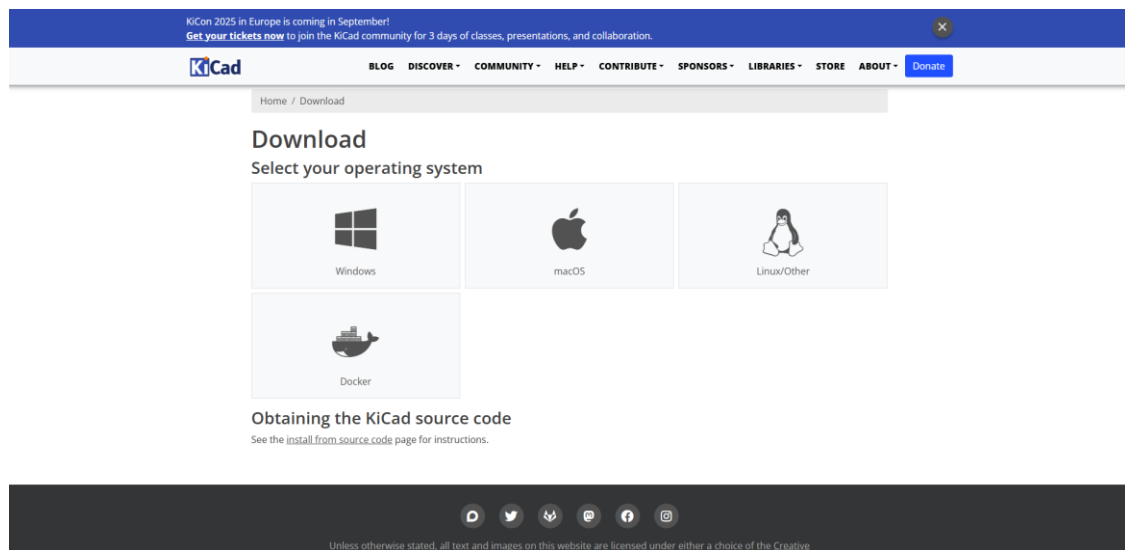


VISITING CARD_kicad

A practical, step-by-step user manual that walks you from a blank project to production-ready Gerbers using KiCad. Intended for beginners and intermediate users who want a clean, repeatable PCB design workflow.

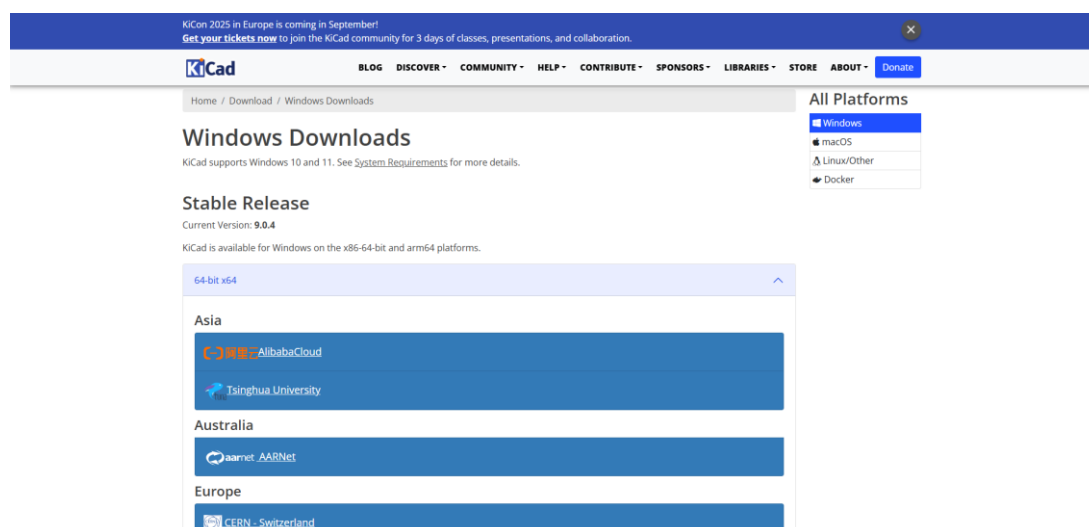
How to download the Kicad Software:

Step 1: Go to the official KiCad website-[Link](https://www.kicad.org)



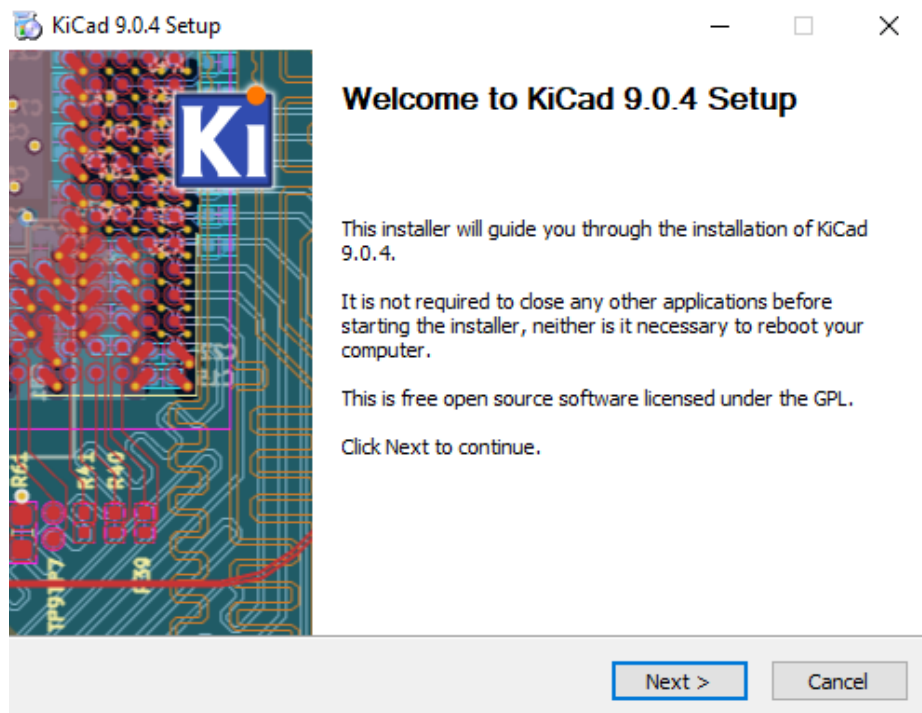
Step 2: Choose your Operating System

- ‘Windows’ → Download the installer (.exe)
- To select the Asia version.



