

## PCB

Board size: 63.0x50.0 mm (2.48x1.97 inches)

- This is the size of the rectangle that contains the board
- Thickness: 1.6 mm (63 mils)
- Material: FR4
- Finish: HAL
- Layers: 2
- Copper thickness: 35  $\mu$ m

Solder mask: TOP / BOTTOM

- Color: Green

Silk screen: TOP / BOTTOM

- Color: White

## Important sizes

Clearance: 0.2 mm (8 mils)

Track width: 0.7 mm (28 mils)

- By design rules: 0.0 mm (0 mils)

Drill: 0.4 mm (16 mils)

- Vias: 0.4 mm (16 mils) [Design: 0.4 mm (16 mils)]
- Pads: 0.9 mm (35 mils)
- The above values are real drill sizes, they add 0.1 mm (4 mils) to plated holes (PTH)

Via: 0.6/0.3 mm (24/12 mils)

- By design rules: 0.5/0.3 mm (20/12 mils)
- Micro via: yes [0.2/0.1 mm (8/4 mils)]
- Buried/blind via: yes
- Total: 2 (thru: 2 buried/blind: 0 micro: 0)

Outer Annular Ring: 0.1 mm (4 mils)

- By design rules: 0.3 mm (12 mils)

Eurocircuits class: 6C - Using min drill 0.35 mm for an OAR of 0.13 mm

## General stats

Components count: (SMD/THT)

- Top: 2/14 (SMD + THT)

- Bottom: 0/0 (NONE)

Defined tracks:

- 0.7 mm (28 mils)

Used tracks:

- 0.7 mm (28 mils) (103) defined: yes

Defined vias:

Used vias:

- 0.6/0.3 mm (24/12 mils) (Count: 2, Aspect: 2.7 A) defined: no

Holes (excluding vias):

- 0.8 mm (31 mils) (8)
- 1.0 mm (39 mils) (22)
- 1.1 mm (43 mils) (16)

Oval holes:

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

- 0.4 mm (16 mils) (2)
- 0.9 mm (35 mils) (8)
- 1.1 mm (43 mils) (22)
- 1.2 mm (47 mils) (16)

Solder paste stats:

Using a paste with 87.75 % alloy, that has an specific gravity for the alloy of 7.4 g/cm<sup>3</sup> and 1.0 g/cm<sup>3</sup> for the flux. This paste has an specific gravity of 4.15 g/cm<sup>3</sup>.

The stencil thickness is 0.12 mm.

Side	Pads with paste	Area [mm <sup>2</sup> ]	Paste [g]
Total	4	6.49	0.03

Note: this is just an approximation to the theoretical value. Margins of the solder mask and waste aren't computed.

