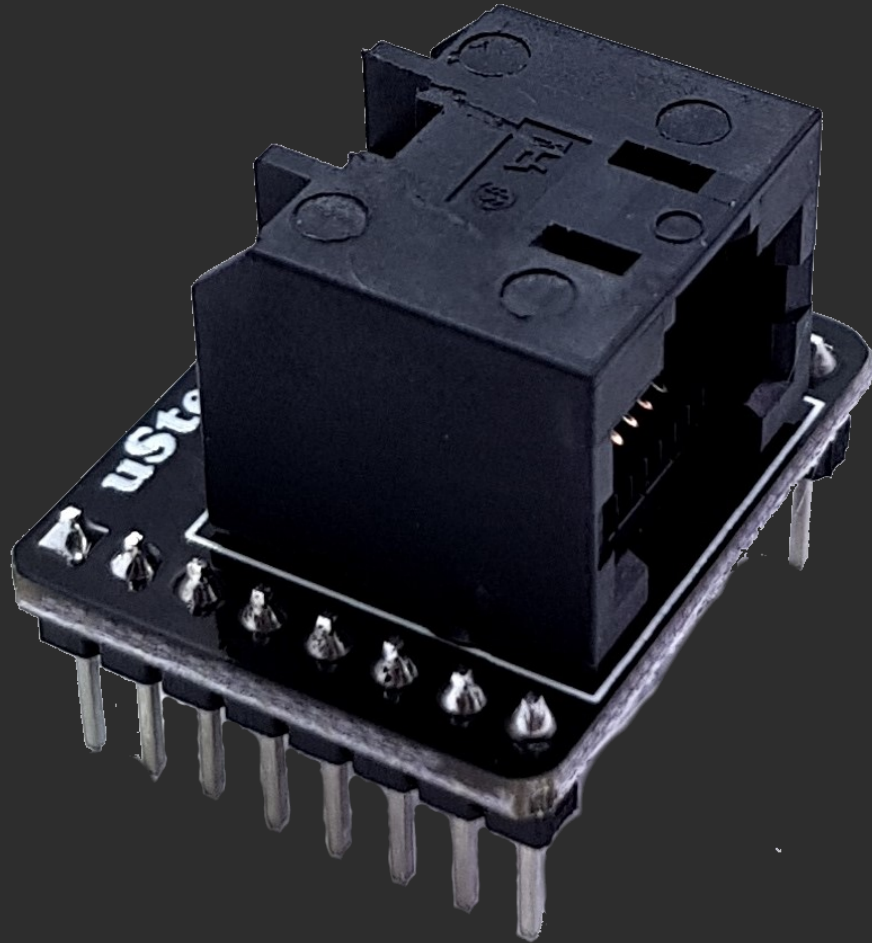


# uStepper S 3D shield

## Product sheet

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Drop-in for your 3D printer or CNC !



By uStepper ApS

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**Product: uStepper S 3D shield**

**Document revision: 1.1**

**Author: MGN**

**Approved by: THO**

**Approval date: November 19th 2019**

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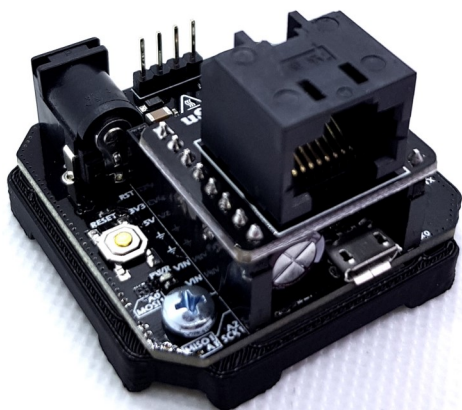
# System overview

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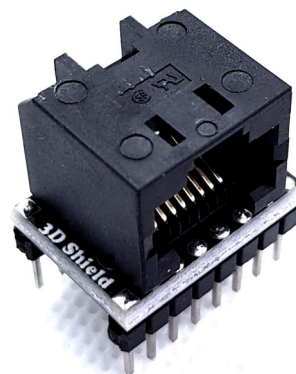
**uStepper S 3D shield** makes it easy to use **uStepper** as a drop-in replacement for StepStick style drivers.

## uStepper S 3D shield overview

The 3D shield cannot stand alone and needs a 3D StepStick shield also to replace the StepStick style driver. The 3D Shield mounts on the uStepper S Expansion bay. Position the 3D Shield flush with the front of the circuit board - so the first pin of the Shield fit with the first Pin of the Expansion bay.



3D shield mounted on a uStepper S



3D StepStick shield to replace a StepStick style driver

The 3D shield set establishes step, dir, ena and power connections from the StepStick connector to the uStepper S using a regular non-crossed RJ-45 cable. **IMPORTANT: use non-crossed RJ45 only !**

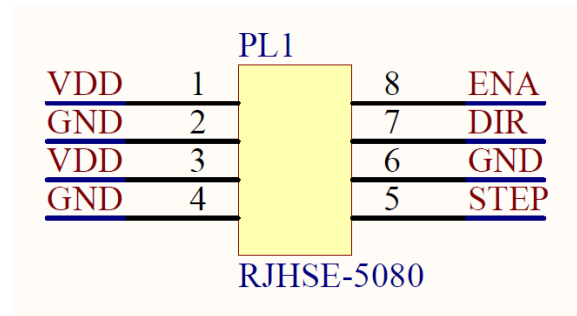
The StepStick shield comes in two variants:



A left and a right variant. What is needed for the application depends on whether there is space for the RJ-45 cable to enter from the left or right side and thus this is the only difference of the two. The two versions are mirror images of each other so please take care, when mounting in the StepStick bay, that the ENA (marked on the bottom side of the PCB) pin is oriented correctly.

## uStepper S 3D shield RJ-45 wiring

The RJ-45 connectors on the StepStick 3D shield and uStepper 3D shield have the pin-out shown below and thus the RJ-45 cable wires will carry the shown signals.



As is evident from the pin-out the uStepper S will get power through the RJ-45 cable and thus no additional cabling is required for the drop-in application.

**Please be sure that a non-crossed RJ-45 cable is used since a crossed cable will damage either the uStepper, your controller or both !**

# uStepper S 3D shield setup

To get started with using uStepper S and the 3D shield expansion set load the uStepper S Drop-in example sketch and/or follow the instructions below !

## Mounting uStepper

To see how you mount uStepper S to your stepper motor correctly, please visit the product sheet by pressing [THIS LINK](#) or scanning the QR code here on the right !



## Video Tutorials

On our YouTube channel you will find video tutorials on how to mount uStepper S, setting it up in the Arduino IDE and programming it. You will also find other cool projects and application examples for uStepper S !



[Mounting uStepper S](#)



[Programming uStepper S](#)

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1.2 By using the uStepper products (including, but not limited to, hardware and software) you acknowledge that uStepper ApS and/or ON Development IVS (or any individuals affiliated with either of the two companies) can not be held responsible for any personal injuries and/or damage to any 3rd party hardware that may occur when using the uStepper products.

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## Contact

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