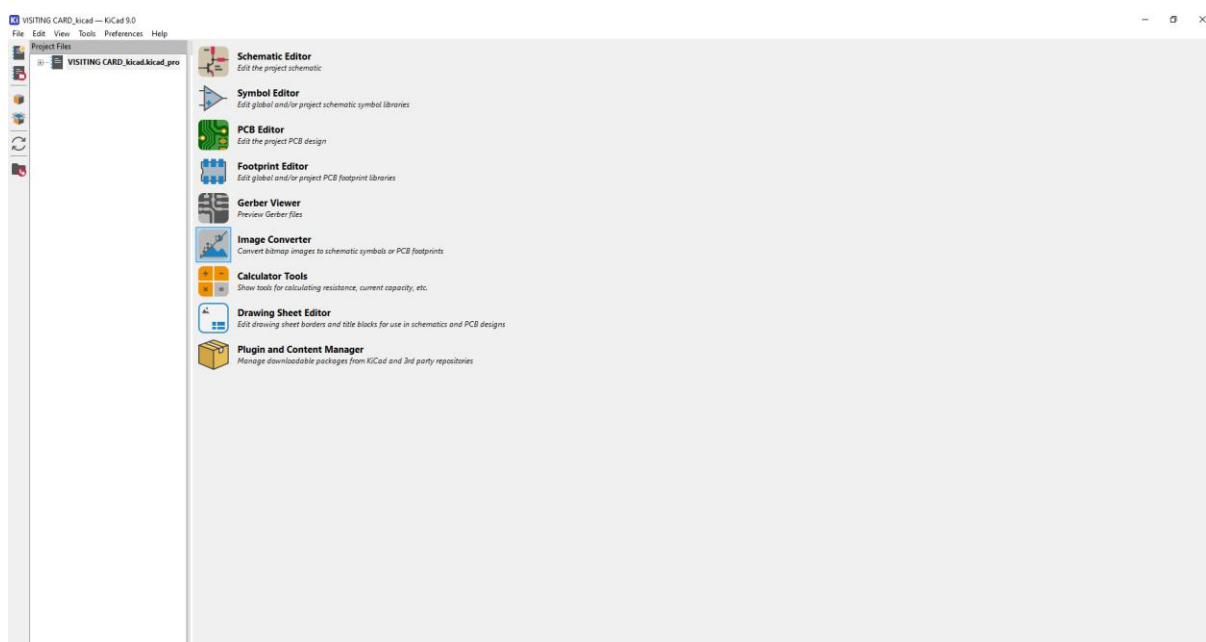
Step 3: Install

- Run the downloaded installer and follow the setup wizard.



Step 4: Verify installation

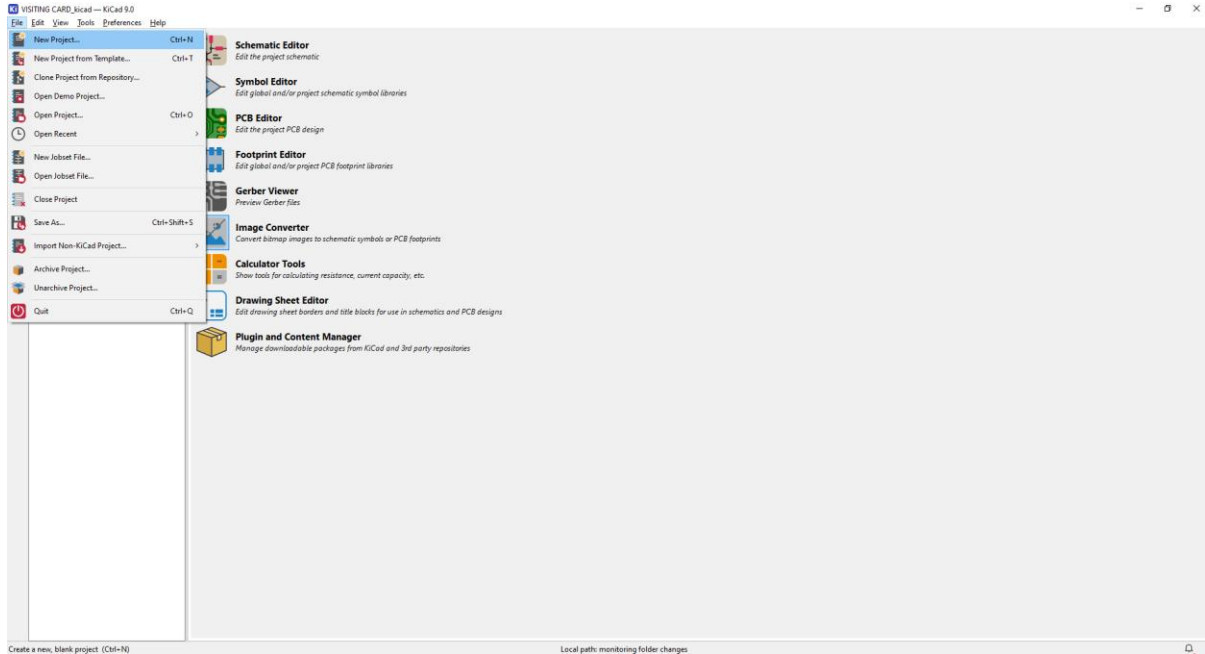
- Open KiCad from your applications menu.
- The KiCad Project Manager window should appear, showing buttons for Schematic Editor and PCB Editor.