## Schematic

Schematic in SVG format

## PCB Layers





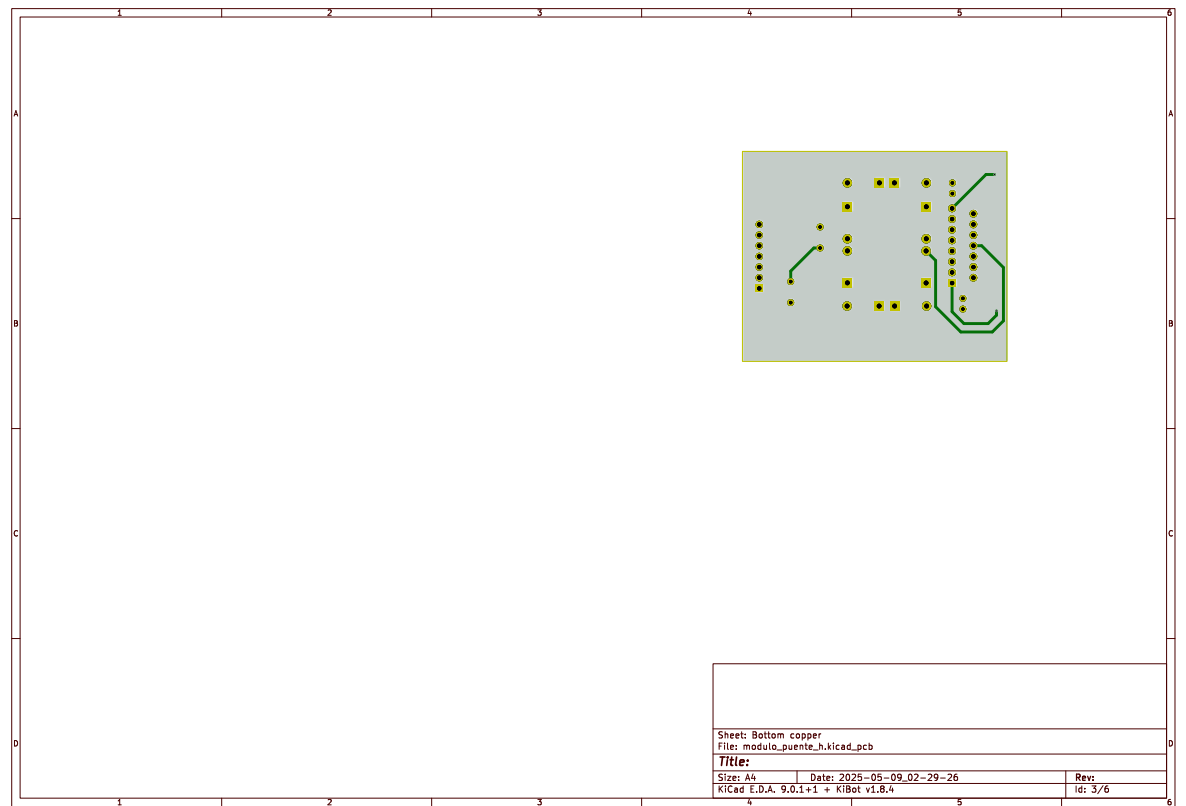


Figure 3: PCB Bottom copper

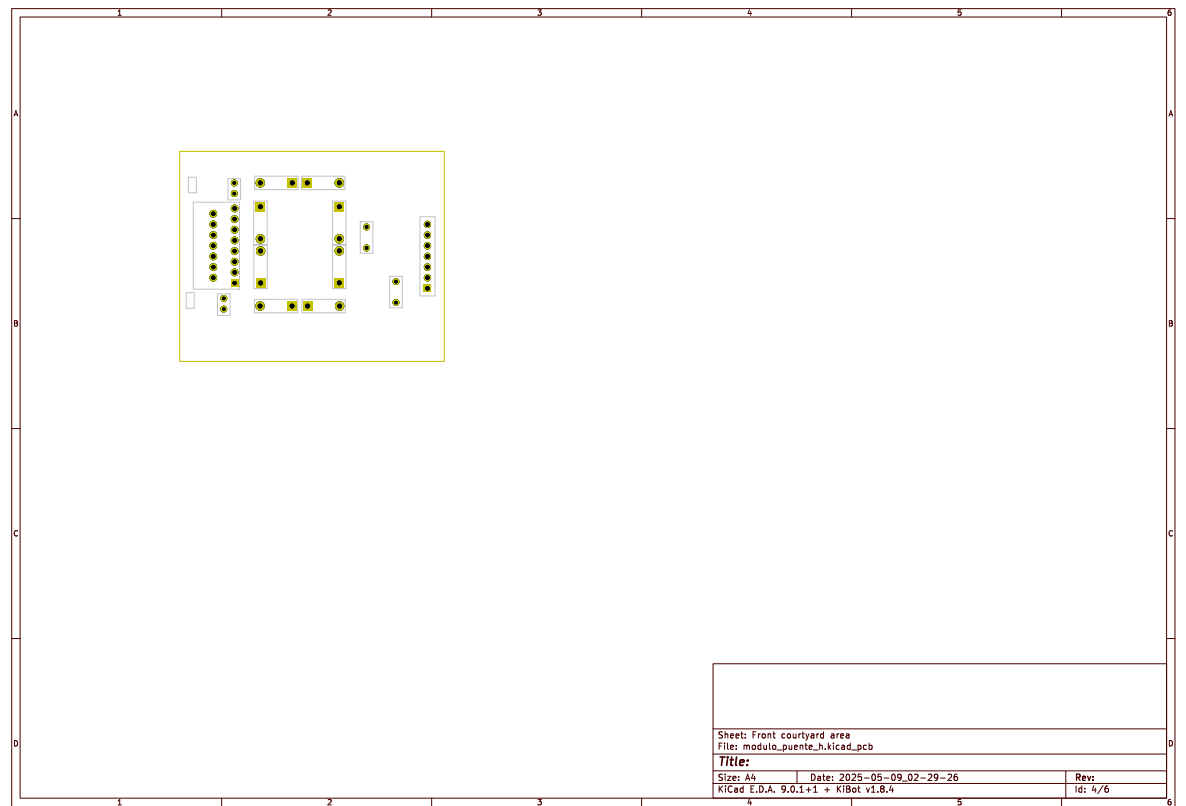


