



m-ATX almost naked housing

B Buzz

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Summary

PC case for under the table

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Tags: [case](#) [gpu](#) [minipc](#) [matx](#) [barebone](#) [miniatx](#)
[pchousing](#)

Update (V3) and finished: closing minor gaps at front patch and base 4 - all works!

Update (V2): Two slight modifications: Mainboard is a little bit wider than expected -> changed Base-3, GPU sits lower than expected -> changed GPU-mount

(V1): This is my first try on a small m-ATX PC-housing (in my case a AMD Ryzen 5 CPU and a R9 290 GPU).

Design goal was to have a small, very open design for mounting it under a desk.

My desk has a sidewall, where i want to place this assembly into the top corner. So it basically only needs a front, the rest can be as open as possible for maximum airflow. Therefore the housing is designed to be

screwed to a side panel, but could also be used as an open design desk top PC.

I'm currently printing it in PLA, so far it looks very promising. Most taller parts were divided to maintain the print orientation for most strength.

Place it on the print bed that the tip in the holes faces upwards.

All parts and bore holes are designed for printing without supports (except SSD-mount)

All parts are designed to fit on a 200 x 200mm printing bed.

All taller parts have a M6x120mm DIN912 screw inside and a M6-nut underneath, to give the parts a metal barebone and therefore more strength. In total there are eight M6x120 screws included.

I designed also an SSD-support, as I want to add at least one additional SSD to the M2-disk on the mainboard.

For front USB3-Access I bought a CSL USB3.2 3.5" front panel from [Amazon](https://www.amazon.de/gp/product/B00OB8OPDK/ref=ppx_yo_dt_b_asin_title_o02_s01?ie=UTF8&psc=1) and unscrewed it from the metal panel https://www.amazon.de/gp/product/B00OB8OPDK/ref=ppx_yo_dt_b_asin_title_o02_s01?ie=UTF8&psc=1

For on/off switch I used a extension kit Angeek Desktop PC Power Switch from [Amazon](https://www.amazon.de/gp/product/B08HH6S6V2/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1) to place the on/off switch on top of the table https://www.amazon.de/gp/product/B08HH6S6V2/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1

According to Cura this will consume around 840g PLA (with 0,2mm, 25% infill and no supports) and 79h printing time

The only part with support is the SSD-mount

Included are the Solidworks-Files and also Step-Files of all parts, in case you want to remix / optimize it.

For the print you only need the .stl files, just ignore the rest :)

Have fun,

Sebastian

Print Settings

Printer Brand:

Anycubic

Printer:

All-metal Mega

Rafts:

No

Supports:

No

Resolution:

0.2

Infill:

25

Filament: geeetech PLA

white

Notes:

placement of the parts on the printer: the sharp edge in the bore holes needs to face upwards (-> no support needed)

Category: Electronics

This remix is based on



m-ATX almost naked housing

by fauldrache

Model files



base_2_x1.stl



base_complete.sldprt



foot_x1.step



foot_x1.sldprt



frontgrill_x1.step



base_2_x1.step



ssd-mount_x1.stl



gpu_mount_x1.sldprt



frontgrill_x1.sldprt



dummyssd_7_mm.sldprt



dummya320m-hd_ap214.sldprt



base_connector_x1.step



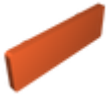
base_3_x1v2.step



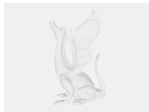
frontpatch_x1v3.stl



base_connector_small_x4.sldprt



base_connector_small_x4.stl



base_4_x1v3.sldprt



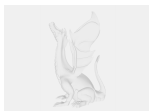
ssd-mount_x1.step



frontpatch_x1v3.step



base_connector_x1.stl



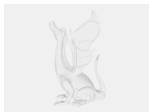
base_1_x1.sldprt



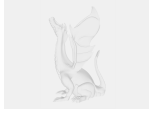
base_connector_x1.sldprt



gpu_mount_x1v2.step



dummyamd_r9_290.sldprt



base_connector_small_x4.step



base_3_x1.sldprt



base_4_x1v3.stl



base_2_x1.sldprt



dummyusb3_connector_csl-300781.sldprt



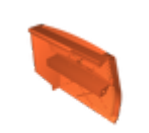
frontpatch_x1v3.sldprt



base_3_x1v2.stl



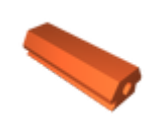
ssd-mount_x1.sldprt



frontgrill_x1.stl



base_1_x1.stl



foot_x1.stl



ssd-support_x1.stl



dummyatx_power_supply.sldprt



ssd-support_x1.step



base_1_x1.step



ssd-support_x1.sldprt



pc-housingassembly.step



gpu_mount_x1v2.stl



base_4_x1v3.step

[Find source .stl files on Thingiverse.com](#)

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