Start a project:

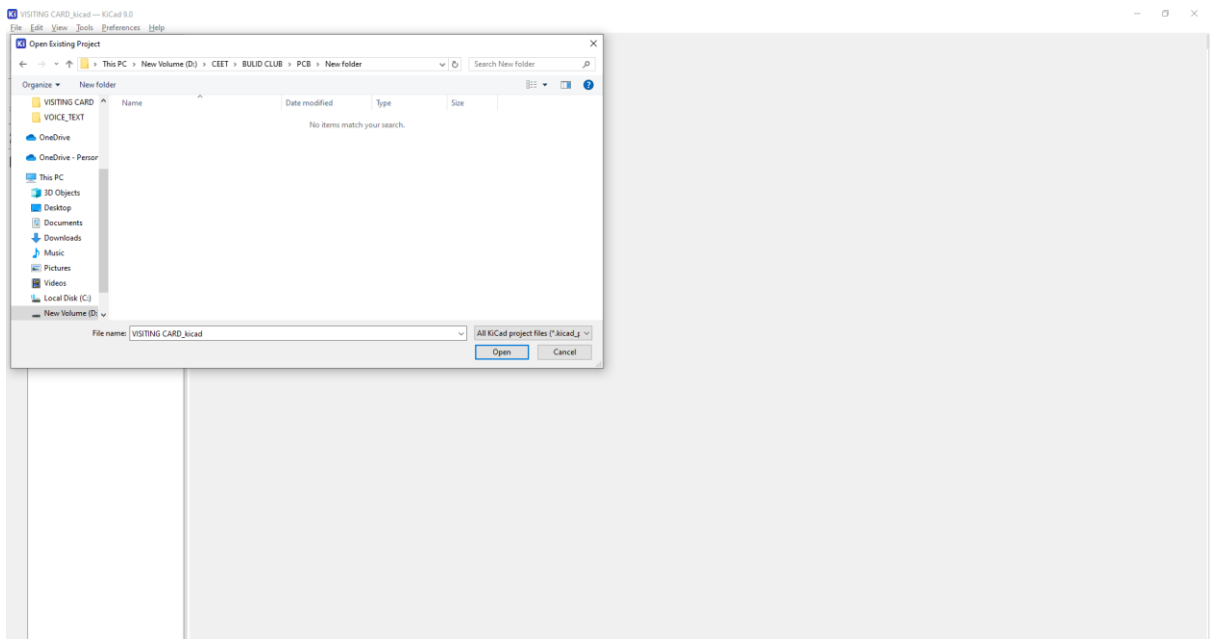
Step1:

- File → New Project → give a clear name



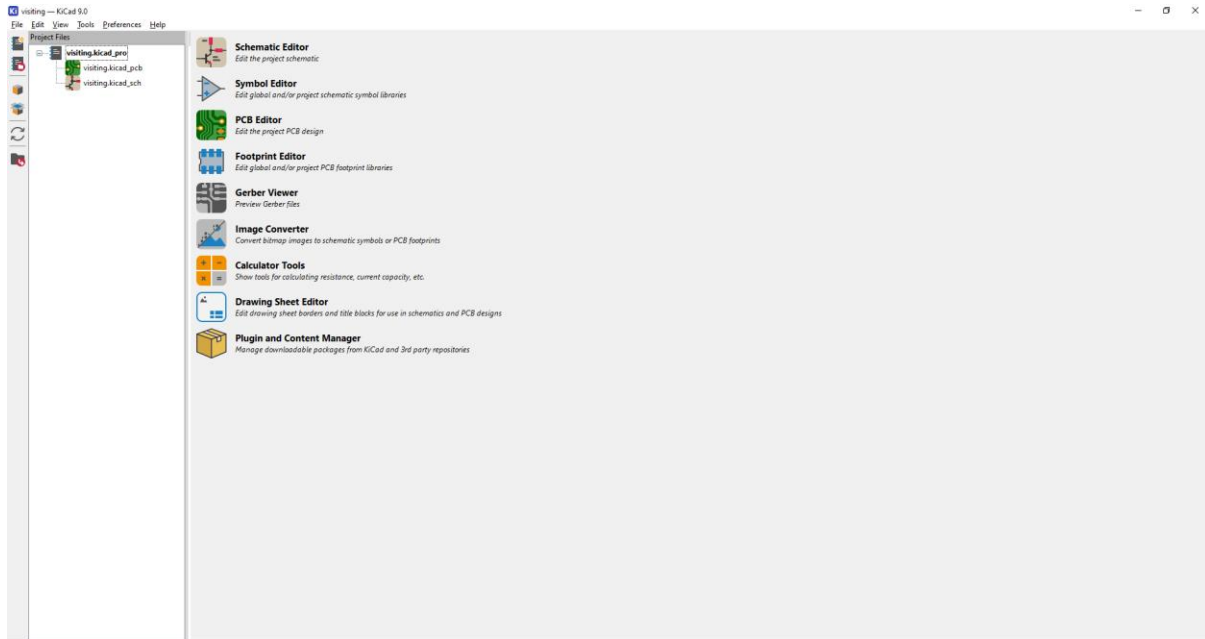
Step2:

- Enter the project title
- Save in a folder structure.



Step 3:

- Open the schematic editor file

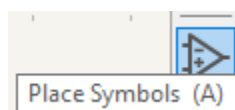


Step 4:

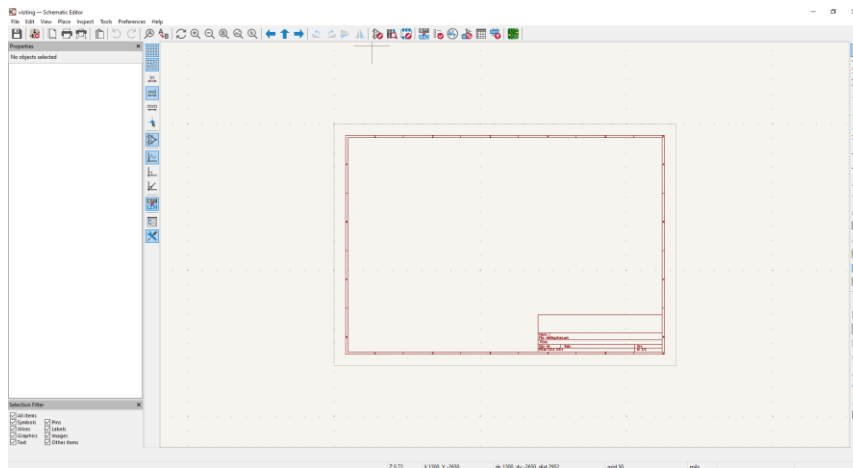
- Select all components list

S. No	Components	Quantity
1.	NE555D	1
2.	SW SPST	1
3.	10uF 63V Capacitor DIP	1
4.	1k Ohm 1/4W 0603	2
5.	LED 0805	12
6.	Cell Holder	2