Figure 4: PCB Front courtyard area

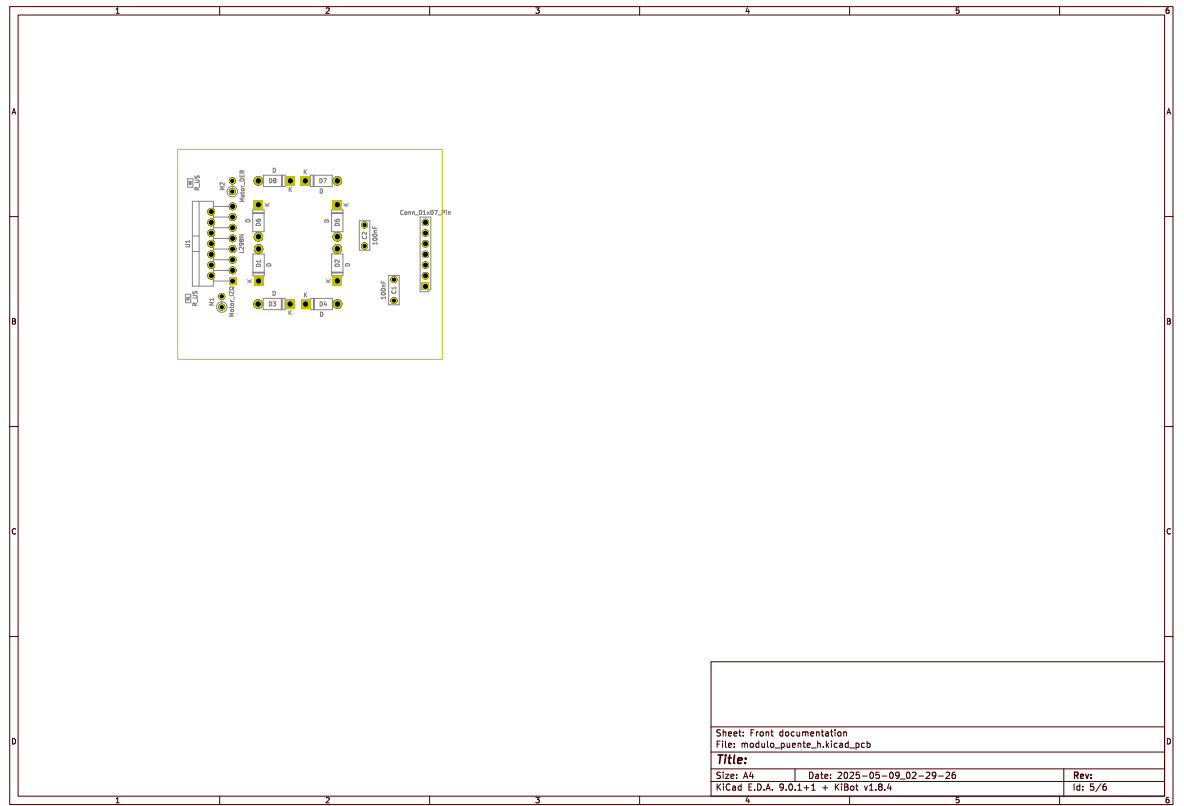


Figure 5: PCB Front documentation

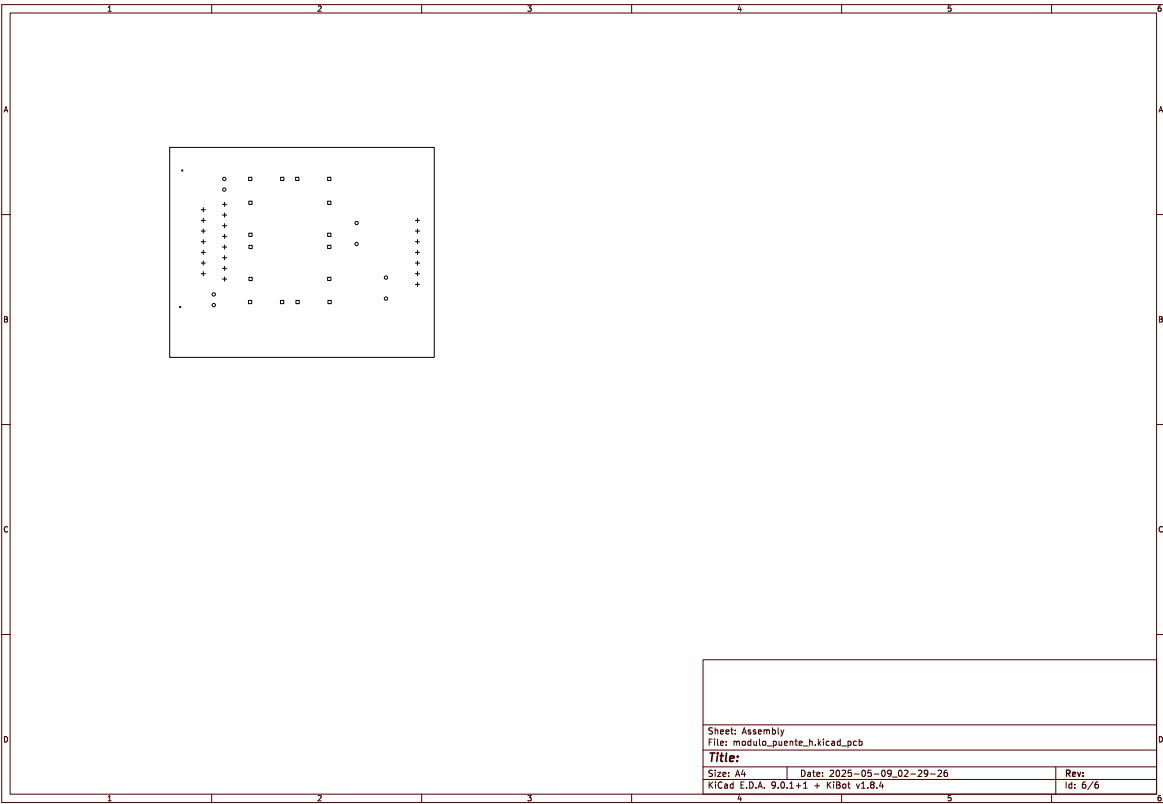


Figure 6: PCB Assembly