

GPC Mini-STX Assembly Manual

* For Intel NUC kit instructions, [click here](#) *



Required Parts

- GameCube top shell
- PC components
 - CPU, CPU cooler
 - Motherboard, I/O shield
 - Memory
 - Storage
 - Power supply

Included Parts

- Bottom shell assembly
- Power button standoff assembly
- Fan hub standoff assembly
- Front panel assembly

Included Tools

- 3mm hex key

Required Tools

- Phillips-head screwdriver
- Needle-nose pliers
- Side-cutting pliers
- 4.5mm Gamebit driver

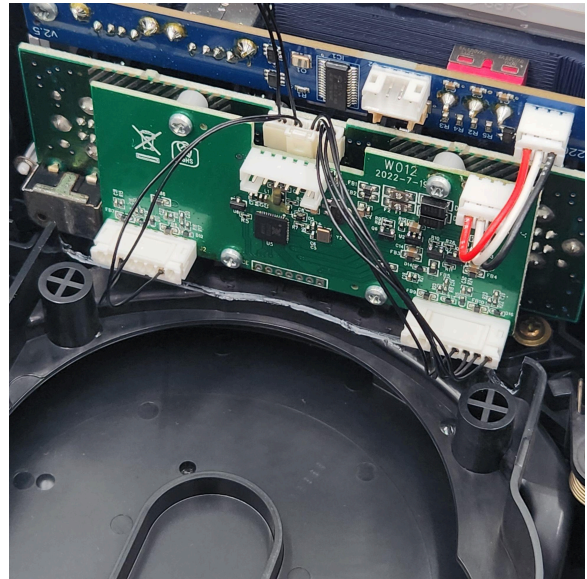
Optional Parts

- Wireless module
- Wireless antennas

IMPORTANT:

- ✗ *This project is recommended for hobbyist computer builders that have the knowledge and skills required to properly handle and assemble sensitive electronic components.*
- ✗ *Do not over-tighten screws when threading into plastic components! Use gentle, hand-tight force to prevent excessive torque that causes plastic parts to strip out*

1. Remove material in the designated area under the top shell using needle-nose pliers. Verify there is clearance when sliding the front panel in.



2. Prepare the motherboard by installing the CPU, CPU cooler, RAM, M.2 storage, and optional wireless module with antenna leads. If adding an M.2-to-OCuLink extension, install M.2 storage device on the underside slot of the motherboard.



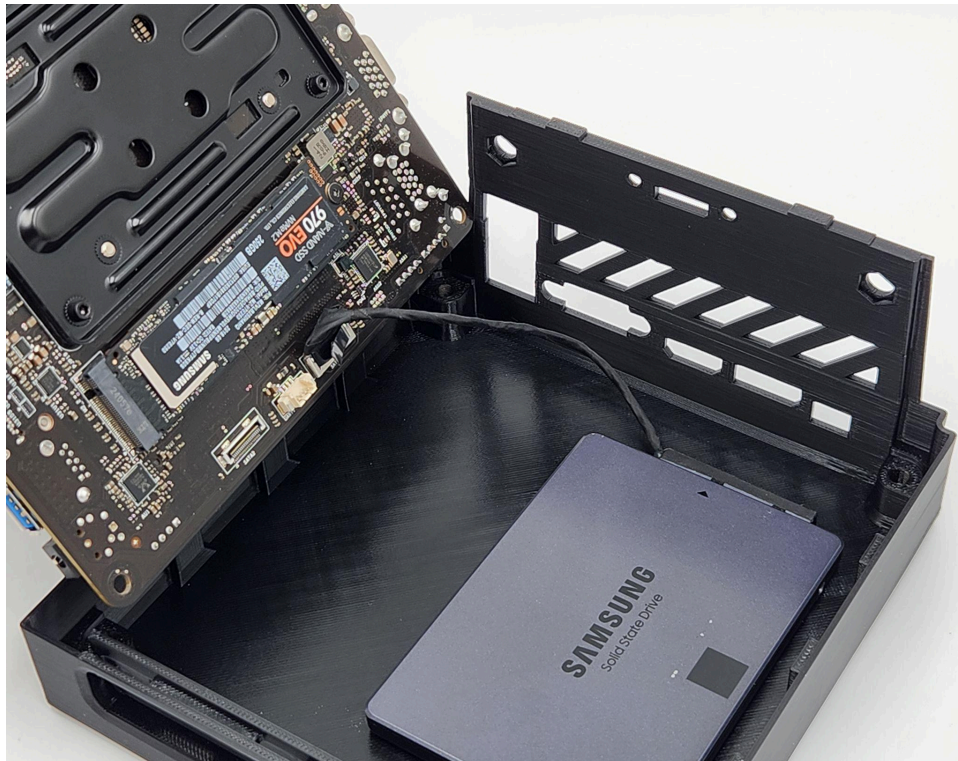
NOTE: For Intel models, the CPU cooler backplate may need to be trimmed to fit around the motherboard heatsink.



Installing a 2.5" Storage Device: Connect a SATA cable to the drive and place it on the standoffs in the bottom shell. Secure the drive using (x4) M3 x 6mm flat head screws.



NOTE: Plug the SATA cable into a SATA3 connector on the motherboard.



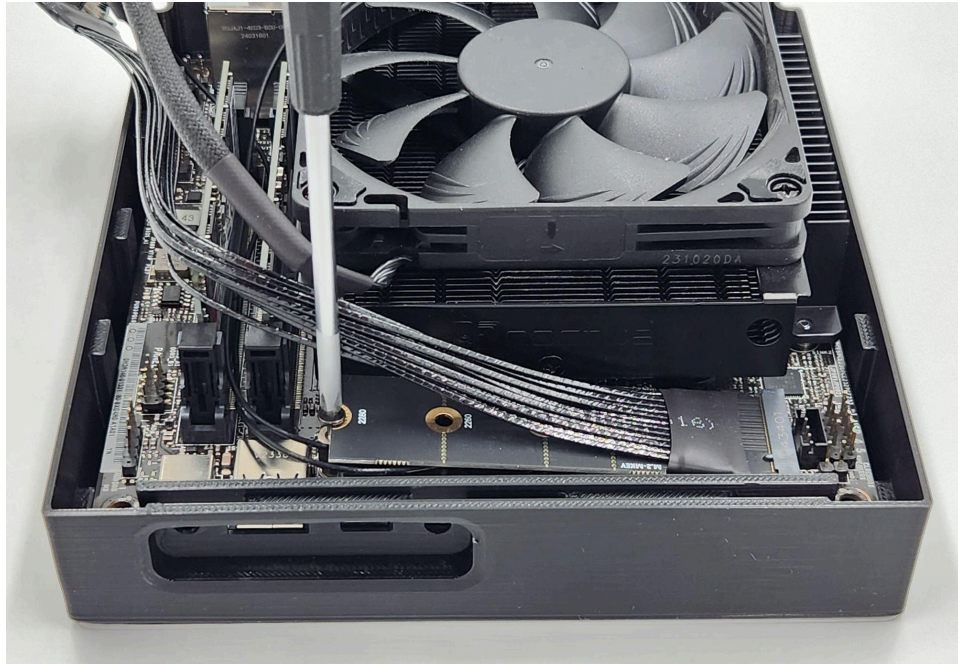
3. Angle and lower the assembled motherboard into the bottom shell until it is resting on all four standoffs.