- Click the Place Symbols ion,

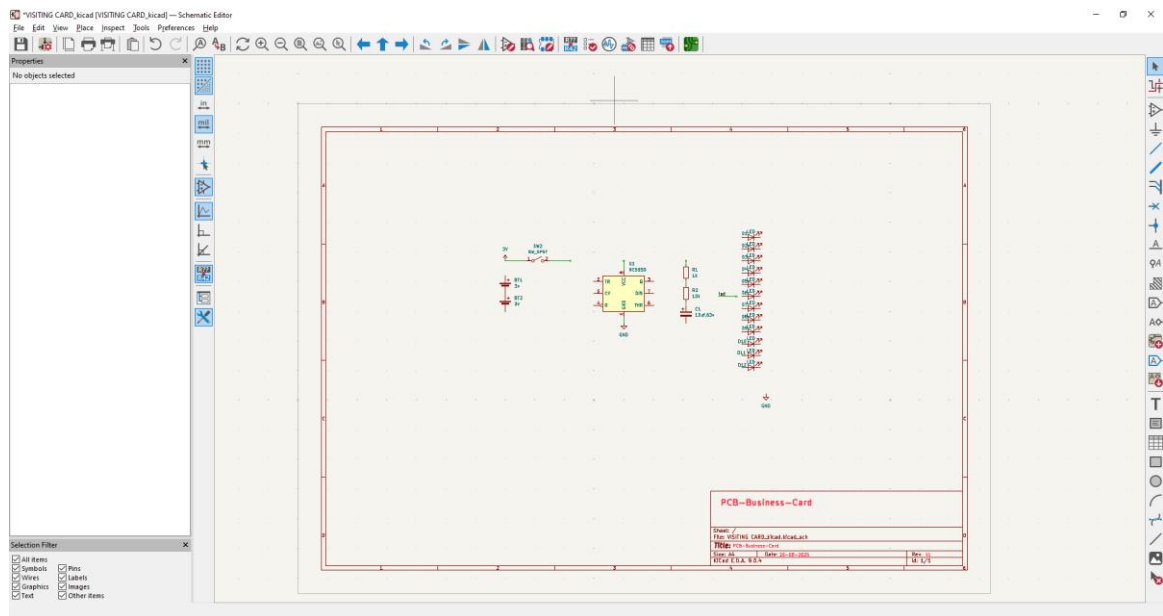


- On your right-side top corner / press 'A' key word

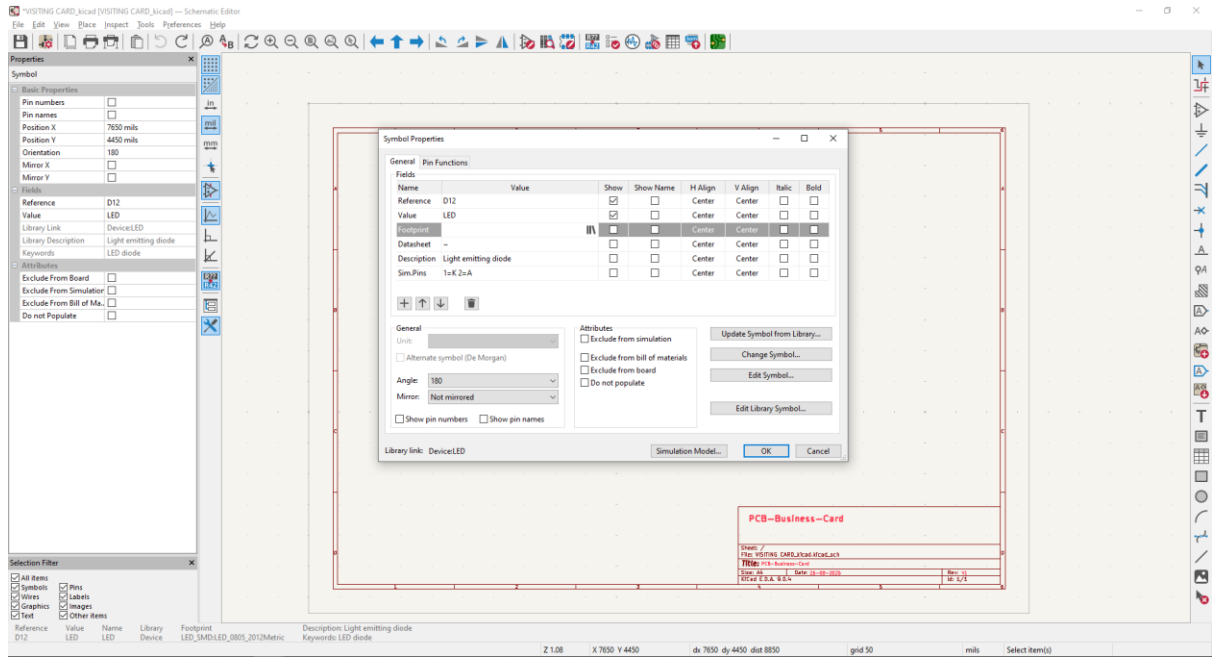


Step 5:

