

## PCB

Board size: 59.69x48.26 mm (2.35x1.9 inches)

- This is the size of the rectangle that contains the board
- Thickness: 1.6 mm (63 mils)
- Material: FR4
- Finish: ENIG
- Layers: 4
- Copper thickness: 35  $\mu$ m

Solder mask: TOP / BOTTOM

- Color: Top: Blue / Bottom: Red

Silk screen: TOP / BOTTOM

- Color: Top: White / Bottom: Black

Special features:

- Edge connector: yes, bevelled
- Castellated pads
- Edge plating

Stackup:

Impedance controlled: YES

Name	Type	Color	Thickness	Material	Epsilon_r	Loss tangent
F.SilkS	Top Silk Screen	White		Liquid Photo		
F.Paste	Top Solder Paste					
F.Mask	Top Solder Mask	Blue	10	Liquid Ink	3.3	0.00
F.Cu	copper		35			
dielectric 1	prepreg		480	FR4	4.5	0.02
In1.Cu	copper		35			
dielectric 2	core		480	FR4	4.5	0.02
In2.Cu	copper		35			
dielectric 3	prepreg		480	FR4	4.5	0.02
B.Cu	copper		35			
B.Mask	Bottom Solder Mask	Red	10	Dry Film	3.3	0.00
B.Paste	Bottom Solder Paste					
B.SilkS	Bottom Silk Screen	Black		Direct Printing		

## Important sizes

Clearance: 0.15 mm (6 mils)

Track width: 0.15 mm (6 mils)

- By design rules: 0.13 mm (5 mils)

Drill: 0.25 mm (10 mils)

- Vias: 0.25 mm (10 mils) [Design: 0.2 mm (8 mils)]
- Pads: 0.6 mm (24 mils)

Via: 0.51/0.25 mm (20/10 mils)

- By design rules: 0.46/0.2 mm (18/8 mils)
- Micro via: no [0.2/0.1 mm (8/4 mils)]
- Burried/blind via: no

Outer Annular Ring: 0.25 mm (10 mils)

- By design rules: 0.25 mm (10 mils)

Eurocircuits class: 6D

## General stats

Components count: (SMD/THT)

- Top: 61/12 (SMD + THT)
- Bottom: 0/0 (NONE)

Defined tracks:

- 0.15 mm (6 mils)
- 0.3 mm (12 mils)
- 0.64 mm (25 mils)

Used tracks:

- 0.15 mm (6 mils) (276) defined: yes
- 0.3 mm (12 mils) (11) defined: yes
- 0.64 mm (25 mils) (175) defined: yes

Defined vias:

- 0.51/0.25 mm (20/10 mils)
- 0.89/0.51 mm (35/20 mils)

Used vias:

- 0.51/0.25 mm (20/10 mils) (Count: 23, Aspect: 3.1 A) defined: yes
- 0.89/0.51 mm (35/20 mils) (Count: 33, Aspect: 1.8 A) defined: yes

Holes (excluding vias):

- 0.8 mm (31 mils) (4)
- 0.85 mm (33 mils) (2)
- 0.95 mm (37 mils) (3)
- 1.2 mm (47 mils) (20)

- 3.2 mm (126 mils) (4)