Installing Wireless Antennas: If the motherboard is to be equipped with a wireless module, mount the SMA connectors to the rear cover using a small adjustable wrench or flat-nosed pliers.



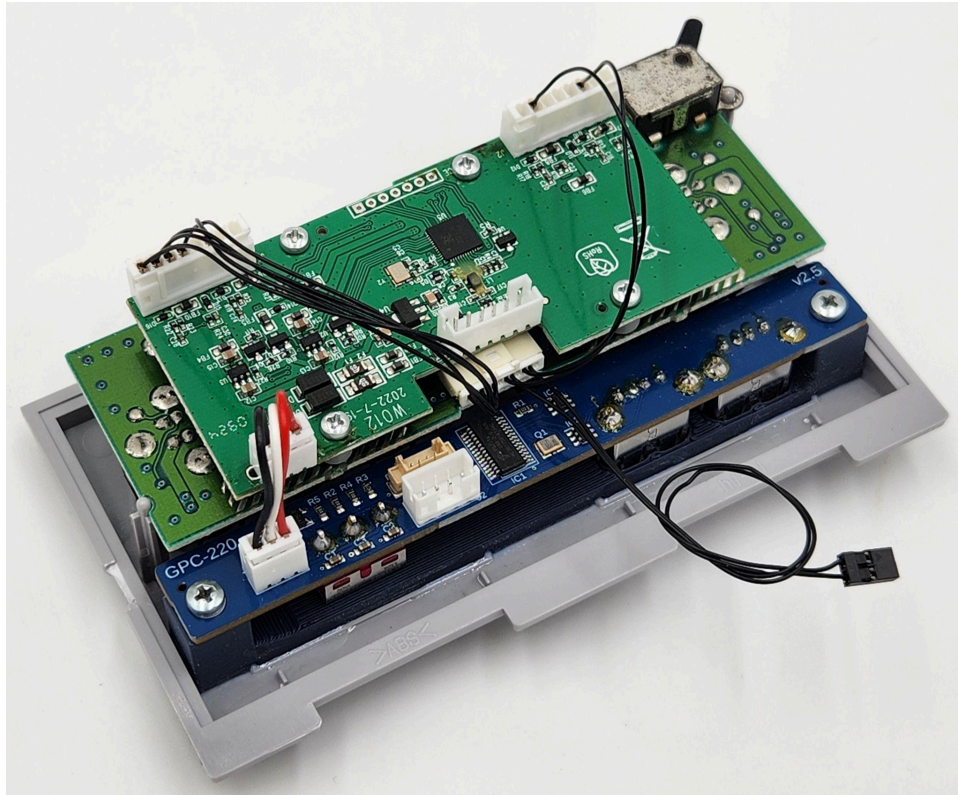
Installing an OCuLink Interface: Insert the M.2-to-OCuLink extension in a top-side M.2 slot.



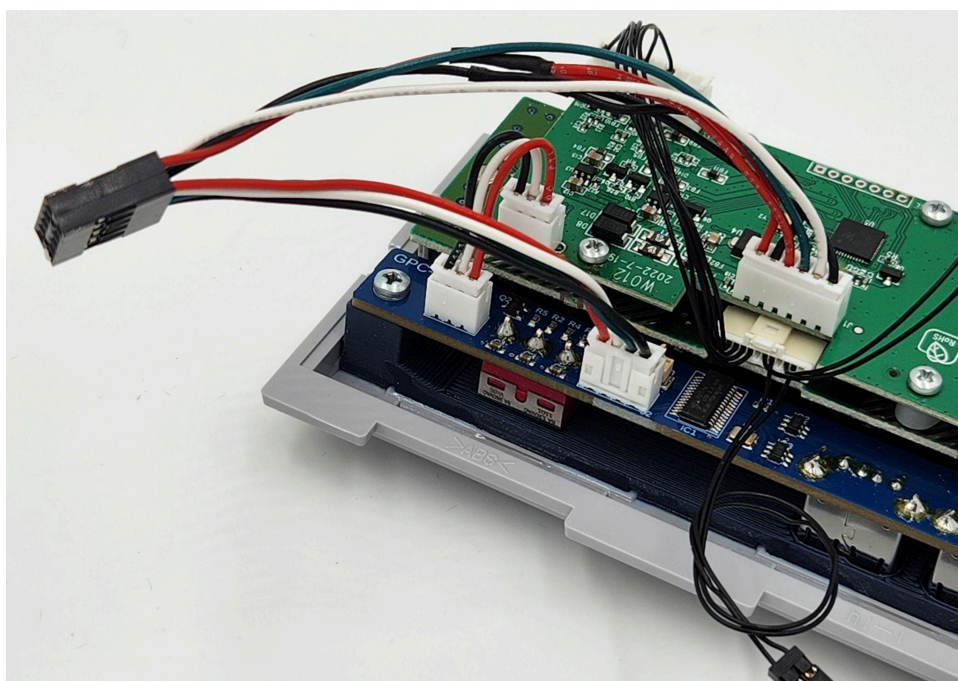
NOTE: Slightly loosen the two bracket screws underneath the extension. Adjust the brackets by pushing the OCuLink port board into its cutout. While holding the brackets in place, re-tighten the screws underneath. Secure the extension using (x2) M3 x 6mm flat head screws.



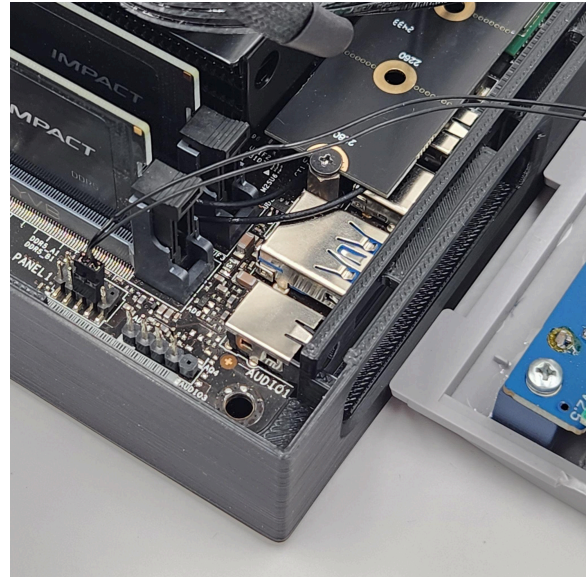
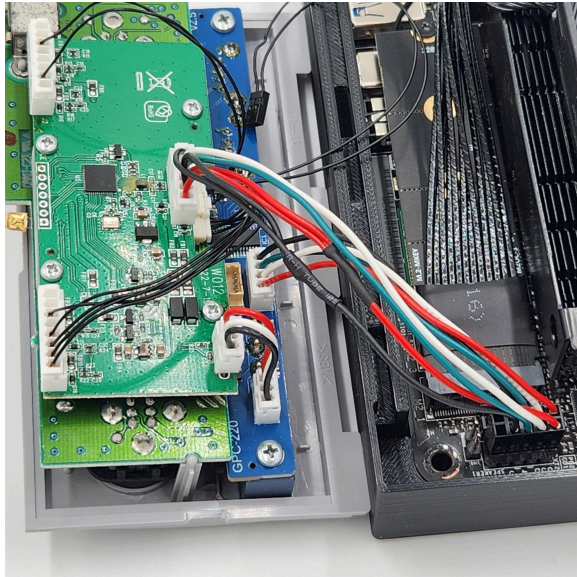
4. Plug the controller adapter harness into the USB controller adapter and controller port board, paying attention to the 8-pin connectors as they are populated differently. Plug the mode switch harness into the 3-pin headers on the USB controller adapter and USB hub board.



