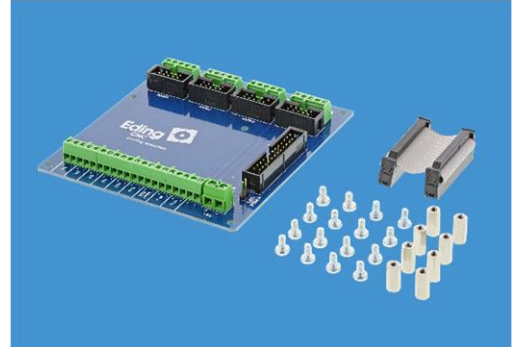# CNC310 Breakout

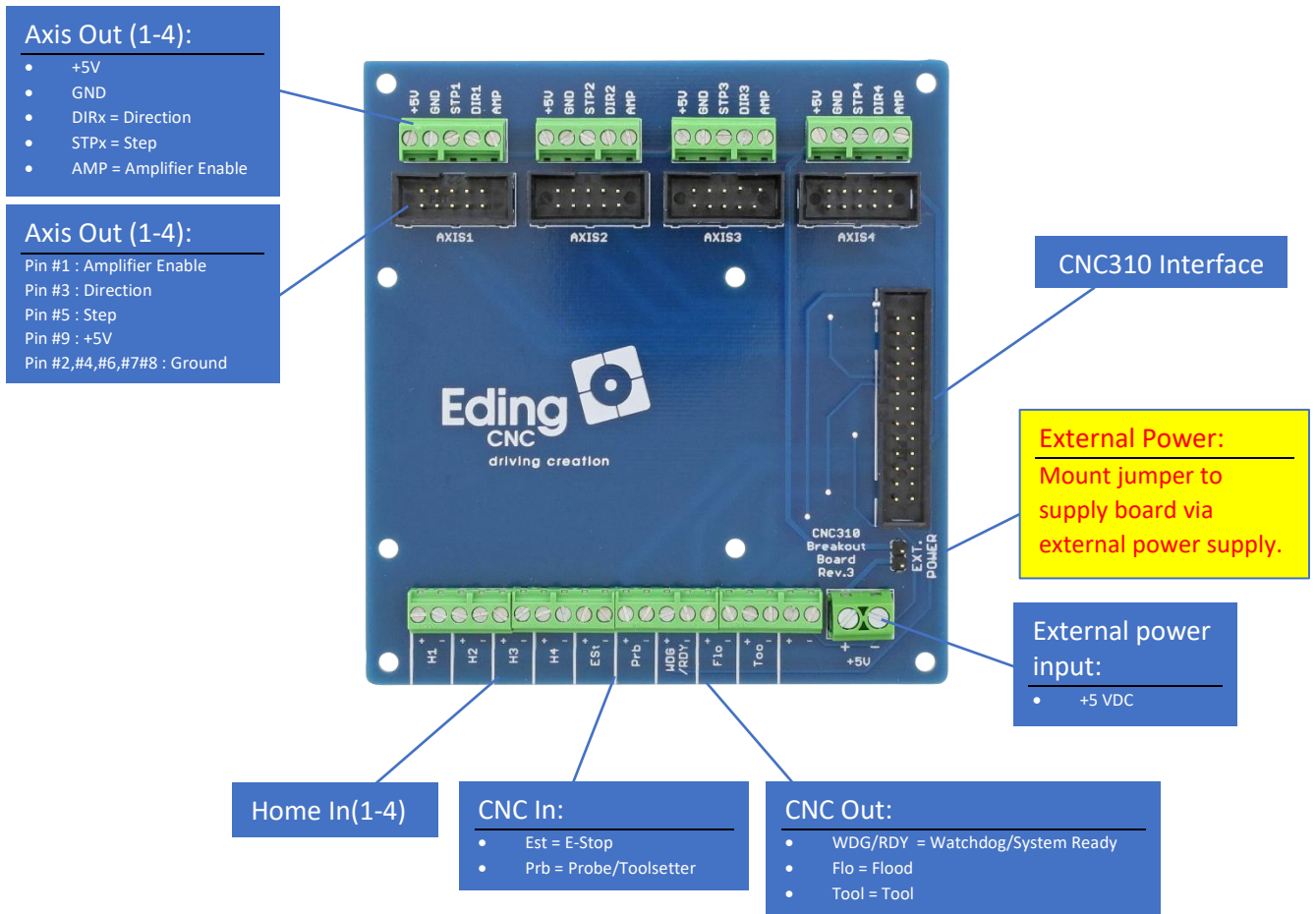## Contents:

Each breakout board kit contains the following:

- ✓ 1x Breakout Board CNC310
- ✓ 1x Cable
- ✓ 8x PCB Spacer 12 mm
- ✓ 12x Screw M3 6 mm

Overview:

Axis Out (1-4):
- +5V
- GND
- DIRx = Direction
- STPx = Step
- AMP = Amplifier Enable

Axis Out (1-4):
Pin #1 : Amplifier Enable
Pin #3 : Direction
Pin #5 : Step
Pin #9 : +5V
Pin #2,#4,#6,#7#8 : Ground

CNC310 Interface

External Power:
Mount jumper to supply board via external power supply.

