



1 FAQs

1.1 Schematic and Footprint Related

1. After placing a component, I am unable to find the Component or I have zoomed out or zoomed in a lot, how to get the default view?
Ans: Click on View from top toolbar of Schematic editor and select Fit On Screen option. Alternately, you can also press the home key on your keyboard.
2. Is it standard procedure for one to have sources, probes and labels in the schematic while designing a board?
Ans : No!
You should remove the sources in the schematic and replace them with connectors. Similar approach for probes if you intend to connect the board to an Oscilloscope, multimeter, or DSO for observation.
Labels are used only for seeing the plots conveniently.
3. How do I know which footprint to use for which component/family of components?
Ans : Components and their appropriate footprint families are listed below
Resistors : Resistors_THT or Resistors_SMD.
Capacitors : Capacitors_THT or Capacitors_SMD.
Diodes : Diodes_THT or Diodes_SMD.
LEDs : LEDs.
BJTs, MOSFETs, JFETs, Voltage Regulators : TO_SOT_Packages_THT and TO_SOT_Packages_SMD.
Connectors: Pin_Headers, Socket_strips, all Connectors_* families.
ICs such as UA741, LM741, LM555: Housings_DIP, Housings_SMD.
4. How do I know which exact footprint to use?
Ans : Usually the dimension of the component for which the footprint is to be used is given in the name of the footprint.

2 Things to keep in mind while creating PCB Layout

2.1 I can't place tracks!

Ans First, select the Place Track tool and make sure you have selected either the Bottom or Top copper layer as current working layer.

2.2 I selected the working layer correctly, still can't place tracks!

Ans Remember that if two tracks are overlapping on the same layer, it will be termed as illegal. You can either re-arrange the components on the editor or change the working layer.

2.3 Unable to place a track near the pads of the components.

If the track which you are trying to place is closer to the pad than permitted, this issue will often occur. As the possibility of a track shorting with unwanted pads is high, the software won't allow you to place a track in the first place.

2.4 For which working layers, should I generate the Gerber Files for?

The number of layers on which information is present in the form of tracks, ground plane, text, dimension, board outline etc., you should generate gerber files for the same.

3 The shortcuts that can be used in the Pcbnew Layout Editor

3.1 What are the shortcut keys, how to access them and what do they do?

1. Open the Pcbnew Layout editor and press Shift and ? keys simultaneously.
2. This will display the total shortcut keys, also called as Hotkeys.
3. Please note that, if the shortcut key is related to a component, for example, changing its value or its orientation etc, then your cursor must be located on that component.

3.2 X

This calls the Place Track tool.

3.3 R

This rotates a component.

3.4 B

Fill or Refill All Zones.

3.5 M

This moves a component. After pressing M key, the component you chose will be tied to the cursor and you can place it anywhere in the Layout by clicking once on the layout editor.

3.6 C

This copies a component. After pressing C key, the component you chose will be tied to the cursor and you can place it anywhere in the layout by clicking once on the layout editor.

3.7 Ctrl + Z

Undo.

3.8 Ctrl + Y

Redo.