- To place all components on the sheet

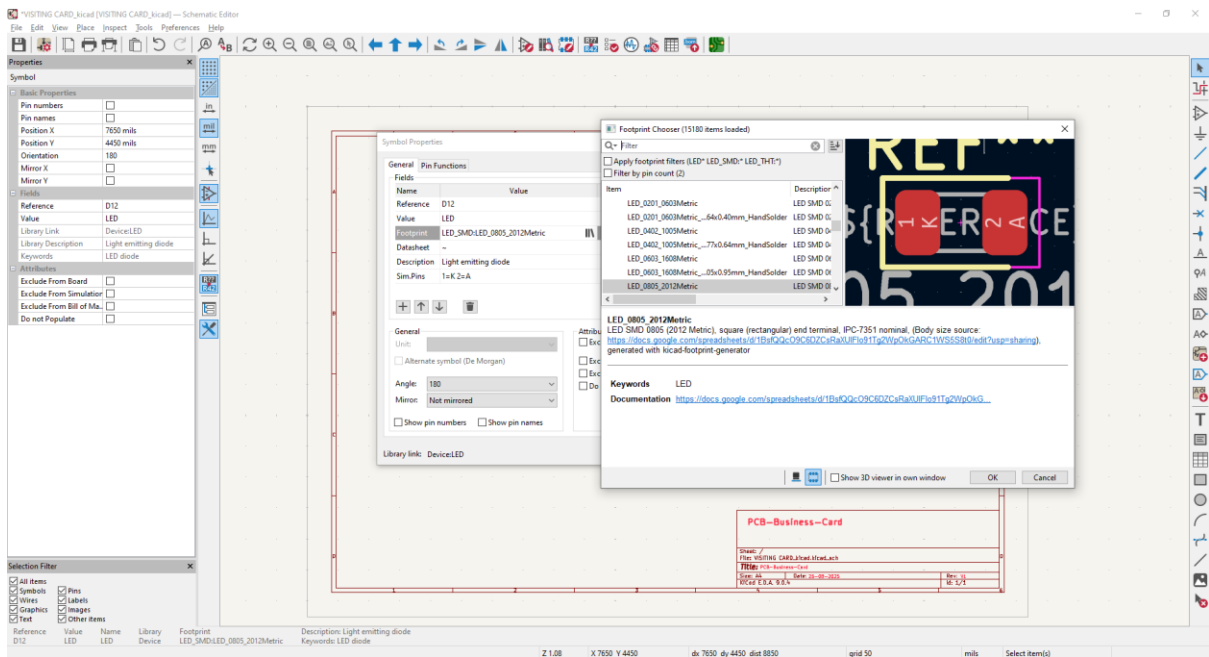


- And import the footprint for all Components
- Select the component press 'E' add the footprint



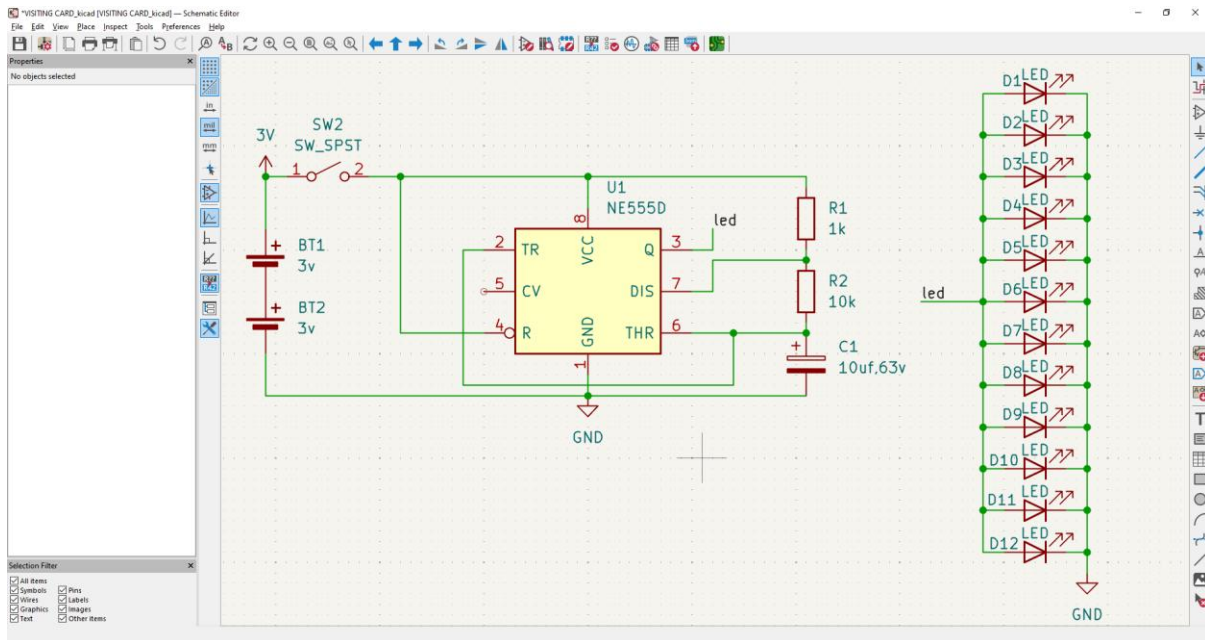
Step 6:

- Select the part number (like a package-0603)



- Connect symbols with wires

- Press W key word

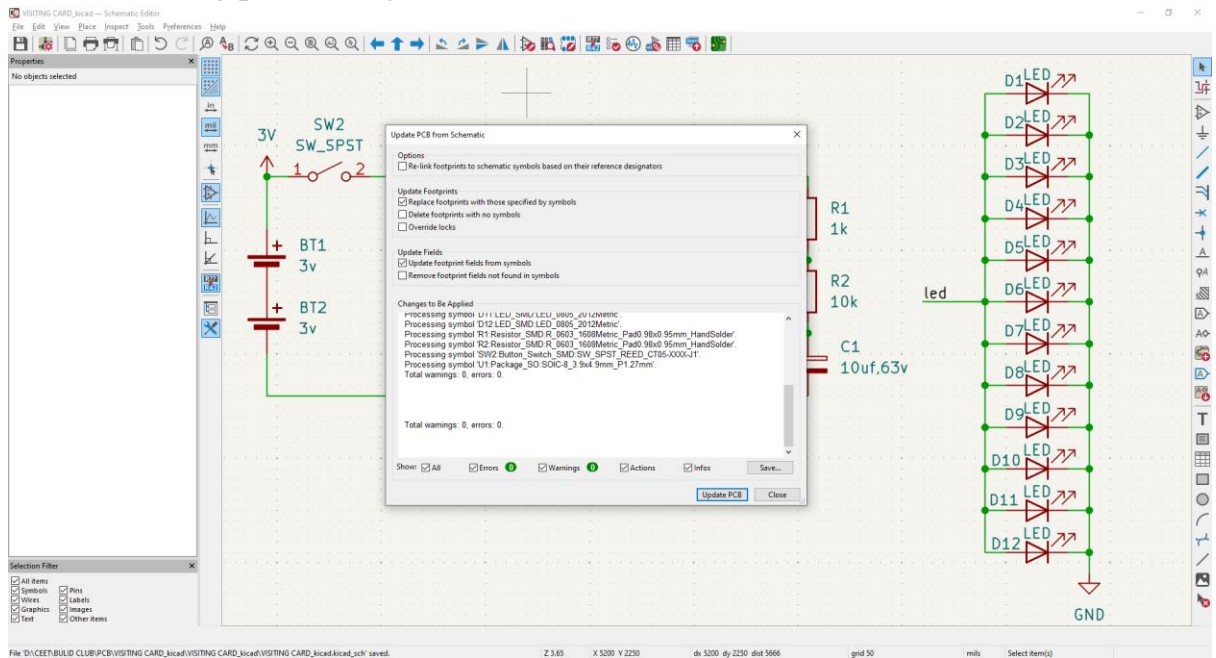


- Save the Schematic file.

