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 / Kapton
- Finish: ENIG
- Layers: 4
- Copper thickness: 35 µm

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	0.000
F.Cu	copper		35			
dielectric 1	prepreg		480	FR4	4.5	0.020
In1.Cu	copper		35			
dielectric 2	core		480	FR4	4.5	0.020
In2.Cu	copper		35			
dielectric 3 (1/2)	prepreg		240	Kapton	3.2	0.004
dielectric 3 (2/2)	prepreg		240	Kapton	3.2	0.004
B.Cu	copper		35			
B.Mask	Bottom Solder Mask	Red	10	Dry Film	3.3	0.000
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: 0.35 mm (14 mils)

- Vias: 0.35 mm (14 mils) [Design: 0.3 mm (12 mils)]
- Pads: 0.7 mm (28 mils)
- The above values are real drill sizes, they add 0.1 mm (4 mils) to plated holes (PTH)

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: 0.08 mm (3 mils)

- By design rules: 0.08 mm (3 mils)

Eurocircuits class: 6D - Using min drill 0.25 mm for an OAR of 0.13 mm

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)

Oval holes:

- 0.6x1.3 mm (24x51 mils) (2)

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

- 0.35 mm (14 mils) (23)
- 0.6 mm (24 mils) (33)
- 0.7 mm (28 mils) (2)
- 0.9 mm (35 mils) (4)
- 0.95 mm (37 mils) (2)
- 1.05 mm (41 mils) (3)
- 1.3 mm (51 mils) (20)
- 3.2 mm (126 mils) (4)

