**Setup of the Laser machine**

First download LaserGRBL software and install

Once the software has been downloaded and installed we can start uploading files to the laser for engraving and cutting.

To start we need to have the pcb image from KiCad in the correct format for Laser GRBL to read the file properly.

1. In KiCad go to File -> Plot
2. Graphical user interface, text, application, email

   Description automatically generated

Set the Plot format to SVG and select the layers that will be necessary to print the stensil (From what I saw only the F.Mask layer is necessary)

A screenshot of a computer

Description automatically generated with medium confidenceOnce the file has been created we can start the LaserGRBL program. Open the software and go to the following in the upper left corner of the software.

To find the COM necessary to connect to the hardware go to device manager -> COM Ports (Though it should automatically detect the correct port)

Click on the lightning symbol and connect to the hardware.

Next click on File -> Open File and select the file that you want printed.

This popup should appear once the file has been selected

Graphical user interface, application

Description automatically generated

Click on the book symbol to open the material database.

Graphical user interface, application

Description automatically generated

Set to the following if you want to cut the stencil (And the material that is being used is still paper)

*For the Business card material 4-5 passes are recommended*

*And the paper with the tape around only 1 pass (2 might make the cuts a bit cleaner but will burn through the paper)*

Once the settings have been selected, click **Apply** and then **Create**

A screenshot of a computer

Description automatically generated with medium confidence

The image should then appear as above (Try your best to ensure the image is as close to the left corner as possible, to ensure this just move the pcb in kicad closer to the upper left corner)

Once the file has been uploaded and connection to the hardware has been established we can start cutting. To set the number of runs change the 1 in the upper left corner to the number of runs required

Once the number of runs has been set click on the play button and the laser should start.