5. Plug the USB harness into the 6-pin USB controller adapter and 4-pin USB hub headers.



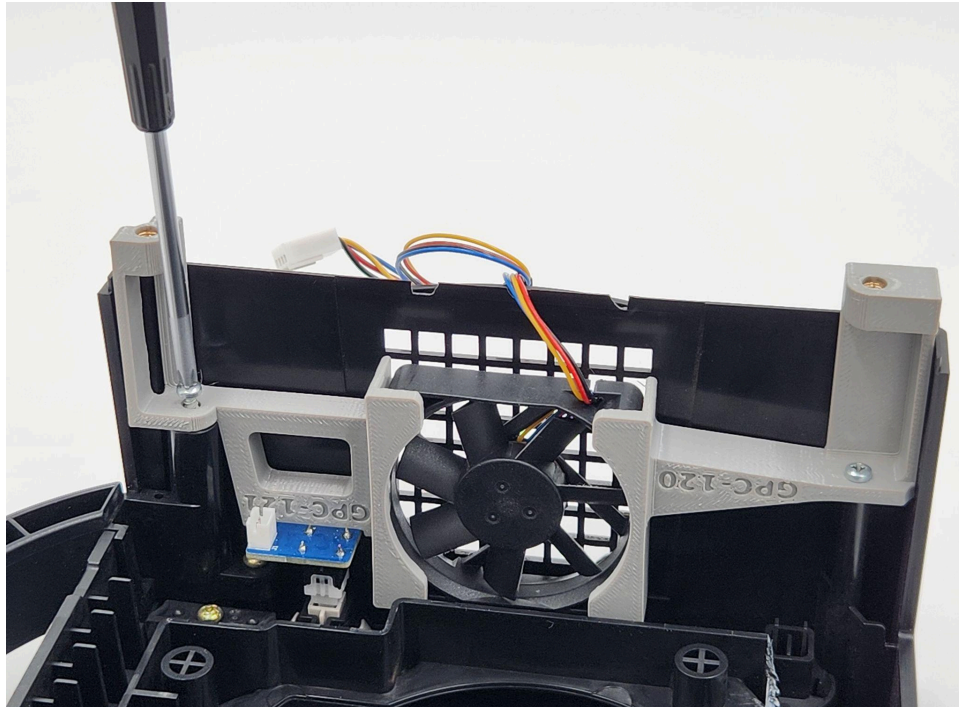
6. Plug the USB harness into the motherboard USB header, paying attention to the connector's polarizing key. Plug the reset button connector into the motherboard front panel header, referring to the motherboard manual for its pinout.



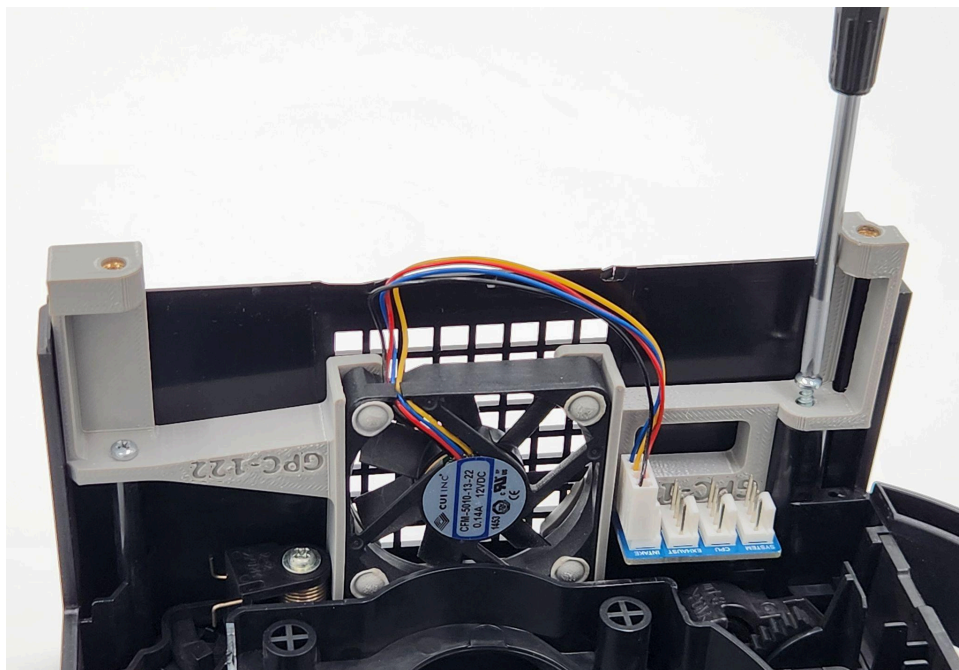
7. Set the front panel into its groove in the bottom shell.



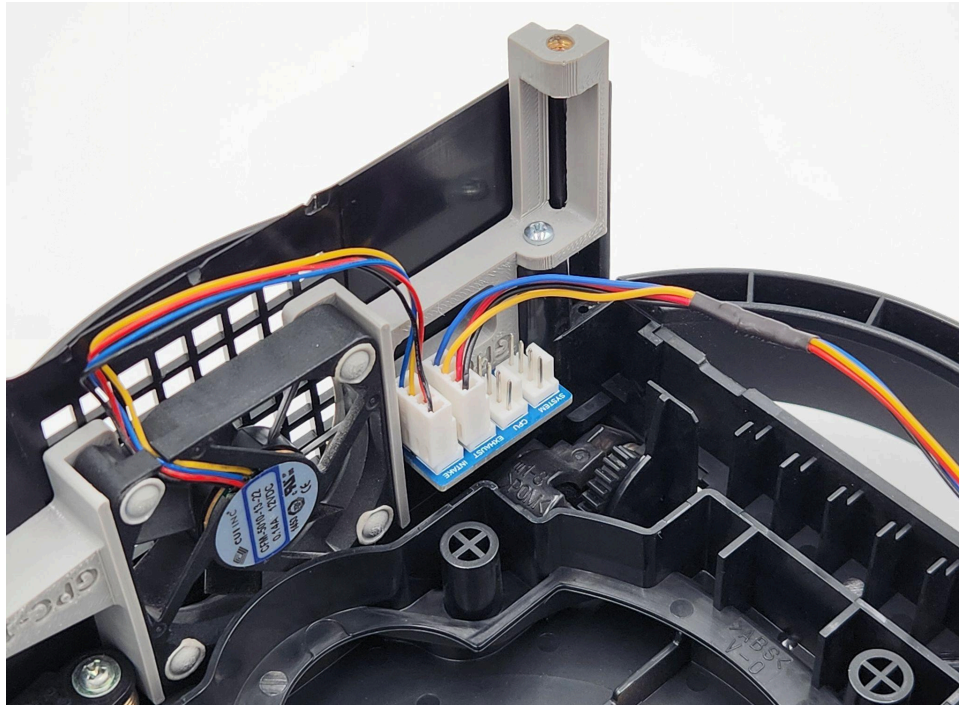
8. Place the power button standoff assembly inside the top shell and secure using (x2) M3 x 8mm thread-forming screws, tightening carefully.



