



# keyestudio



## Ks0095 Arduino CNC Kit / CNC Shield V3.0 +keyestudio Uno R3+4pcs a4988 Driver / GRBL Compatible

### Introduction:

Keyestudio CNC Shield V3.0 can be used as driver expansion board for engraving machines. 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 6 IO ports is sufficient to manage 3 stepper motors. This shield can make quick work for managing stepper motors in your project.

### Specification:

keyestudio CNC Shield Version 3.0

GRBL 0.8c compatible. (Open source firmware that runs on an UNO that turns G-code commands into stepper signals)

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)

2 x End stops for each axis (6 in total)

Spindle enable and direction

Coolant enable

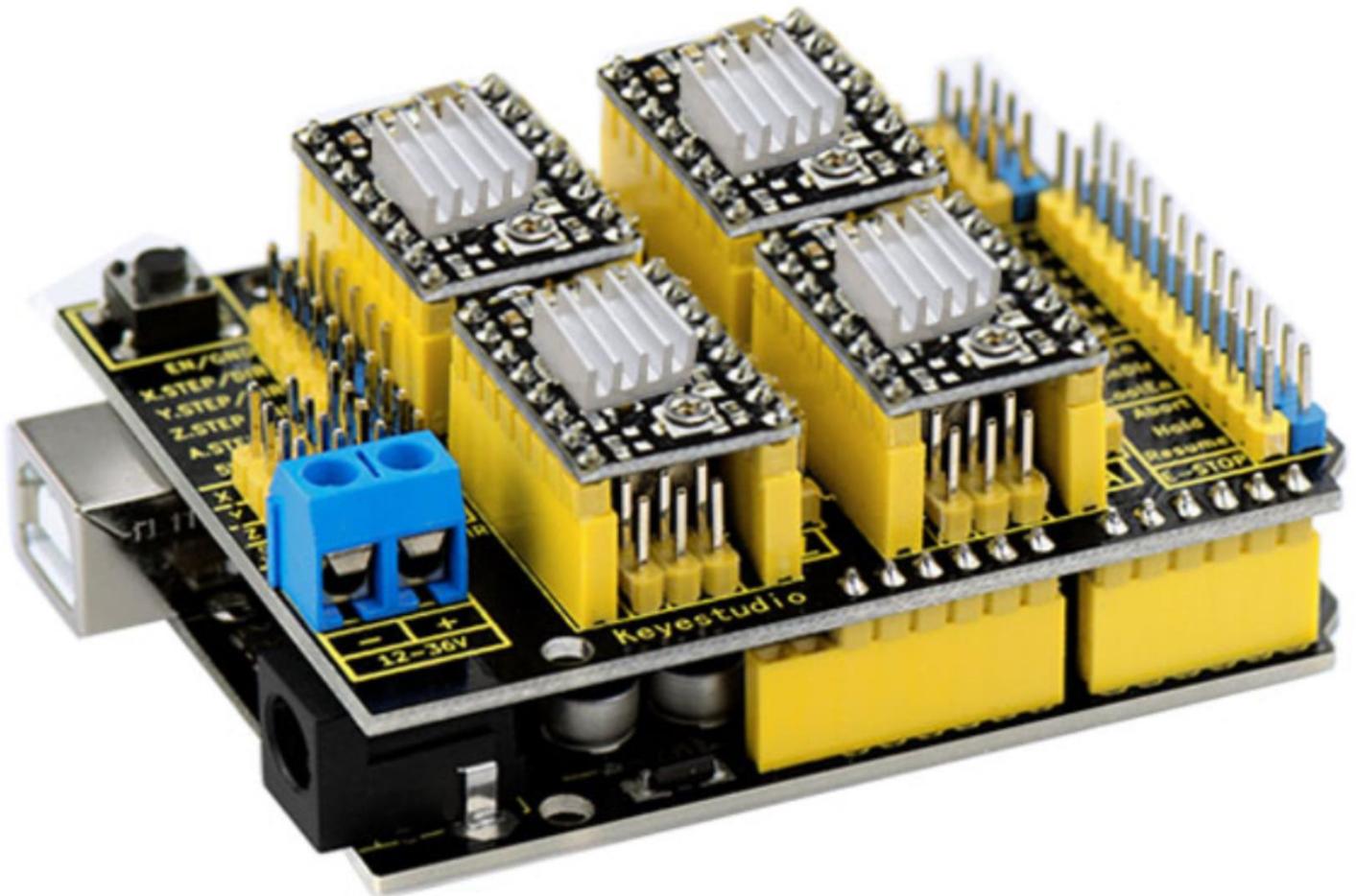
Uses removable Pololu A4988 compatible stepper drivers. (A4988, DRV8825 and others)

Jumpers to set the Micro-Stepping for the stepper drivers. (Some drivers like the DRV8825 can do 1/32 micro-stepping )

Compact design.

Stepper Motors can be connected with 4 pin molex connectors or soldered in place.

Runs on 12V DC.



### Resources:

[https://wiki.keyestudio.com/Ks0095\\_Arduino\\_CNC\\_Kit\\_/CNC\\_Shield\\_V3.0\\_%2Bkeyestudio\\_Uno\\_R3%2B4pcs\\_a4988\\_Driver\\_/GRBL\\_Compatible](https://wiki.keyestudio.com/Ks0095_Arduino_CNC_Kit_/CNC_Shield_V3.0_%2Bkeyestudio_Uno_R3%2B4pcs_a4988_Driver_/GRBL_Compatible)