## Schematic

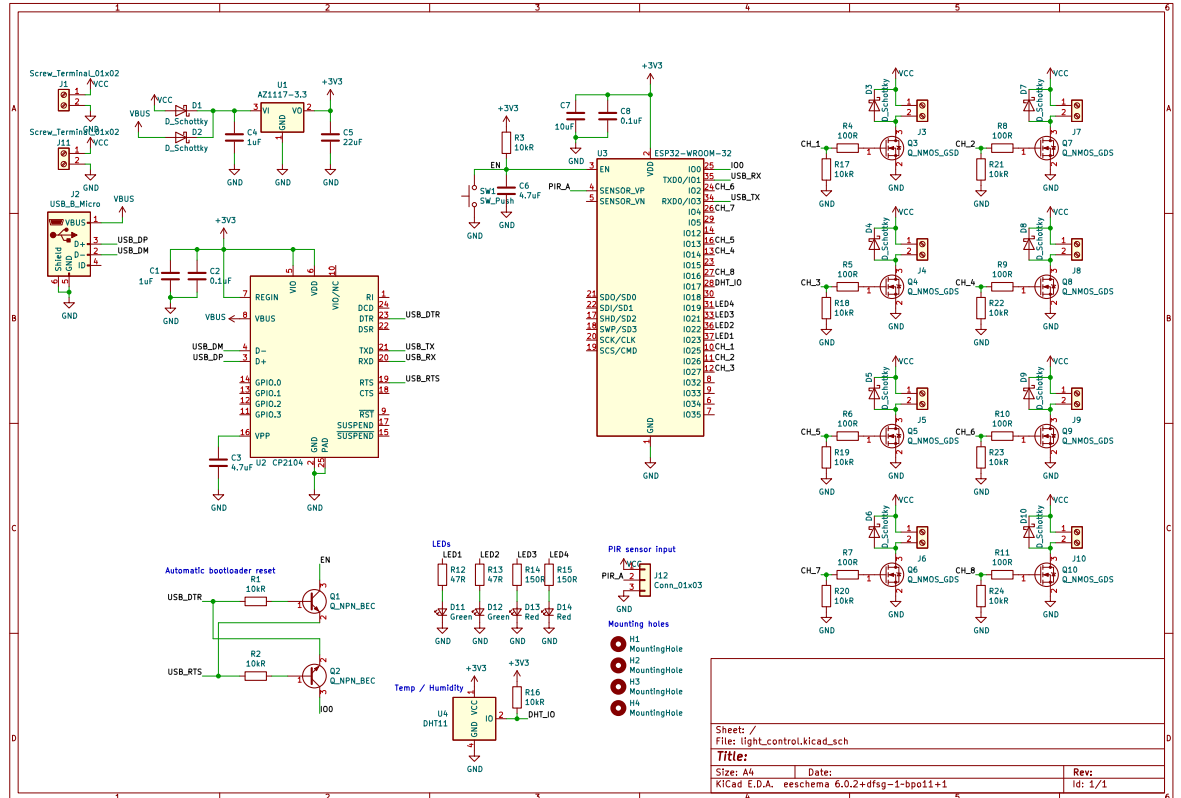


Figure 1: Schematic

## PCB Layers

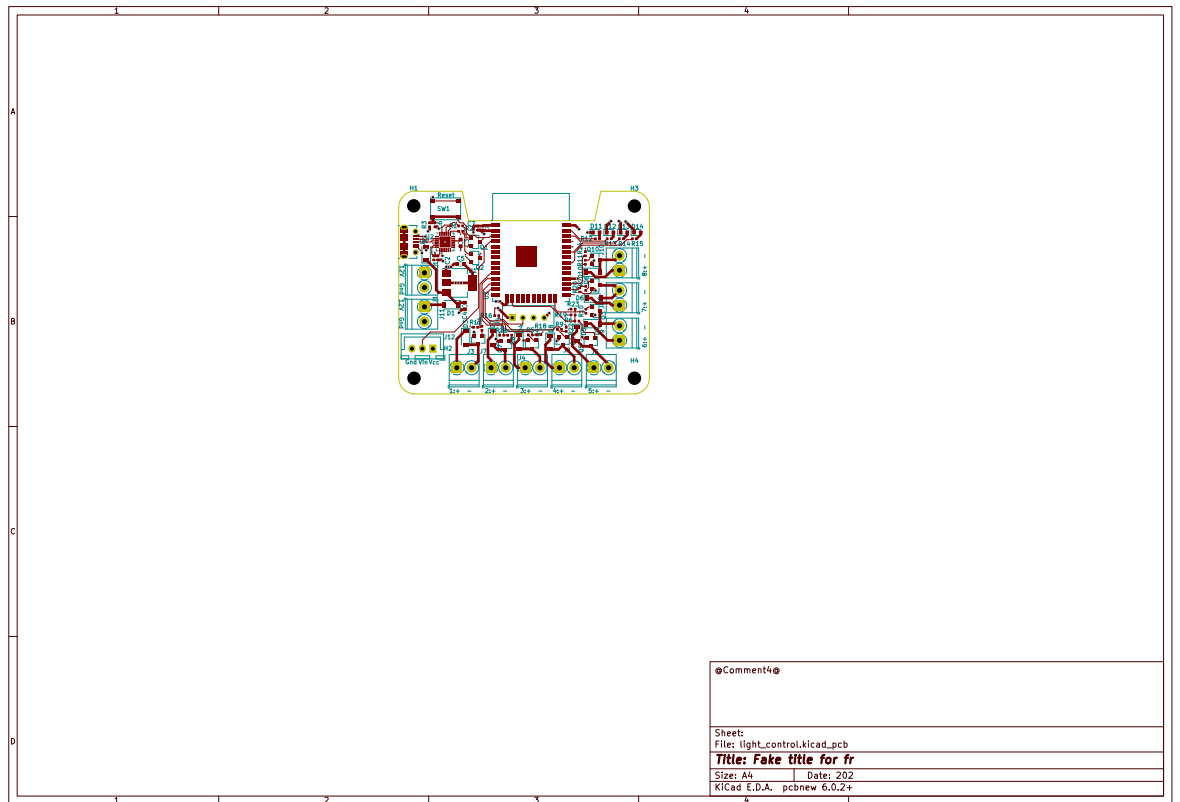


