

NCASE M1 BUILD GUIDE

posted to HardForum on 04-AUG-2016

<https://hardforum.com/threads/ncase-m1-a-crowdfunded-mini-itx-case-updates-in-first-post.1717132/page-519#post-1042461452>

Take your time and plan ahead. I must have removed components several times the first time I built in the M1 because they were blocking something or other. My suggested build order (primarily for an air cooling build) is:

1. Strip the M1, removing all panels, the drive cage, and the side bracket. Keep
2. Open the accessories box and organize the mounting screws, grommets, brackets, and everything else as per the **photo on the Ncase website in the FAQ tab**.
3. If using the drive cage, prepare it by mounting the drives into it with the appropriate screws and grommets.
4. If using 2.5 inch drives attach the necessary mounting screws and grommets. Use the stacking brackets if you want to attach two drives together. If they will be mounted on the outside of the frame's front panel, both drives must be 7 mm or less in height (thickness?). Taller (thicker?) 2.5 inch drives can be combined and mounted inside the front panel, but be aware of the distance to the adjacent power supply.
5. If using an optical drive: remove the two brackets on the front panel and attach them to the sides of the drive. (Those screws are tiny!). Don't attach this drive to the frame until the end. It's easy and leaving it off can make other tasks easier.
6. Install the CPU into the socket on the motherboard.
7. Attach any mounting brackets for the CPU cooler to the motherboard. I don't know if liquid cooling CPU blocks or AIO block-pump devices should be attached at this point or later when the motherboard is in the M1 frame. Sorry.
8. Install RAM onto the motherboard.
9. If there are daughterboards or cards with wires, such as a Wi-Fi or Bluetooth, that need routing around motherboard components or under the motherboard itself, attach those to the motherboard and route any wires while the motherboard is still outside the M1 frame.
10. Install any other components that attach or mount to the motherboard, such as M.2 or mSATA devices.
11. Install any bottom fans or a single 3.5 inch drive to the bottom of the M1 frame Attach cables to the single 3.5 inch drive before mounting it to the frame.
12. Consider moving the external power socket at the top of the rear panel from the corner position to the center position. This can be helpful with some large CPU air coolers or when there is a radiator and fan on the rear position of the side bracket.
13. Install the I/O Shield into the M1 frame (so easy to forget) and then install the motherboard into the M1. Attach any Wi-Fi/Bluetooth cables to the I/O Shield.
14. Install the power supply adapter frame.
15. Connect modular power supply, data cables, and Front I/O cables to the motherboard. The power supply end of modular PS cables are easy to attach to the PS unit so leave that until later, but route the cable towards the front of the case where the PS unit will be..
16. Practice and finalize fan placement and connect fan cables to the motherboard headers. Let the fans hang outside the M1 frame, except for the rear panel fan, if you plan to use one (mount that one now) and any bottom fans (should already be attached). Use fan splitters and extension cables where appropriate or necessary, such as for bottom fans, dual CPU cooler or radiator fans or to reach the front side bracket location. These can make disassembly (for cleaning or repair)

easier in the future. Side bracket fans, either alone or attached to a radiator should also be hanging loosely around the M1 frame for now.

17. Install SFX power supplies to the adapter frame.
18. Install hard drive(s) to the inside of the front panel or the side cage. Attach their data and power cables.
19. Install ATX power supply to the adapter frame.
20. Connect modular PS cables to the power supply unit, including any PCI-E power cables for the graphics card.
21. Install the CPU air cooler heatsink. Attach fans first if it is not possible to attach them after the heatsink is mounted. For the NH-C14 it is possible to slide the bottom fan in from the top of the case, even if the motherboard has a tall power daughterboard along that edge, like some Asus models. Attach any remaining cooler fans to the heatsink.
22. Attach any drives (2.5 inch or optical) to the outside of the frame's front panel and attach their data and power cables.
23. Remove the small rectangular metal plate above the expansion card slot covers and then remove the slot covers where the graphics card will be located (usually the top one or two slots).
24. Install the graphics card into the case and attach the PCI-E power cables. Re-attach the small plate above the expansion slots.
25. Attach side fans or radiator and fans to the case's side bracket and attach the bracket to the case. Obviously, flexible hoses for liquid cooling must be carefully arranged to avoid kinking when the side bracket is attached.
26. Attach all of the exterior case panels.

Well, I'm sure it's not perfect, but I hope it helps!

Qrash's Ncase M1 Build album: <http://imgur.com/a/BWiDh>