External power input:
- +5 VDC

Home In(1-4)

CNC In:
- Est = E-Stop
- Prb = Probe/Toolsetter

CNC Out:
- WDG/RDY = Watchdog/System Ready
- Flo = Flood
- Tool = Tool

Mounting CNC310 on breakout board:

The kit contains all the mounting material to mount a CNC310 controller and the breakout board.
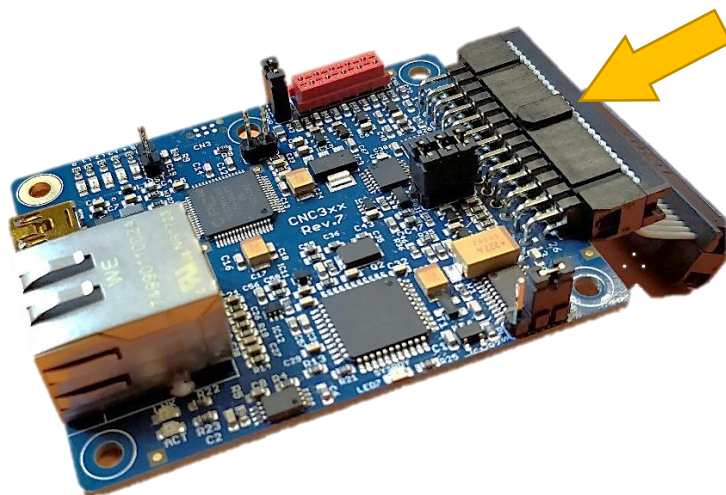
Step 1. Mount PCB spacers on breakout board

The first step is to mount the 4 PCB spacers on the breakout board. Each spacer is fixed by one of the M3 screws from the bottom.
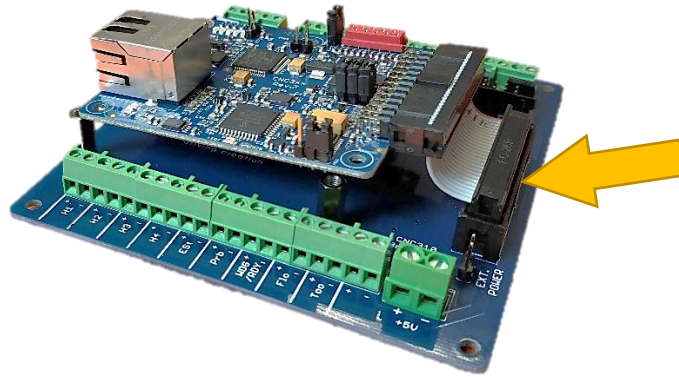

Step 2. Attached the cable to the CNC310

Next, the cable needs to me mounted, maker sure you have the correct orientation.
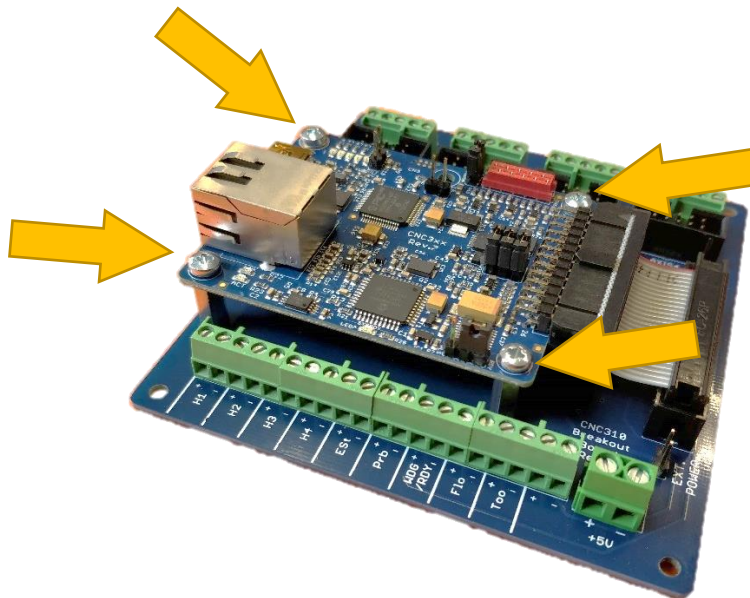
Step 3. Connect CNC310 to breakout board

Connect the CNC310 by connecting the cable into the boxheader on the breakout board.

Step 4. Mount CNC310

Finally, use 4 M3 screws to mount the CNC310 on the spacers.

You're done !

External power setup:

This board can either be externally powered with 5V. By default, the 'ext. power' jumper is not set If you want to power it externally with 5V the jumper *must* be set to 5V.

Without the jumper the board is *NOT* externally powered

PLEASE READ THE WARNING BELOW:

 WARNING: If an external power is applied, the jumper USBPWR on the CNC310 must be removed to avoid the USB port of the PC being powered externally.

Here the board **is** powered via USB