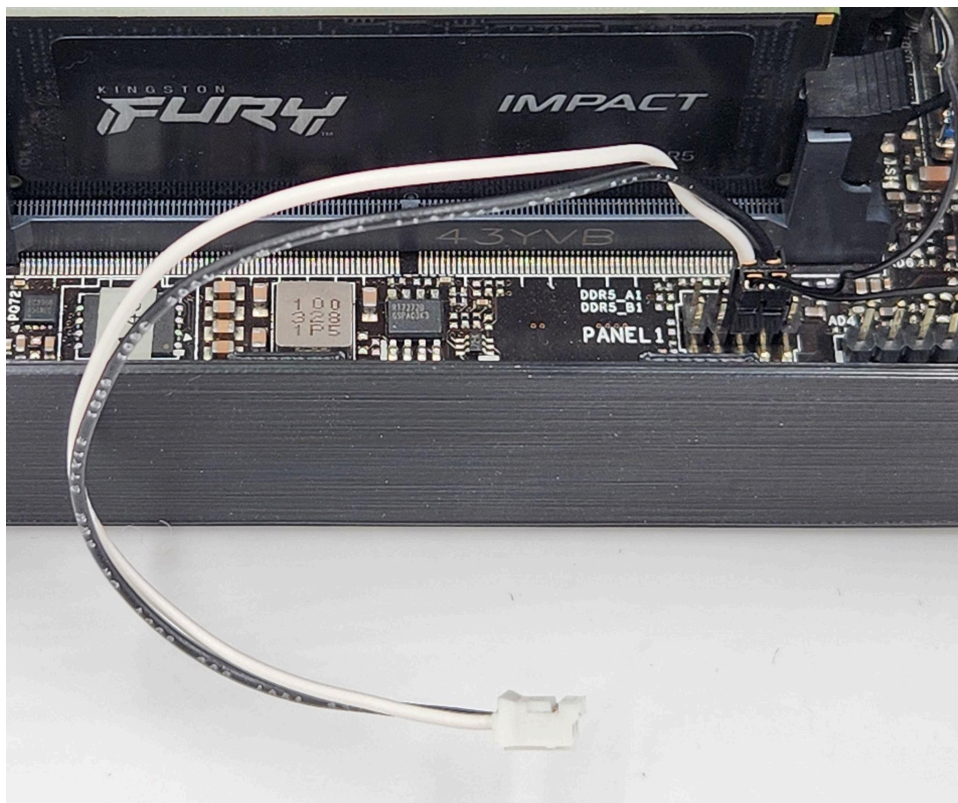
9. Place the power button standoff assembly inside the top shell and secure using (x2) M3 x 8mm thread-forming screws, tightening carefully.



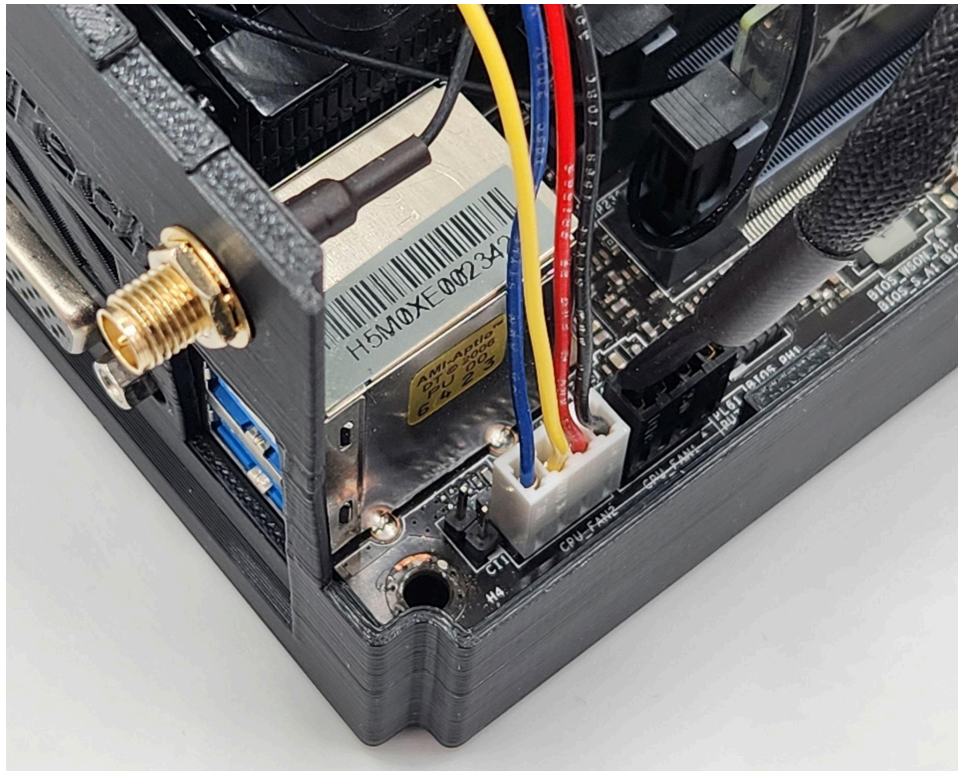
- 10.** Plug the intake and exhaust fan connectors into the “INT” and “EXH” headers on the fan hub board, respectively.



- 11.** Plug the power button harness into the motherboard front panel header, referring to the motherboard manual for its pinout.



