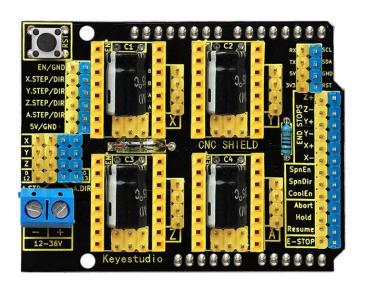
STEPPER MOTOR SHIELD FOR CNC, 3D PRINTER OR ENGRAVER



## INTRODUCTION

keyestudio3D printer stepper motor shield V3 can be used as driver expansion board for engraving machines and 3D printers. It has in total 4 channel slots for A4988 stepper motor driver modules (not included) for driving 4 channel of stepper motors. Each channel of stepper motor only needs 2 IO ports, which means 8 IO ports is sufficient to manage 3 stepper motors. This shield can make quick work for managing stepper motors in your project.

## SPECIFICATION

- 1.Latest Arduino CNC Shield Version 3.0
- 2.GRBL 0.8c compatible. (Open source firmware that runs on an Arduino UNO that turns G-code commands into stepper signals)
- 3.4-Axis support (X, Y, Z, A-Can duplicate X,Y,Z or do a full 4th axis with custom firmware using pins D12 and D13)
  - 4.2 x End stops for each axis (6 in total)
  - 5. Spindle enable and direction
  - 6.Coolant enable
- 7.Uses removable Pololu A4988 compatible stepper drivers. (A4988, DRV8825 and others)
- 8. Jumpers to set the Micro-Stepping for the stepper drivers. (Some drivers like the DRV8825 can do up to 1/32 micro-stepping)
  - 9.Compact design.
- 10.Stepper Motors can be connected with 4 pin molex connectors or soldered in place.
- 11.Runs on 12-36V DC. (At the moment only the Pololu DRV8825 drivers can handle up to 36V so please consider the operation voltage when powering the board.)