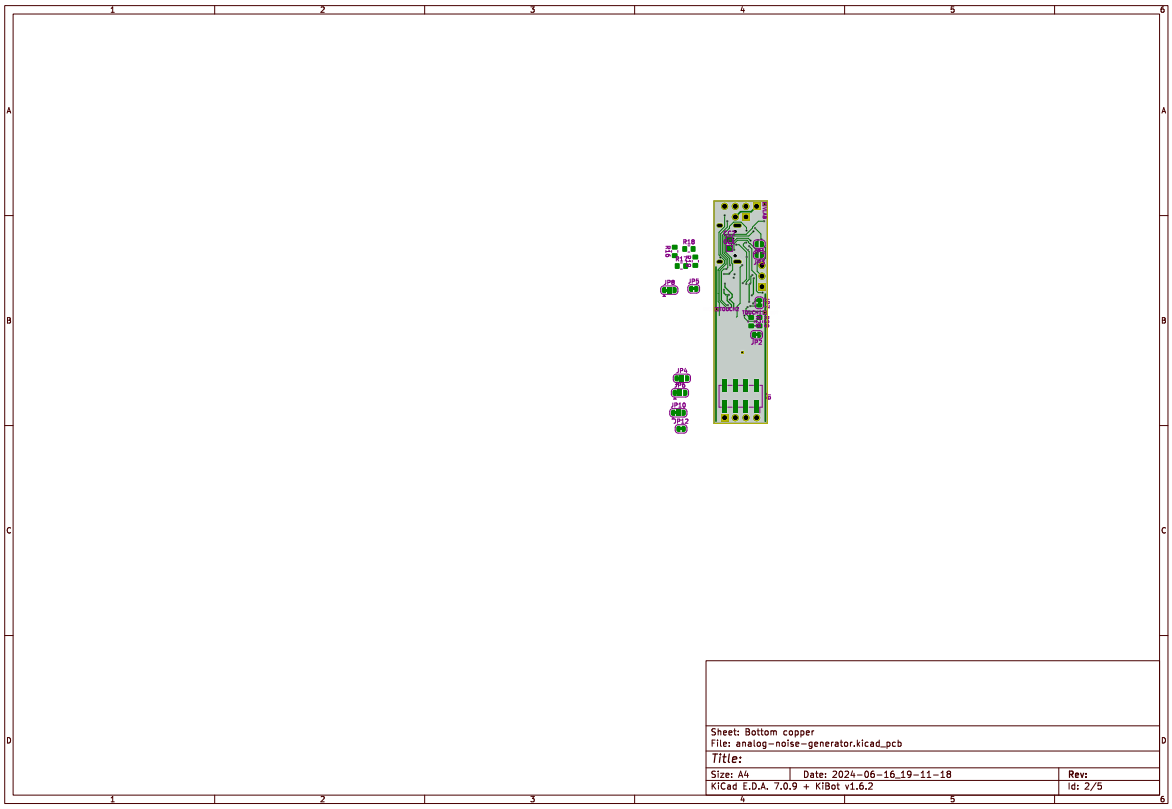

Figure 3: PCB Bottom copper

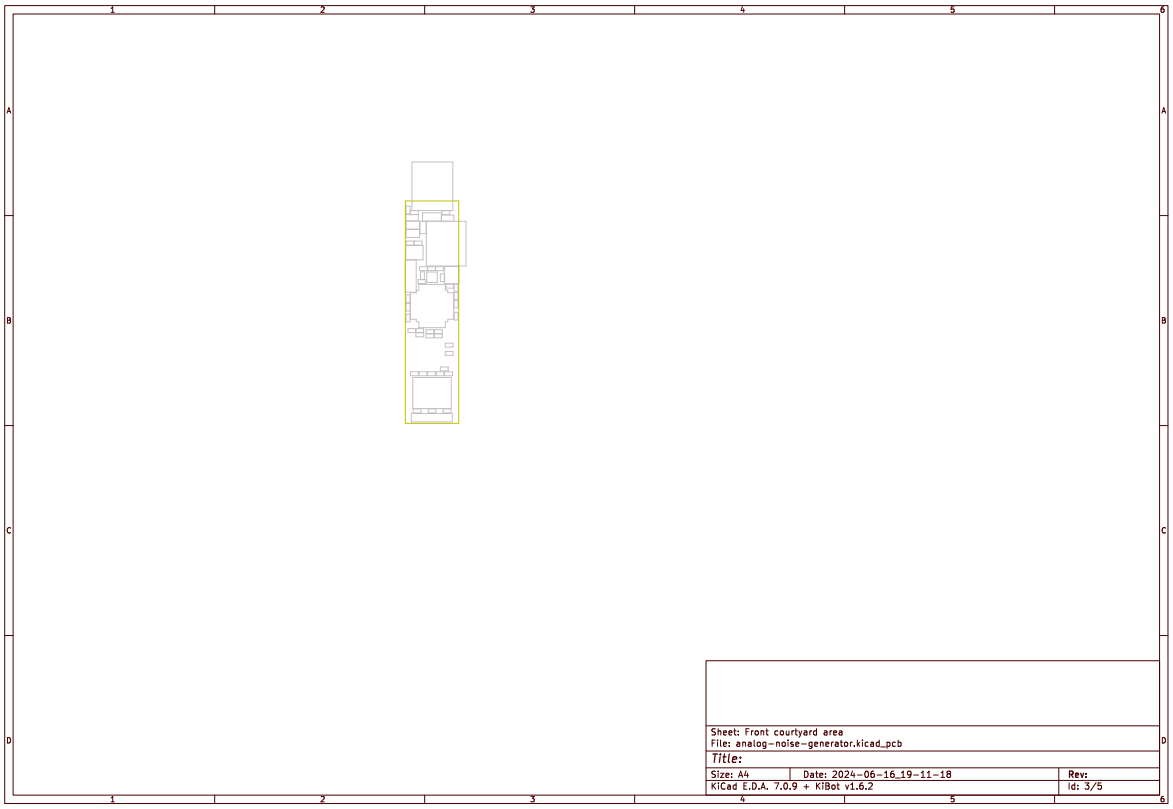

