ABSTRACT

With the rapid development of technology, human needs also increase along with the times. Especially in the printing industry, a tool that can print an image with a higher level of detail is needed than ordinary printers and one of the tools to answer this need is a plotter.

In this study, the author will design a three-axis plotter based on Arduino Uno that can be operated with a PC. This tool will use Arduino Uno as a microcontroller, Stepper as an x and y axis actuator, and a servo as a z-axis driver that moves the pen. By implementing a data input in the form of pixel coordinates obtained from the processing interface application, the plotter can move the actuator according to the coordinates and can produce the desired image.

From the results of the tests that have been carried out, it shows an average accuracy value of 99.94% with an average error accuracy value of 0.0583%.

Keyword : Plotter, Vector, Arduino Uno