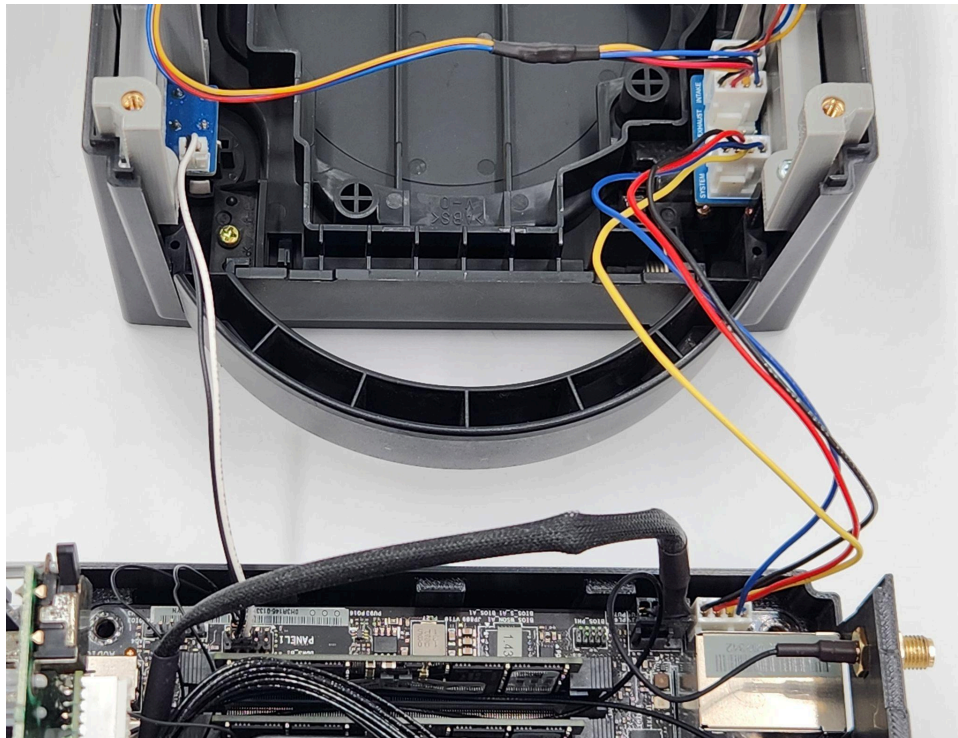
- 12.** Plug the fan hub wire harness into the motherboard.



For Motherboards with 1 Fan Header: Plug the fan hub wire harness into the CPU fan header on the motherboard. Plug the CPU cooler fan into the fan hub board's "CPU" header.

For Motherboards with 2+ Fan Headers: Plug the CPU cooler fan into the main CPU fan header on the motherboard. Plug the fan hub wire harness into the SYS_FAN or CPU_FAN2 header on the motherboard.

- 13.** Plug the other end of the fan hub wire harness into the fan hub board's "SYS" header. Plug the other end of the power button harness into the power button board.



- 14.** Start to slide the top shell onto the front panel from above. Check that the front panel reset switch lines up with the slot on the reset button.



- 15.** With the top lid open, slowly slide the top shell down while ensuring that no wires are being pulled on.



- 16.** Ensure that the top shell is fully seated in the bottom shell around the perimeter. Check that no wires were pinched under the top shell mating lip, fell inside the CPU cooler fins, or are close to any of the system fan blades.



- 17.** Secure the top shell to the bottom shell using (x4) M4 x 20mm bolts and (x4) rubber bumpers with the included 3mm hex key. Do not overtighten; the rubber bumpers should only be slightly compressed.



NOTE: Use a small screwdriver or the included 3mm hex key to align the threaded hole if the bolts do not thread in.

Installing Wireless Antennas: If the motherboard is equipped with a wireless module, install the wireless antennas onto the SMA connectors.



18. Assembly is now complete.

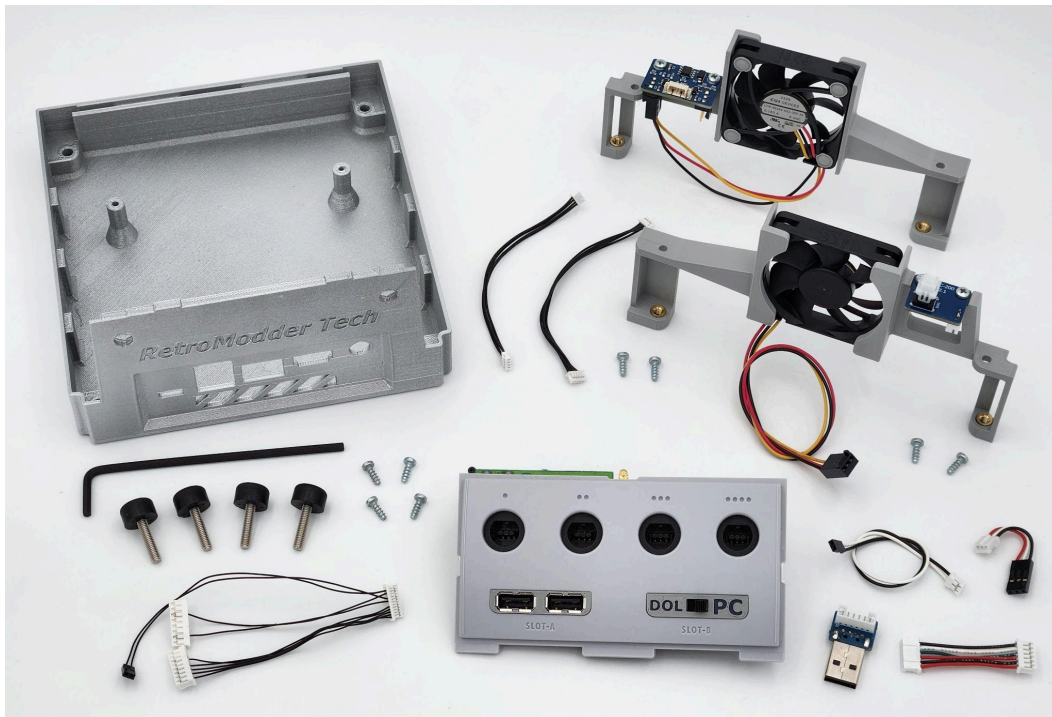


Here are some suggested next steps:

- Plug in power adapter, display monitor, and keyboard/mouse
- Power PC on using GameCube power button
- Verify system fans are spinning
- Verify reset button functions
- Install desired operating system and latest motherboard drivers
- Install latest firmware for GameCube USB adapter found [here](#)
- Install latest beta version of Dolphin Emulator found [here](#)
- Setup the adapter to work with Dolphin Emulator as detailed [here](#)
- Verify adapter mode switch and front panel USB ports are functional

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1. Inside the top shell, remove material in the designated area using needle-nose pliers. Verify there is clearance when sliding the front panel in.



2. Remove the motherboard from the Intel NUC7 case and prepare it by installing the RAM, M.2 storage, and optional wireless module with antenna leads.



