

Mini CNC

ABSTRACT

This DIY Arduino CNC Machine can draw most of the basic shapes, texts and even cartoons. It's operation is similar to the way a human hand writes. It's faster and more accurate compared to the way a human being can write or draw.

Working

Machine will be coded to read the gcode, gcode will be send from PC or any other serial gcode sender device

Machine will perform the task according to the gcode received

Machine can have multiple head to perform different task like cutting, drilling ,milling ,writing or engraving

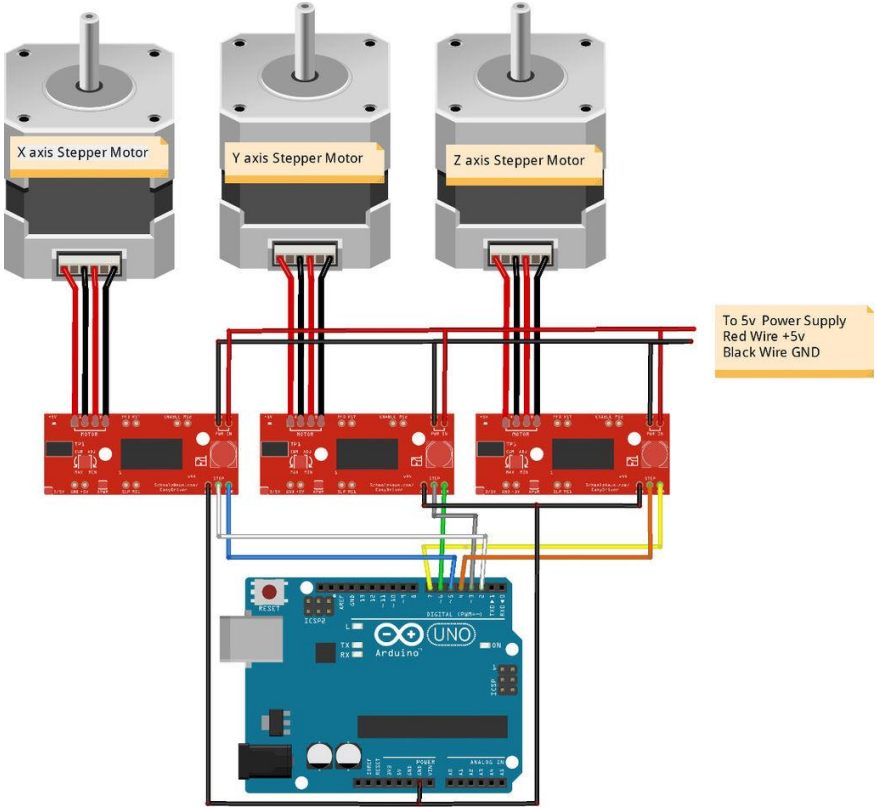
Main controller board will understand the gcode and send will drive stepper motor accordingly
Speed and steps of motor are calculated and synchronised to move particular distance in particular steps

There are also limit switches present to know when machine reach limit position or when restart to initiate position.

Components

- Arduino Uno
- Stepper motors
- Drivers
- Arduino CNC Shield
- 3d printed part

Circuit Diagram



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