




## OLIMEX Neo6502 USB NeoHub User Manual

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# OLIMEX



USB-NeoHub  
User Manual  
[olimex.com](http://olimex.com)  
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## What is USB-NeoHub

[USB-NeoHub](#) is USB hub which is both USB 1.1 and USB 2.0 compatible. This is important as Neo6502 modern retro computer uses RP2040 to interface USB keyboards and USB Flash drives.

RP2040 USB interface is USB 1.1

For some weird reason not all USB hubs on the market support this standard which leads to incompatibilities. If you attach USB keyboard to Neo6502 it works, same is if you attach directly USB Flash. But if you attach USB keyboard through USB hub there is 50:50 chance that it may or may not work.

To save the customer frustration we decided to find USB hub chip set which guaranteed works with Neo6502.

This is how [USB-NeoHub](#) was made.

## USB-NeoHub features:

- USB 1.1 and USB 2.0 compliant
- USB-C device input
- USB-A x4 host outputs
- works with Neo6502, PC, OLinuXino, Raspberry Pi, RP2040-PICO and RP2040-PICO W
- Industrial grade -40+85C
- Dimensions are: 46 x 34

## Order codes for USB-NeoHub:

[USB-NeoHub](#) industrial grade -40+85C USB hub compatible with Neo6502

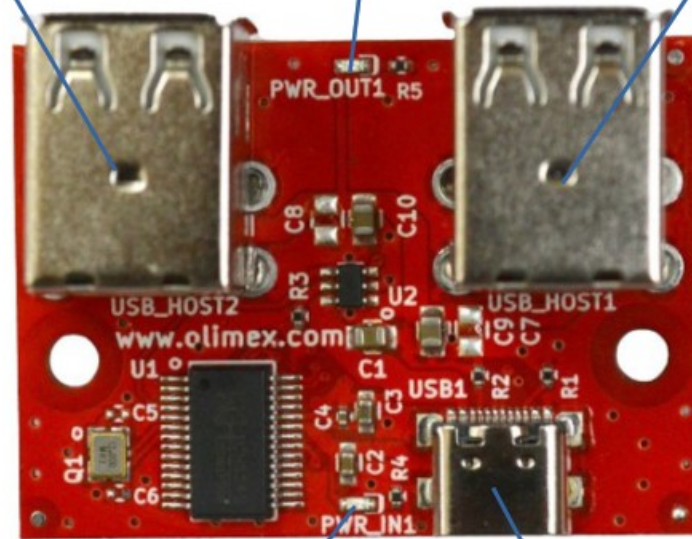
[USB-CABLE-A-TO-C-1M](#) USB-C cable

## USB-NeoHub layout:

Dual USB-A host

USB host power indicator

Dual USB-A host

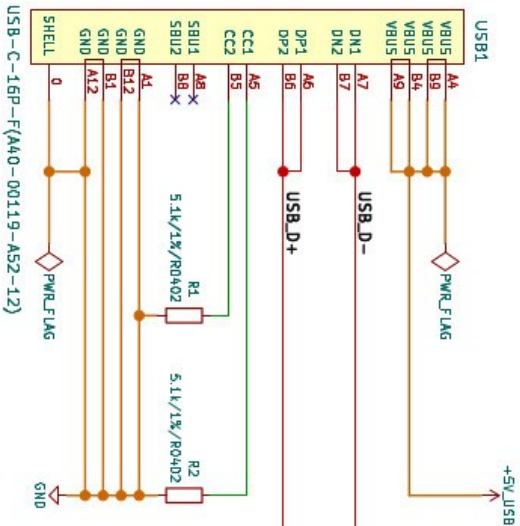


USB-C power indicator

USB-C device input

**USB-NeoHub schematics:**

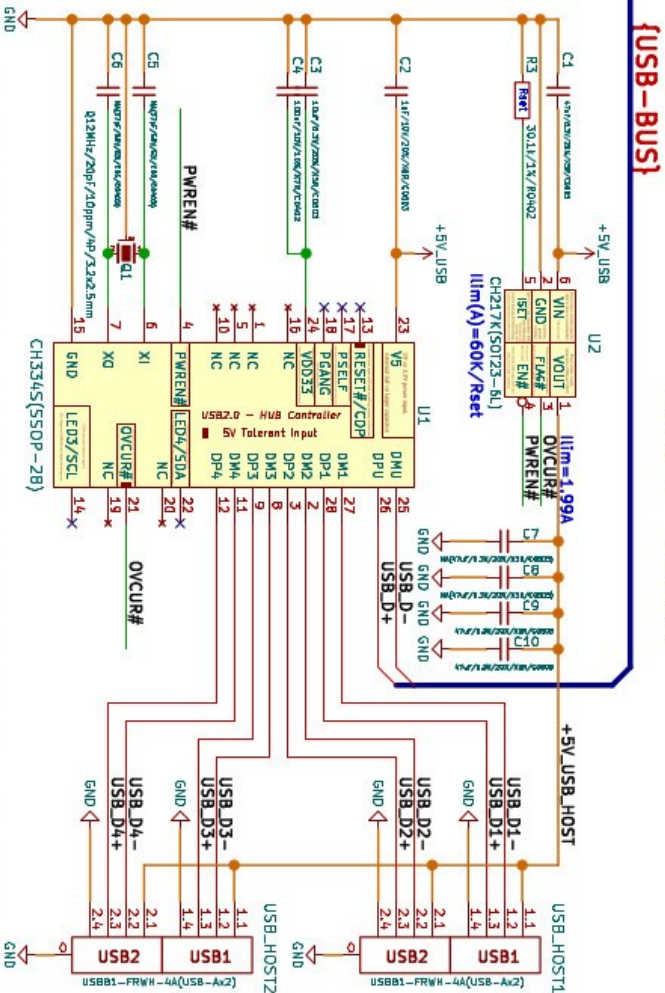
## USB



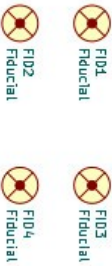
## Mounting Holes



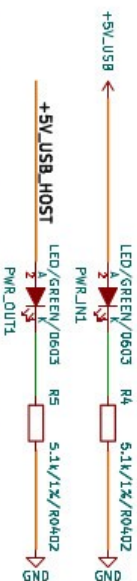
## USB-HUB



## Fiducials



## Power Leds




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KiCad E.D.A. kicad 7.0.10-7.0.10-ubuntu22.04.1

Rev: A  
Id: 1/1

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## Documents / Resources

	<p><a href="#">OLIMEX Neo6502 USB NeoHub</a> [pdf] User Manual Neo6502 USB NeoHub, Neo6502, USB NeoHub, NeoHub</p>
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## References

- [OLIMEX LTD - OLinuXino Arduino Maple Pinguino ARM Open Source Hardware Development Boards](#)
- [USB-CABLE-A-TO-C-1M](#)
- [USB-NeoHub - Open Source Hardware Board](#)
- [User Manual](#)

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