PCB

Board size: 100.0x50.0 mm (3.94x1.97 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 [µm]	Material	Er	Loss tan
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: 0.25 mm (10 mils)

Track width: 0.38 mm (15 mils)

- By design rules: 0.15 mm (6 mils)

Drill: 0.45 mm (18 mils)

- Vias: 0.45 mm (18 mils) [Design: 0.45 mm (18 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: 0.69/0.33 mm (27/13 mils)

- By design rules: 0.69/0.33 mm (27/13 mils)
- Micro via: yes [0.2/0.1 mm (8/4 mils)]
- Buried/blind via: yes
- Total: 47 (thru: 47 buried/blind: 0 micro: 0)

Outer Annular Ring: 0.12 mm (5 mils)

- By design rules: 0.3 mm (12 mils)

Eurocircuits class: 8B - Using min drill 0.45 mm for an OAR of 0.12 mm

General stats

Components count: (SMD/THT)

- Top: 29/3 (SMD + THT)
- Bottom: 0/0 (NONE)

Defined tracks:

- 0.19 mm (7 mils)
- 0.38 mm (15 mils)
- 0.64 mm (25 mils)

Used tracks:

- 0.38 mm (15 mils) (368) defined: yes
- 0.76 mm (30 mils) (54) defined: no

Defined vias:

Used vias:

- 0.69/0.33 mm (27/13 mils) (Count: 47, Aspect: 2.3 A) defined: no

Holes (excluding vias):

- 1.0 mm (39 mils) (51)
- 1.2 mm (47 mils) (5)
- 3.2 mm (126 mils) (1)

Oval holes:

- 0.8x1.5 mm (31x59 mils) (5)

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

- 0.45 mm (18 mils) (47)
- 0.9 mm (35 mils) (5)
- 1.1 mm (43 mils) (51)
- 1.2 mm (47 mils) (5)
- 3.2 mm (126 mils) (1)

Solder paste stats:

Using a paste with 87.75 % alloy, that has an specific gravity for the alloy of 7.4 g/cm³ and 1.0 g/cm³ for the flux. This paste has an specific gravity of 4.15 g/cm³.

The stencil thickness is 0.12 mm.

Side	Pads with paste	Area [mm²]	Paste [g]
Total	126	179.65	0.89

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