Step 7:

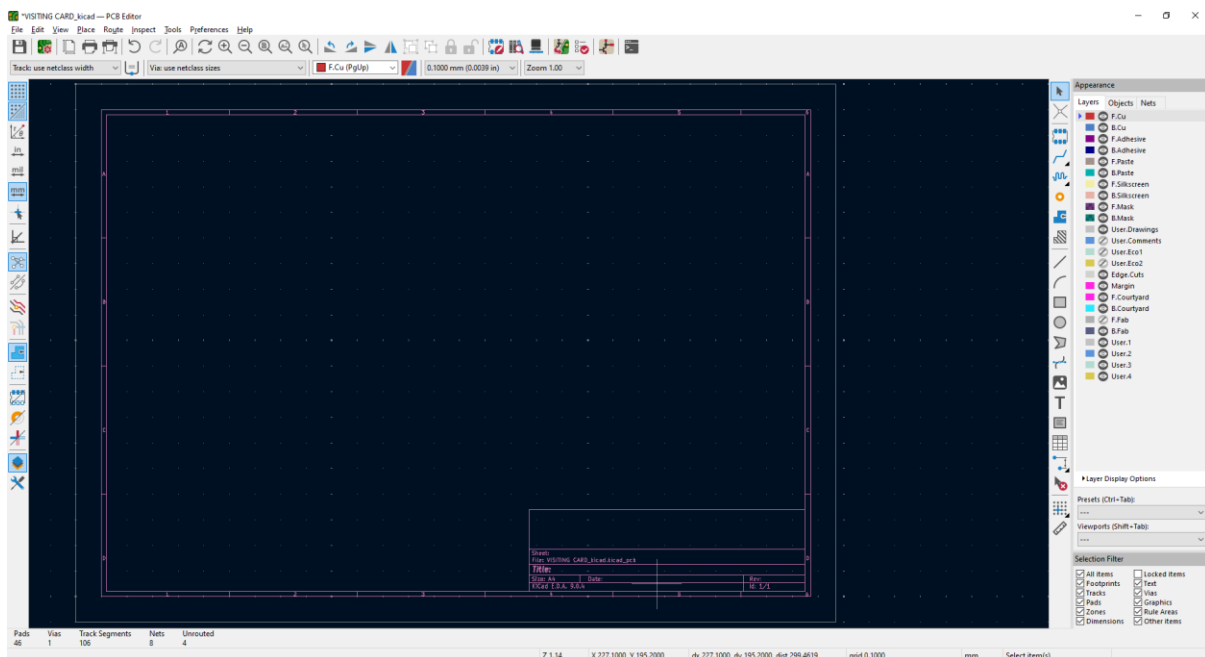
- Go to 'Tool' → 'Update PCB from schematic' / F8
- Check each schematic symbol must have a matching PCB footprint
- If any footprint has missing it can't update PCB, it's shown error warning

- Go to clear the error (like a No unconnected, annotate symbols, Fix wiring errors, missing power flags)

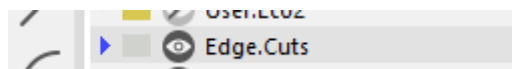


Step 8:

- Set the board outline (Edge Cuts layer)