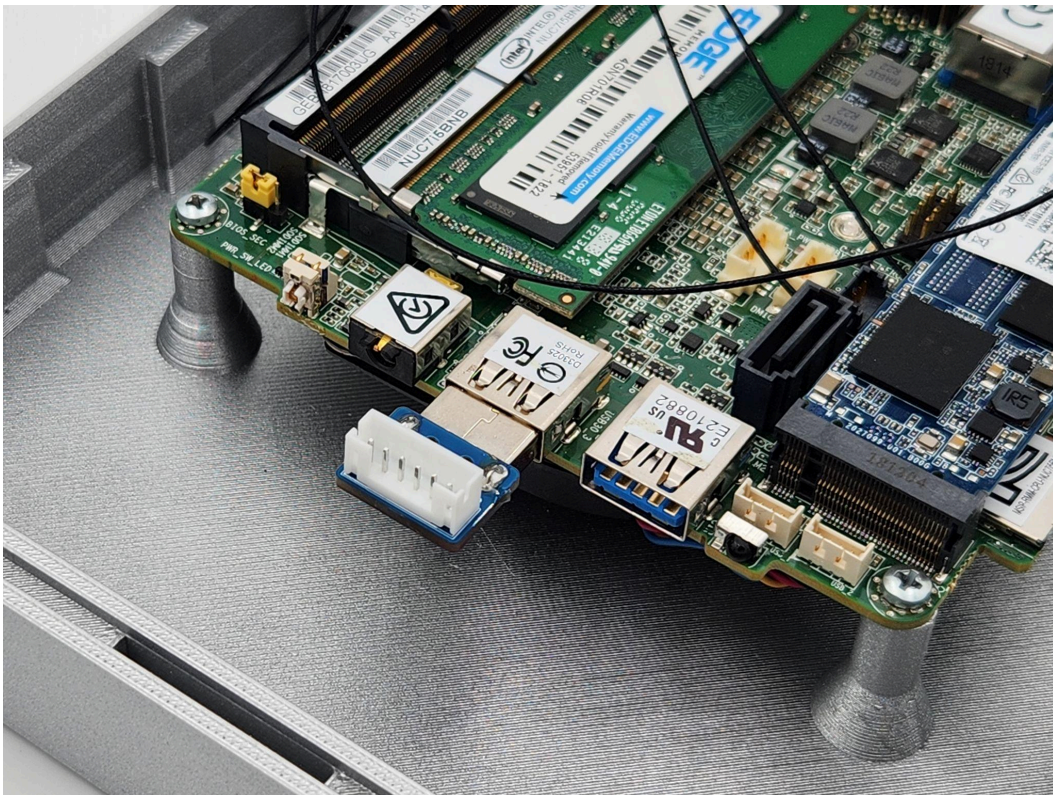
3. Lower the motherboard onto the motherboard mount standoffs and push it towards the rear of the case. Secure using (x4) M3 x 8mm screws, tightening carefully.



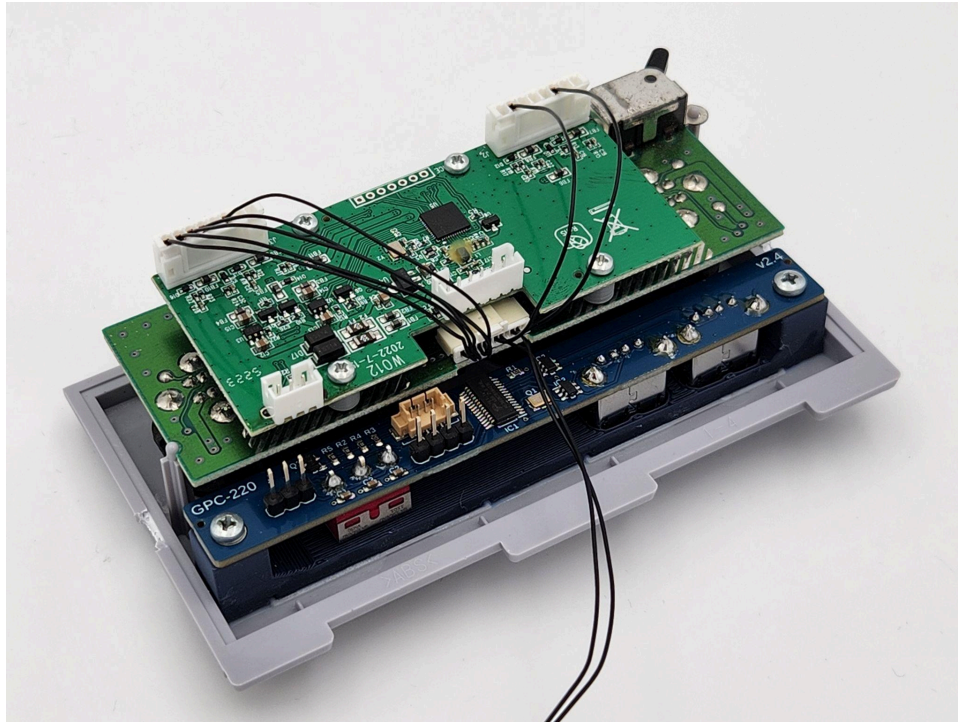
Installing Wireless Antennas: If the motherboard is equipped with a wireless module, mount the SMA connectors to the rear I/O shield using a small adjustable wrench.



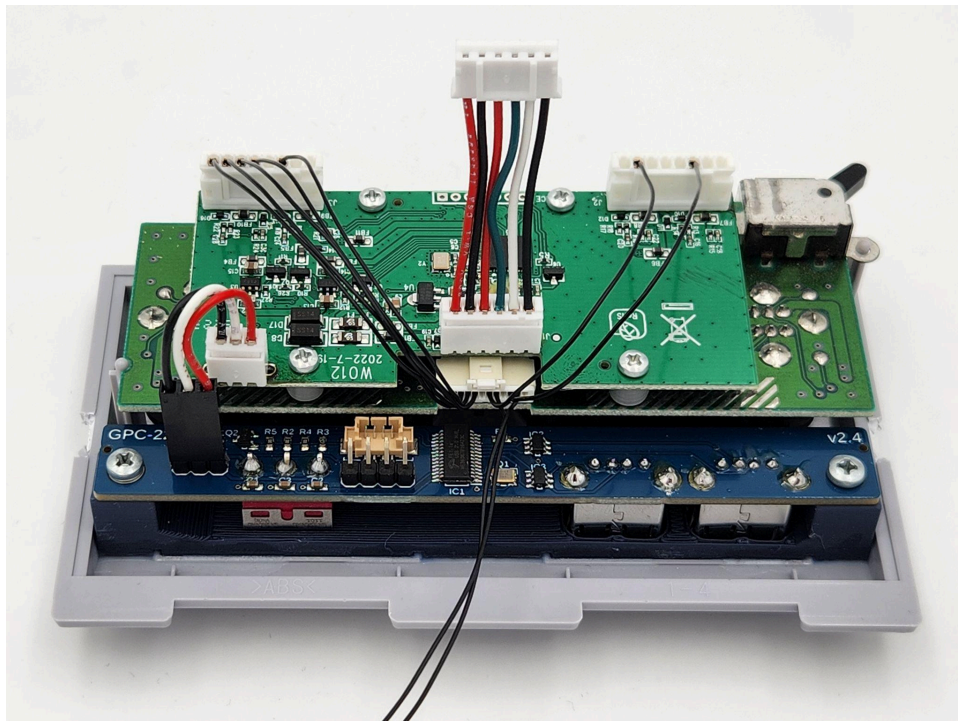
4. Plug the USB Type-A adapter board into the first USB port on the motherboard.



