DIY Pi 400 Keyboard Case

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https://learn.adafruit.com/pc-keyboard-case

Last updated on 2023-08-29 04:50:30 PM EDT
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Overview

Build a PC case inside a Keyboard

Plug into any HDMI display! Browse, work, watch streaming video and code, just like any computer!

Most single board computers, like a Raspberry Pi, fit right into the small form factory of a keyboard with built-in trackpad. Easily detach the keyboard to access additional GPIO hidden inside the case.

Ports on the back allow you to attach accessories and keep them tidy!
Room to grow

This case works with both Pi 3 or Pi 4 'shaped' boards!

The case has plenty of room to store extra wires. Fan mount with a ventilation grill keeps the PC cool with enough space to add a heat sink.

SD Card Slot

The Micro SD card slot is accessible on the front so you can always swap it out.
Grippy, stable base

Add a set of rubber feet to the bottom so it’s nice and grippy.

The mini fan provides air flow to the board so it stays nice and cool.

Cable Coiling

With the extra space you can pull out the HDMI and microUSB cable for connecting to a display and power supply.

Parts
Full Size Wireless Keyboard with Trackpad
The quick brown fox jumps over the lazy dog.  The quick brown fox jumps over the lazy dog.  The quick brown fox - sorry! We were practicing our typing ON THIS AWESOME...
https://www.adafruit.com/product/2876

7" Display 1280x800 (720p) IPS + Speakers - HDMI/VGA/NTSC/PAL
Yes, this is an adorable small HDMI television with incredibly high resolution and built in 3W stereo speakers! We tried to get the smallest possible HDMI/VGA display with...
https://www.adafruit.com/product/1667

Miniature 5V Cooling Fan for Raspberry Pi (and Other Computers)
Looking for another way to keep your Raspberry Pi cool? Hook up this 5V Mini Cooling...
https://www.adafruit.com/product/3368

Official Raspberry Pi Power Supply 5.1V 3A with USB C
The official Raspberry Pi USB-C power supply is here! And of course, we have 'em in classic Adafruit black! Superfast with just the right amount of cable length to get your Pi 4...
https://www.adafruit.com/product/4298
4 x M3x12mm Screws
M3x12mm Screws for Fan


4 x M3x6mm Screws
M3x6mm Screws for Pi board


Slim HDMI Cable - 450mm / 1.5 feet long
Connect two HDMI devices together and save space with this slim, high quality HDMI cable. It has nice molded grips for easy installation and is 450mm long (~1.5 feet). Sporting...
https://www.adafruit.com/product/2420

Mini HDMI Plug to Standard HDMI Jack Adapter
What an adorable little pug! Sorry - plug! What an adorable mini HDMI to HDMI plug. We find this plug adapter really helpful....
https://www.adafruit.com/product/2819

Little Rubber Bumper Feet - Pack of 4
Keep your electronics from going barefoot, give them little rubber feet! These small sticky bumpers are our favorite accessory for any electronic kit or device. They are sticky, but...
https://www.adafruit.com/product/550
3D Printing

Parts List
STL files for 3D printing are oriented to print "as-is" on FDM style machines. Parts are designed to 3D print without any support material. Original design source may be downloaded using the links below.

Edit Pi 400 Case design
Download STLs

Slice with settings for PLA material

The parts were sliced using CURA using the slice settings below.

- PLA filament 220c extruder
- 0.25 layer height
- 10% gyroid infill
- 60mm/s print speed
- 60c heated bed

Build Plate Adhesion
Type: brim
Line Count: 4
Snap fit

The enclosure snap fits over the bottom panel so it's easy to open and take things apart.

Built in standoffs are designed for standard mounting holes so you can secure the board with screws and hex nuts.

Power up the mini fan over five volts by plugging in jumper cables to the GPIO headers.

This slim Full Size Wireless Keyboard with Trackpad () lays on top with a notch in place so you can access the built-in controls!