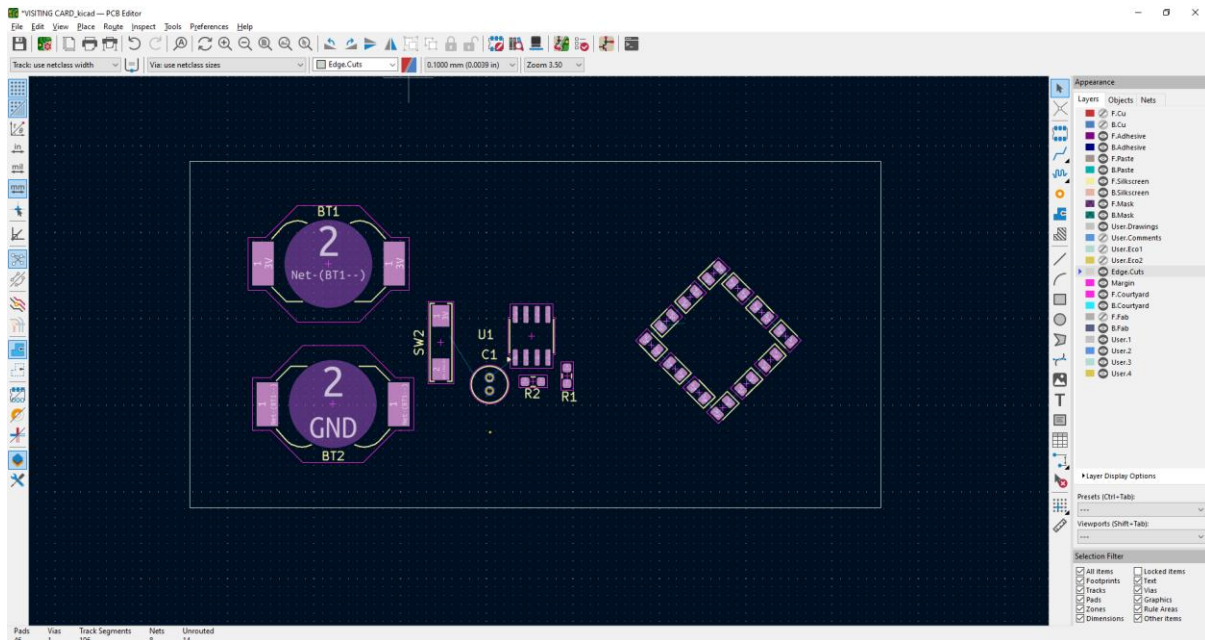


- Click the Place Symbols icon, On your right-side corner



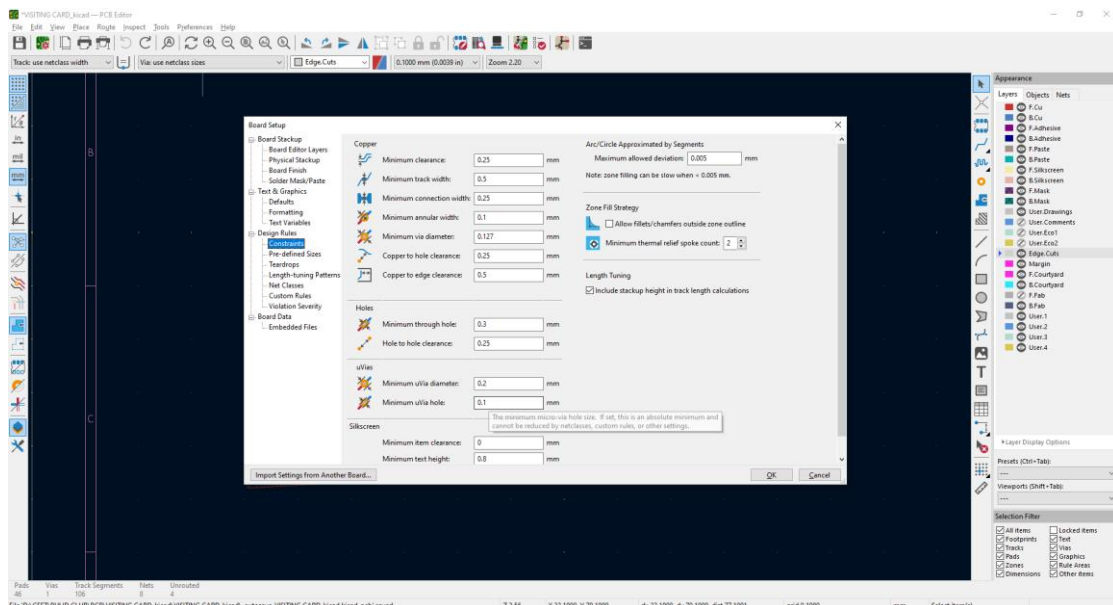
- Select the rectangle tool using to set the board outline

- To place all components on the sheet



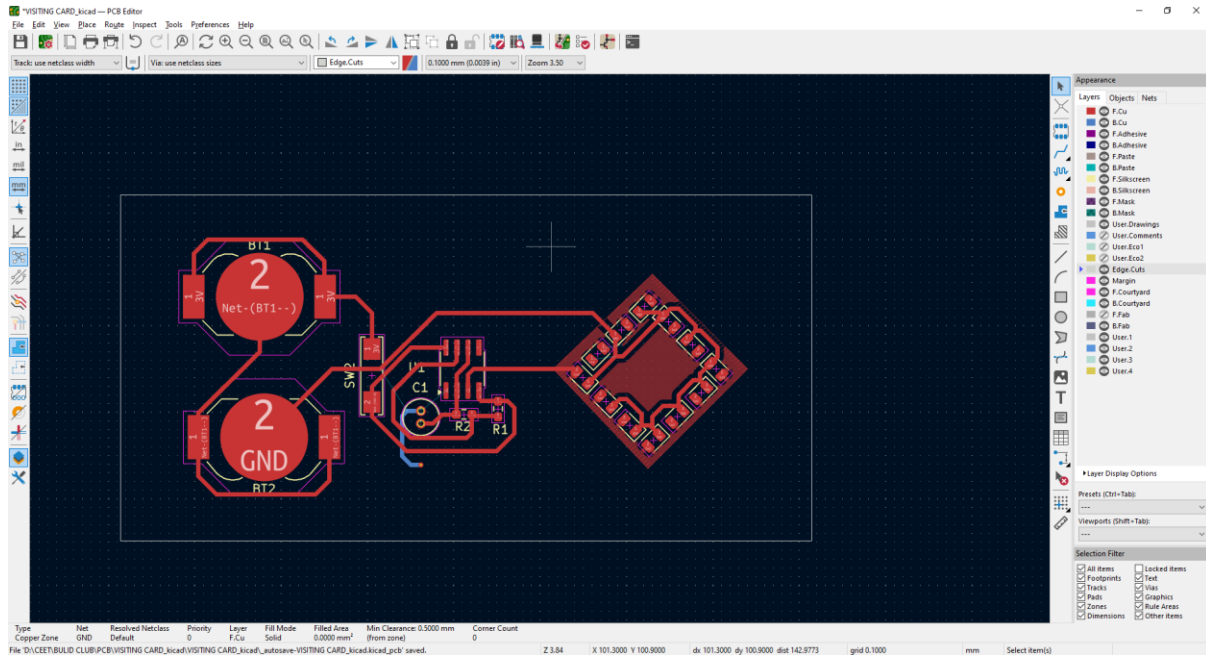
Step 9:

- Next go to 'Board Setup' → 'Constraints'
- Set the details of all option
- And refer the [link](#) (**Disclaimer** – 'Constraints' depends on PCB manufacturer)