Figure 4: PCB Front courtyard area

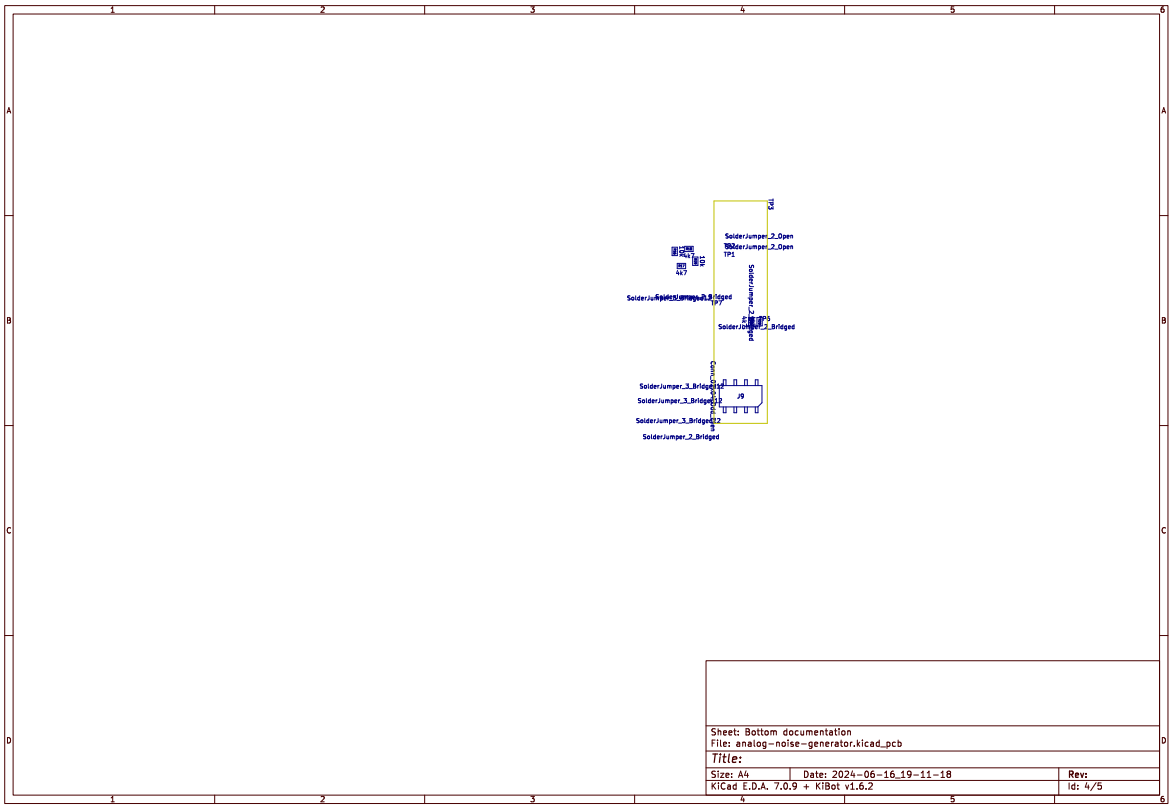

