



Smallest ITX (MiniATX) PC case - full length graphic card + Noctua NH-D14 (D15), no screws or inserts SFX-L



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Summary

Smallest ITX (MiniATX) PC case - full length graphic card + Noctua NH-D14 (D15), no screws or inserts SFX-L

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Printable on BambuLab 256x256x256 bed (biggest part - base is actually 231.52 x 251.08 x 127.54mm) - just let it auto rotate it. Supports for long overhangs are recommended (I used auto tree supports).

No screws (other than for securing PSU/motherboard) or inserts needed, just print and screw your motherboard directly to the base. There is cut-out left for bottom NVME drive + extra cooling for the board.

The aim of the case was to fit it under my TV as Proxmox/NAS/Home assistant/Second gaming PC inside Ikea Kallax compartment. I wanted to use leftover GTX 1070 + have system fully passive so NH-D14 with single fan had to fit there (I haven't found any other ITX case that allows that) -

system operates without spinning fans under idle load below 55°C on my Ryzen 3600x using Gigabyte Aorus B550i Pro AX. I used be quiet! 600W SFX-L and everything fits nicely.

It's very lightweight and quick to print case - I used PLA-CF to print it and only took me below 8h. You can print cover with single bottom layer (or 0 layer + hexagonal infill for extra fresh air from the top) without top layers. Best to print base with 100% infill and 3 wall layers.

I think you can even fit RTX 4090 into it as I provided enough space - making it smallest and most powerful 3D printed case IN THE WORLD.

Case cover isn't perfectly secured, it only rests on it but base is strong enough that you can move your PC easily. You can use 140mm strengthening bracket to hold it better + use it to mount FAN. 4 feet (from TPU or other material) are required as graphic card metal plate will stick out.

You can close holes and modify to suit your needs as I left Fusion360 file with history (don't judge me about quality of this file though).

Model files

16mm-button-holder.stl



graphic-card-holder.stl



feet.stl



☐ Print x4 (TPU recommended)

140mm-fan-strengthenener.stl





itx-case-cover.stl

📄 Case cover



itx-case.stl

📄 Case base



itx-case-v20.f3d

📄 Fusion360 file

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