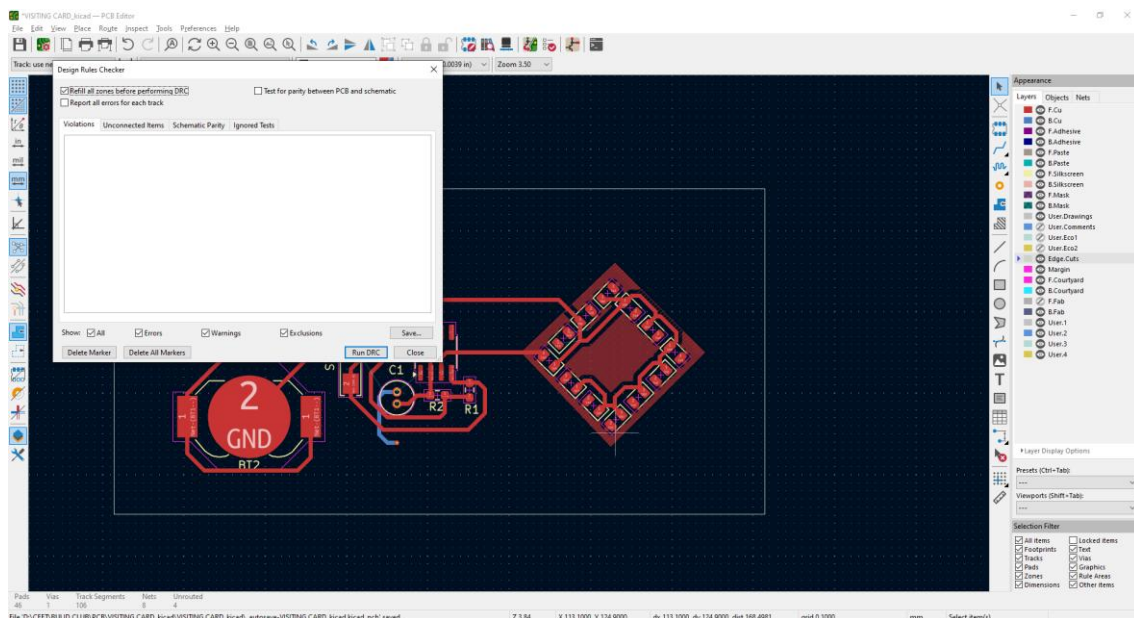
Step 10:

- Go to select the layer after routing in the traces
- Traces thicker increase or decrease width via net class selection based



Step 11:

- Go to 'Inspect' → 'Design Rules checker'
- Check each Constraints value must have a matching PCB design
- If any Constraints value has missing it can't run DRC, it's shown error warning Go to clear the error (clearances, unconnected pins, minimum annular rings)

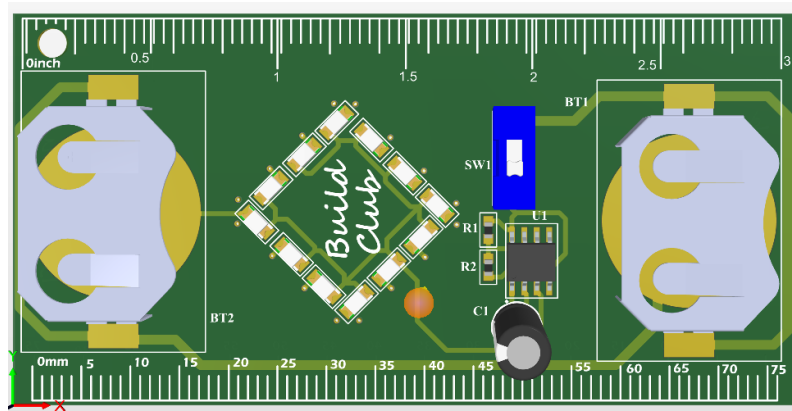
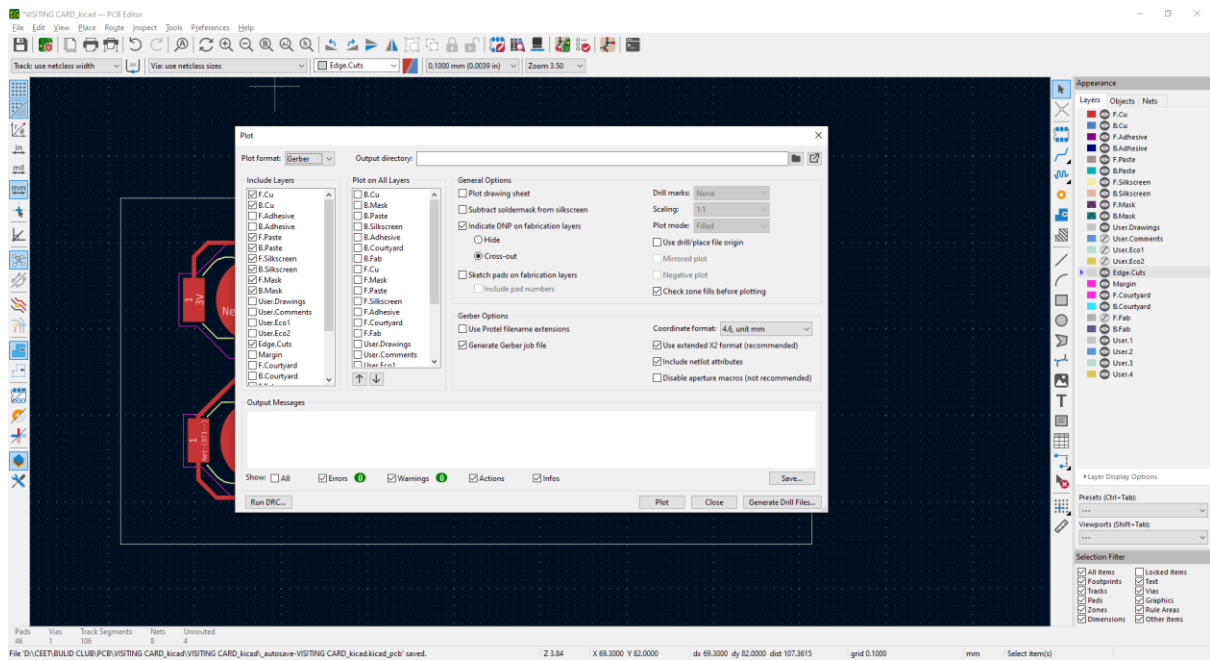


Step 12:

- If clear all error go to Fabrication outputs → Gerber, click it
- Select all layers

- F. Cu (Top copper)
- B. Cu (Bottom copper)
- F. Silk (Top silkscreen)
- B. Silk (Bottom silkscreen)
- F. Mask (Top solder mask)
- B. Mask (Bottom mask)
- Edge. Cuts (Board outline)
- Drill file (Excellon)

- Click the Generate Drill Files option



Reference [link](#)