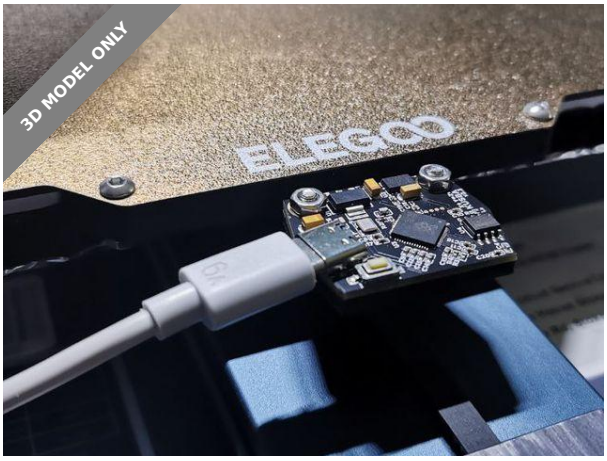

Elegoo Neptune 3 Pro - kusba adxl345 usb mounts

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VIEW IN BROWSER

updated 26. 11. 2023 | published 26. 11. 2023

Summary

I designed some mounts for kusba adxl345 usb pcb by maker panda for my Elegoo Neptune 3 Pro.

3D Printers > Other Printer Parts & Upgrades

Tags: pro 3 neptune measuring klipper elegoo adxl345 adxl345mount resonance kusba

I designed some mounts for kusba adxl345 usb pcb by maker panda for my Elegoo Neptune 3 Pro.

For klipper resonance compensation/measuring: https://www.klipper3d.org/Measuring_Resonances.html

Link to a good (german) documentation: https://book.cryd.de/books/klipper/page/youtube-adxl345-einrichten

Link to the kusba adxl345 usb PCB at AliExpress: https://de.aliexpress.com/item/1005005182131890.html

You will need:

- 1x or 2x **kusba adxl345 usb pcbs** (when you use 2, you don't need to switch the pcb/mounts)
- 1x **M3 12mm Screw, Nut** (& Washer optional)
- 2x **M3 6mm Screw, Nut** (& Washer optional)
- 2x **M3 10mm Scew & Nut**
- 2x **M3 8mm Screw, Nut** (& Washer optional)

See Pictures for Details.

I also added the FreeCad Files (i used Version 0.21.1) if you need any customizations.

In case you use 2 adxl345 chips, here is my printer.cfg snippet:

[mcu adxl_hotend] # Hotend (X Axis) # find your correct device id's with "ls /dev/serial/by-id/*" on your RasPi serial: /dev/serial/by-id/usb-Klipper_rp2040_E6624C9027674638-if00 [mcu adxl_bed] # Printbed (Y Axis) # find your correct device id's with "ls /dev/serial/by-id/*" on your RasPi serial: /dev/serial/by-id/usb-Klipper_rp2040_E6624C9027418D2F-if00 [adxl345 hotend] cs_pin: adxl_hotend:gpio1 spi_software_sclk_pin: adxl_hotend:gpio2 spi_software_mosi_pin: adxl_hotend:gpio3 spi_software_miso_pin: adxl_hotend:gpio0 [adxl345 bed] cs_pin: adxl_bed:gpio1 spi_software_sclk_pin: adxl_bed:gpio2 spi_software_mosi_pin: adxl_bed:gpio3 spi_software_miso_pin: adxl_bed:gpio0 [resonance_tester] accel_chip_x: adxl345 hotend accel_chip_y: adxl345 bed probe_points: 120,120,20

After restart, you should have 2 new MCUs ("mcu adxl_bed" and "mcu adxl_hotend") in the "MACHINE" menu.

You now can use the following Console Commands:
TEST_RESONANCES chips="hotend, bed" axis=X
and
TEST_RESONANCES chips="hotend, bed" axis=Y
to measure resonances on the two axis. Follow the official documentation from here: https://www.klipper3d.org/Measuring_Resonances.html

Model files

kusba_adxl345_head-mount.fcstd

kusba_adxl345_pei_mount.fcstd

kusba_adxl345_head-mount-body.stl

kusba_adxl345_pei_mount.stl

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