Schematic

PCB Layers

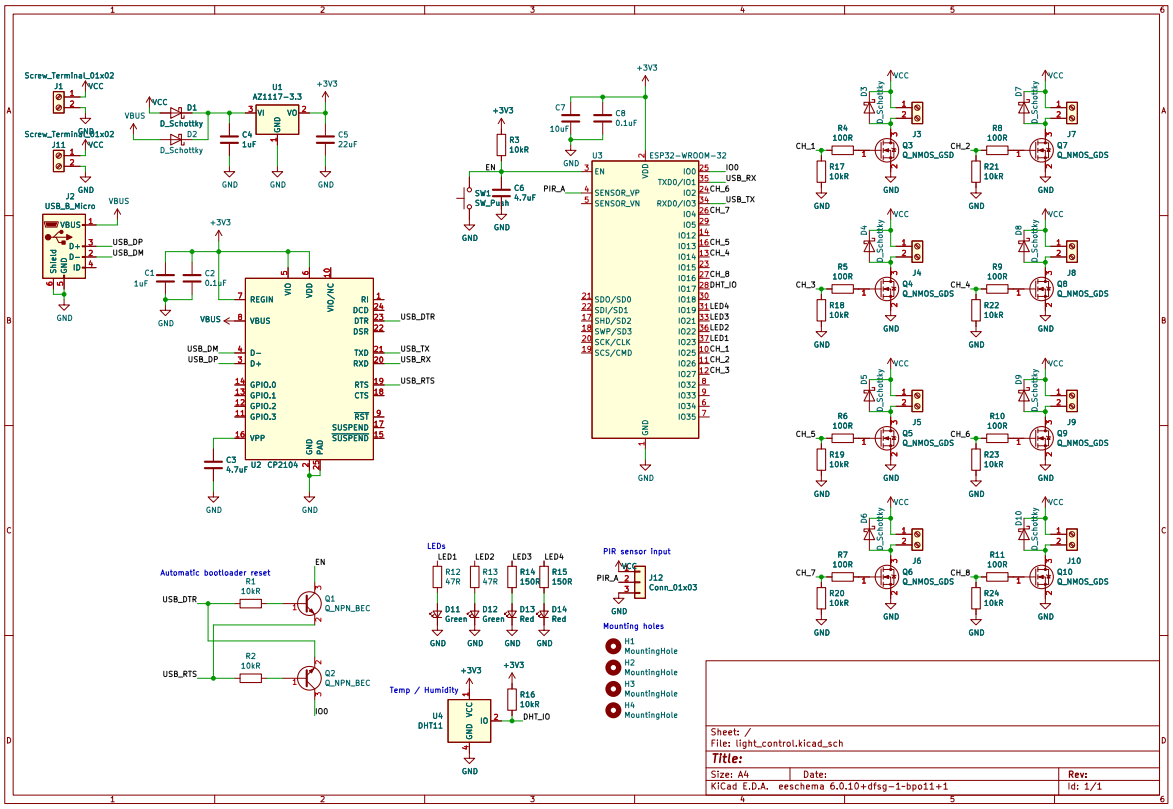

Figure 1: Schematic

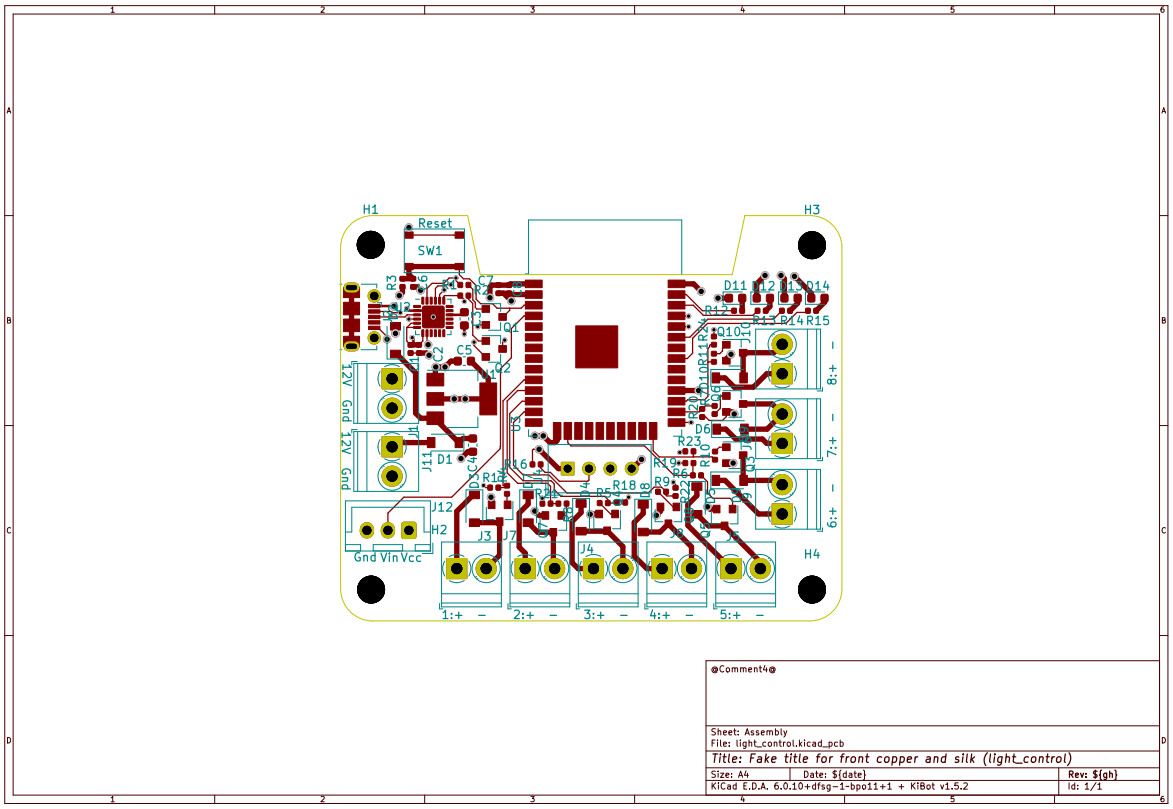

Figure 2: Top copper and silkscreen

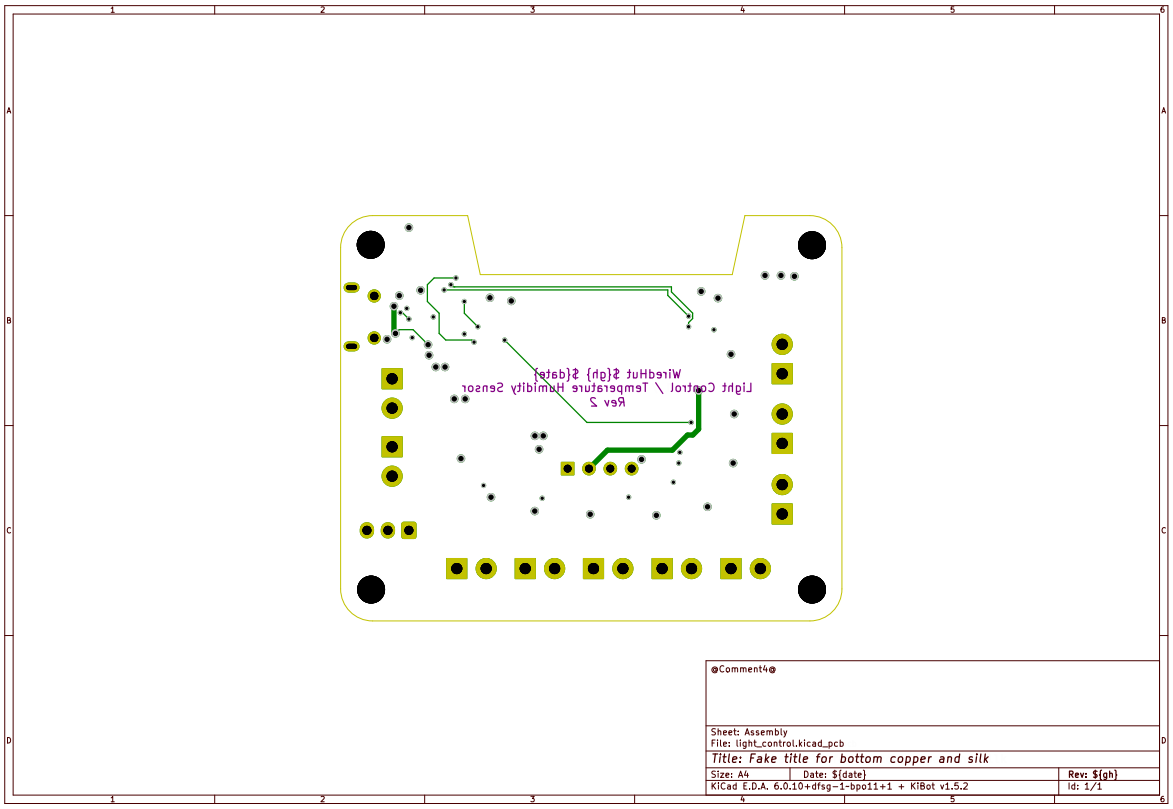

Figure 3: Bottom copper and silkscreen