Figure 5: PCB Bottom documentation

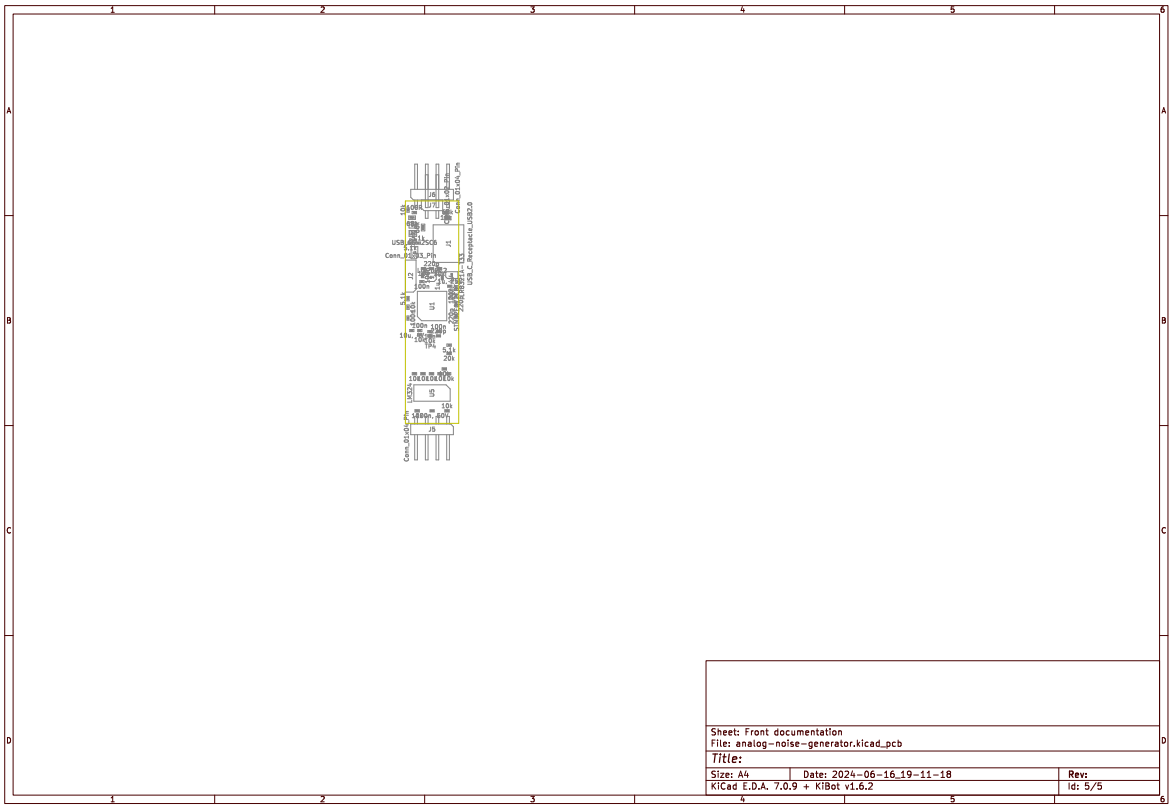

Figure 6: PCB Front documentation