

**Abstract:** XY Plotter is an embedded system that works based on the principle Computer Numerical Control. XY Plotter basically works with two stepper motors and a servo motor, wherein the robot plots the input given from the computer on the drawing board using ATMEGA328p microcontroller on a open-source physical computing platform arduino. The XY plotter has a two axis control and a special mechanism to raise and lower the pen. The drawing robot is a robot which offers the fastest way to powerfully produce very large drawings. This Robotic X-Y Plotter which is basically centered to the vector graphic device, wherein the robot designs or sketches the input given from the computer on the drawing board or a sheet of paper using arduino UNO microcontroller on a open-source physical computing platform arduino IDE software. The board is fed with polargraph server arduino based program which is required for the accurate diagram, and thus with the aid of processing software (version 1.0.5) in which polargraph libraries are uploaded, the robot starts sketching. The X-Y robotic plotter, as the name suggests has a two axis control (i.e. X and Y axis), and a distinctive mechanism to lift up and lift down the pen. Each axis is drove using a single servo motor. The plotter works more efficiently, which is used to recording or plotting two dimensional data on a rectangular coordinate system. In this, arduino compatible main board with two stepper motors for ease moving of pen holder and servo motor is used to lift the pen. For this we are using the software like arduino IDE software and G code converter.