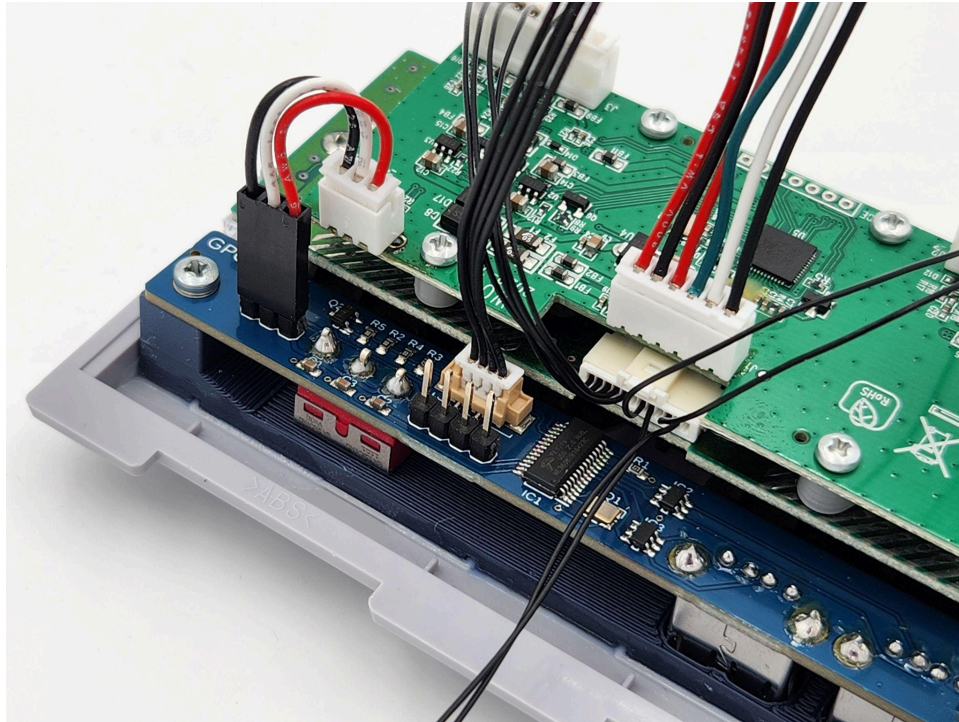
5. Plug the controller adapter harness into the controller port board, paying attention to the 8-pin connectors as they are populated differently.



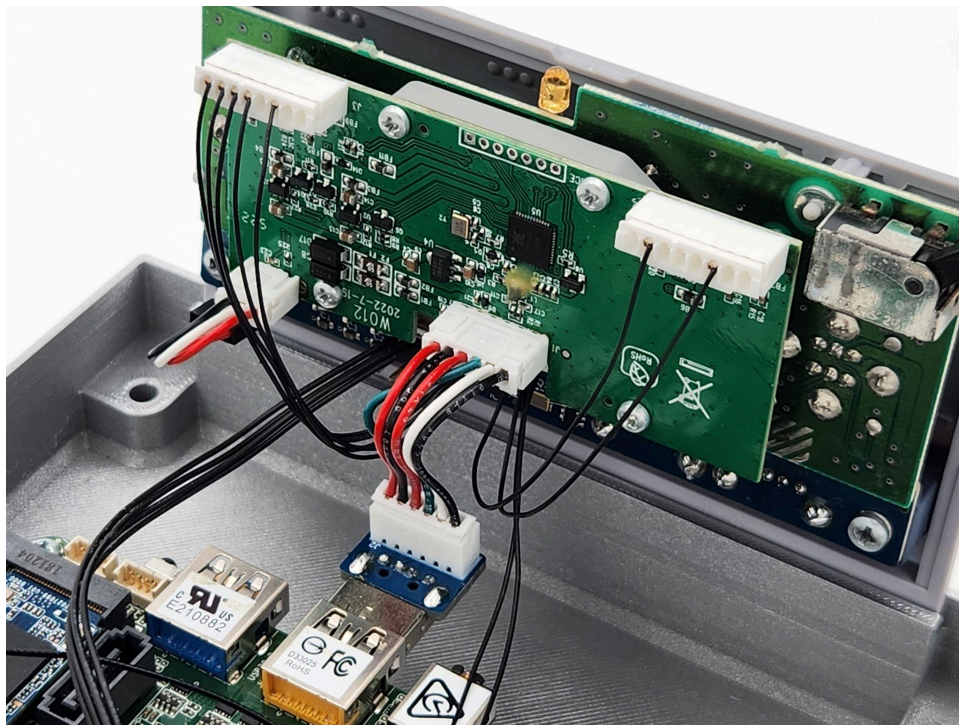
6. Plug the USB harness for the controller adapter into the 6-pin USB controller adapter header. Plug the mode switch harness into the 3-pin headers on the USB controller adapter and USB hub board.



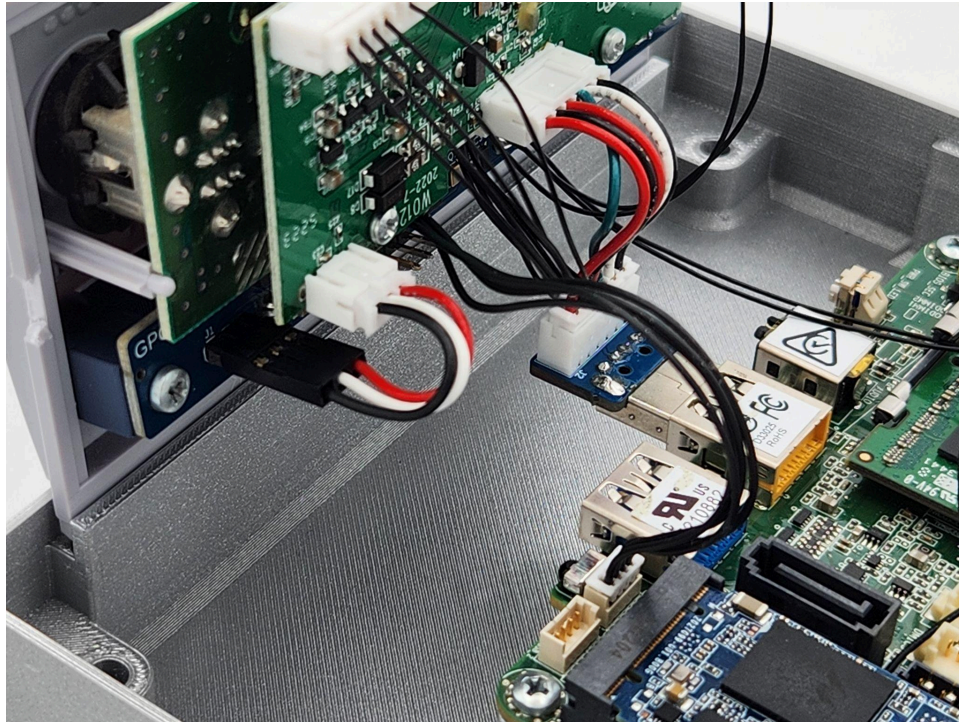
7. Plug the USB harness for the USB hub into the 4-pin USB hub header on the USB hub board.