Figure 2: Top copper and silkscreen

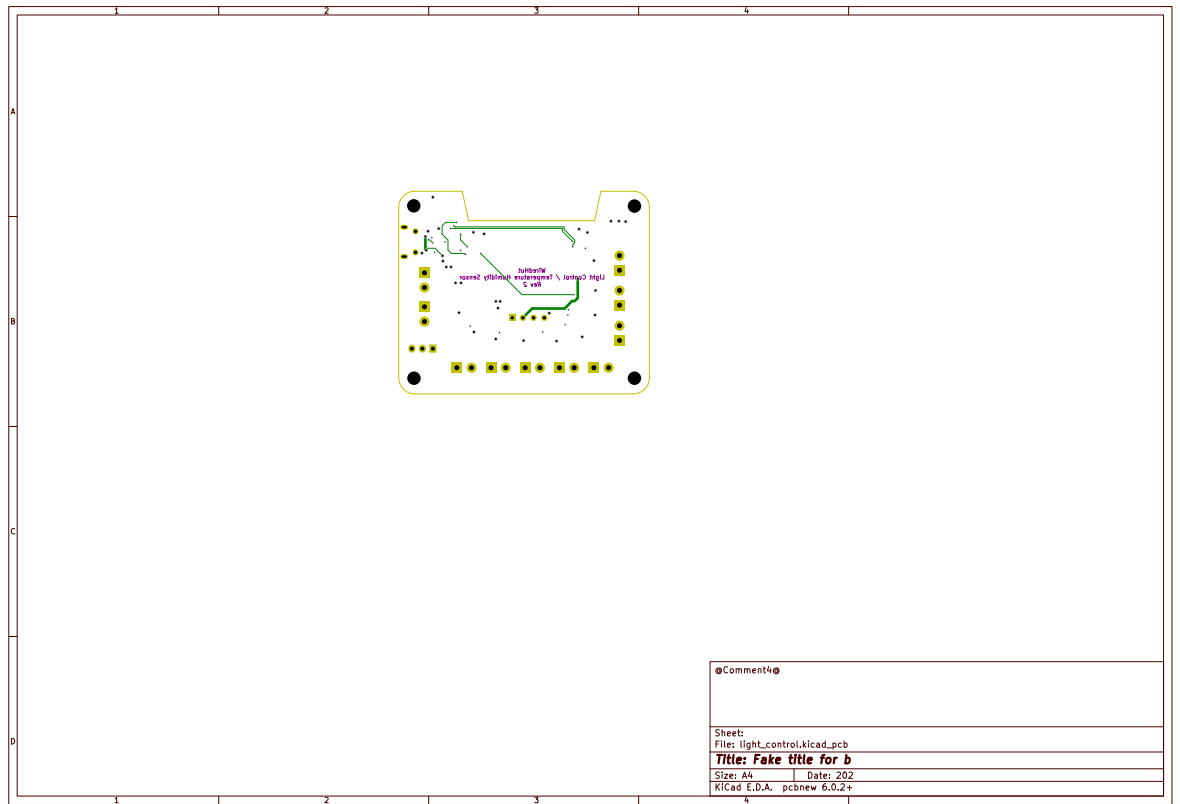


Figure 3: Bottom copper and silkscreen