

Mini CNC plotter

Using components available in the FabLab laboratory, the project was assembled.

components used:

Arduino nano.

3 Drivers of the type(Uln2003).

3 stepper motors (28BYJ-48).

Mechanical parts printed using the 3D printer in the FabLab laboratory.

After assembling process components and connecting the motors with the drivers, we need to upload the library (RGL) on the Arduino.

The project is controlled by Software(UGS_Universal Gcode Sender), after defining the plotter on the program and specifying the coordinate axes and the positive directions of the coordinate axes, then we can control the project.

After selecting the image, the program (Inkscape) is used to convert it into a vector and then save it as an (SVG)type.

Using the (jscut.org)site we can convert the file from format(SVG) to (G_code)file after specifying the appropriate parameters.

We now have a (G_code)file, using (UGS_Universal Gcode Sender) Software we open the (G_code)file and then start the drawing process.