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CNC Shield V3 For Arduino

Introduction

This CNC shield software is designed to control a CNC or a 3D printer. It comes with 4 sockets A498 stepper driver. This Board has Arduino pin connection and pins for engine and other peripherals.

Specification

- Motor Voltage = 8V to 35V
- Logic Circuits Voltage = 3V to 5.5V
- Current = 2A (MAX)
- Protection = Under-Voltage, over-current and over-temperature

Objective

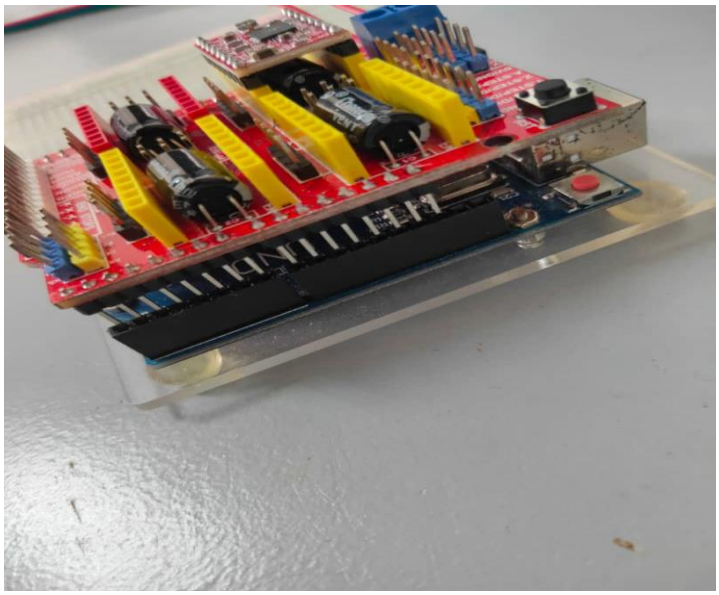
- To control the stepper motor using CNC Shield V3.

Component

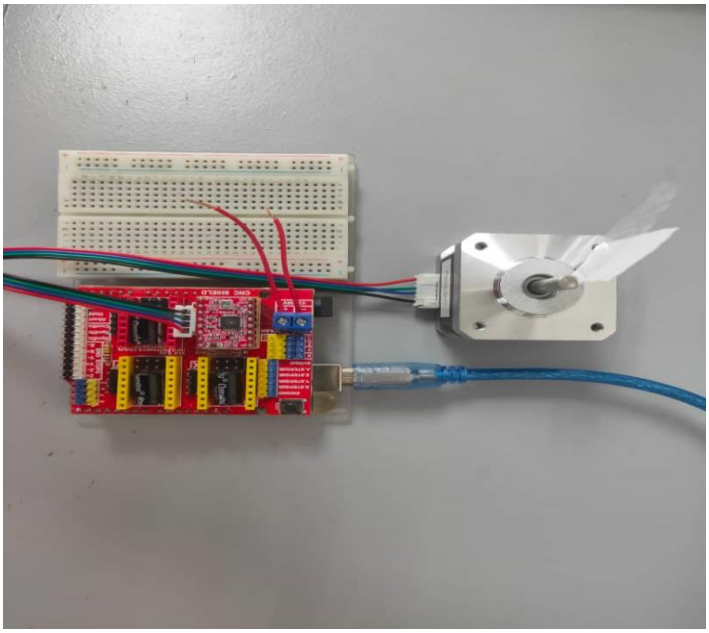
- CNC Shield V3
- Arduino UNO
- Stepper Motor
- 9V Battery
- Jumper Wire

Procedure

1. Insect a pin CNC Shield V3 on the Arduino Uno.



2. Connect the wire from Stepper Motor to CNC Shield V3 (Z).



3. Upload the coding into Arduino Uno.

```
const int stepZ = 4;
const int dirZ  = 7;
const int enPin = 8;


void setup() {

  pinMode(stepZ,OUTPUT);
  pinMode(dirZ,OUTPUT);
  pinMode(enPin,OUTPUT);

  digitalWrite(enPin,LOW);
  digitalWrite(dirZ,HIGH);
}

void loop() {

  for(int x = 0; x < 800; x++) {
    digitalWrite(stepZ,LOW);
    delayMicroseconds(1000);
    digitalWrite(stepZ,HIGH);
    delayMicroseconds(1000);
    }

   delay(1000); // One second delay
}
```

4. Connect the battery(9V) to CNC Shield V3.