IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 3, May 2022

Mini CNC Plotter

Rohit Somnath Narode, Shubham Madhukar Teke, Mangesh Sanjay Waghmare, Samadhan Nanasaheb Gavhane, Prof. S. K. Gupta

Department of Electronics & Telecommunication Engineering Sanjivani Rural Education Society's, Sanjivani College of Engineering, Kopargaon, Maharashtra, India

Abstract: With the advancement of technology, demand for computer numerical control (CNC) plotter machines in educational institutions and laboratories is rapidly rising. This research paper will present an affordable model of a CNC plotter machine which is able to draw a 2D diagrams images on to a small size paper very accurately and efficiently, using simple algorithms and available components. "CNC PLOTTER" is a work which is design to done a low cost three axis mini CNC plotter using stepper motor, Arduino micro controller and motor control software. At first the user needs to convert any image file or text file into G-code using Inkscape software and then feed it into the machine using processing software Arduino Uno is used as a control device for our project. This plots the required image on to the paper using some processing software and using mechanical arrangements. So, in our project, we are trying to create a low cost CNC plotter of small or medium size and an open structure.

Keywords: Computer Numerical Control (CNC), Image File, G-Code, Micro-Controller Unit (MCU), Driver Motors, Plotting on the Paper

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