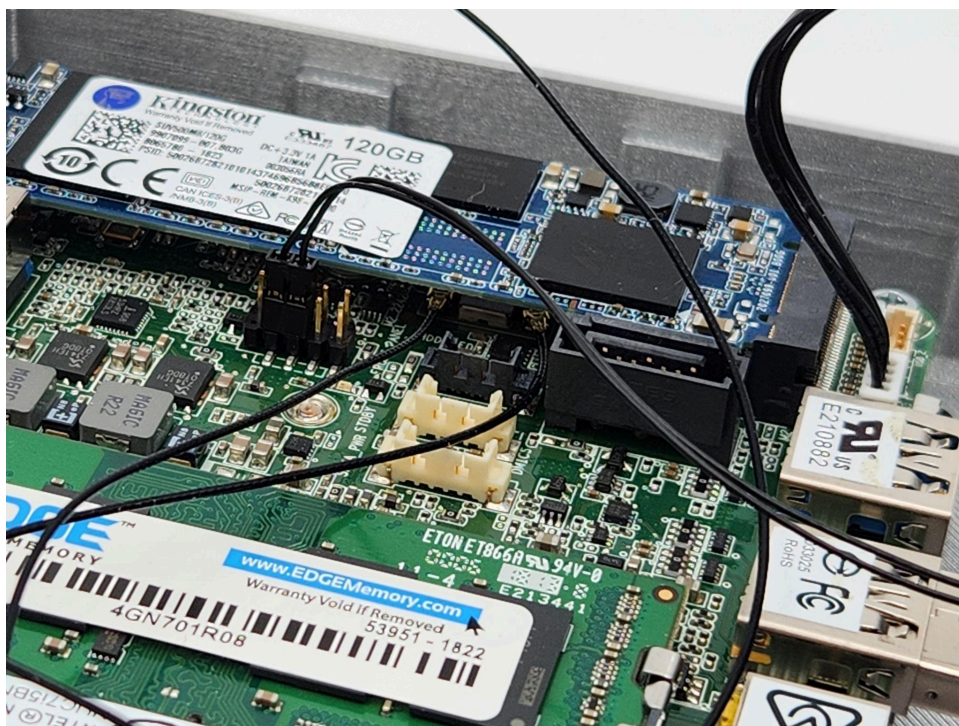
8. Set the front panel into the groove in the bottom shell. Plug the USB harness for the controller adapter into the USB Type-A adapter board.



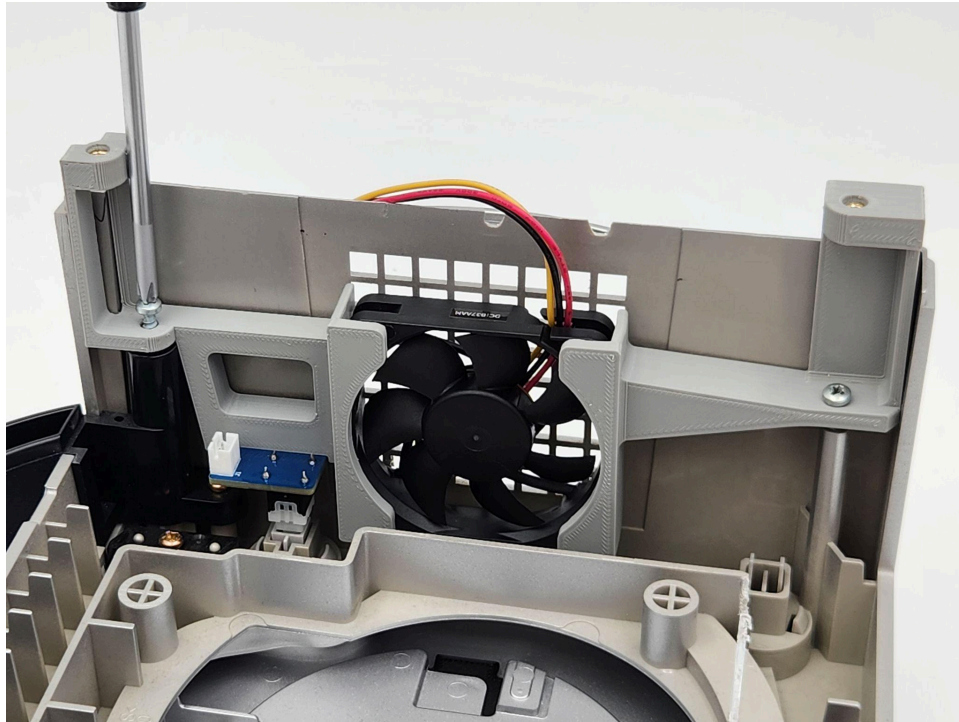
9. Plug the USB harness for the USB hub into the 4-pin USB header on the motherboard.



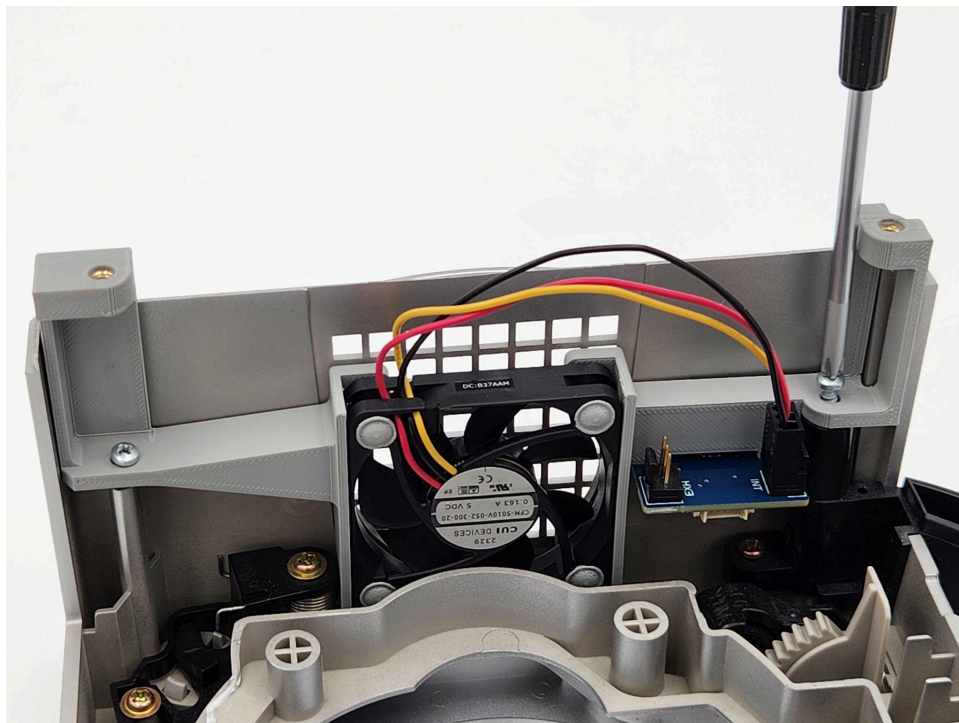
10. Plug the reset button connector into the motherboard front panel header, referring to the motherboard manual for pinout.



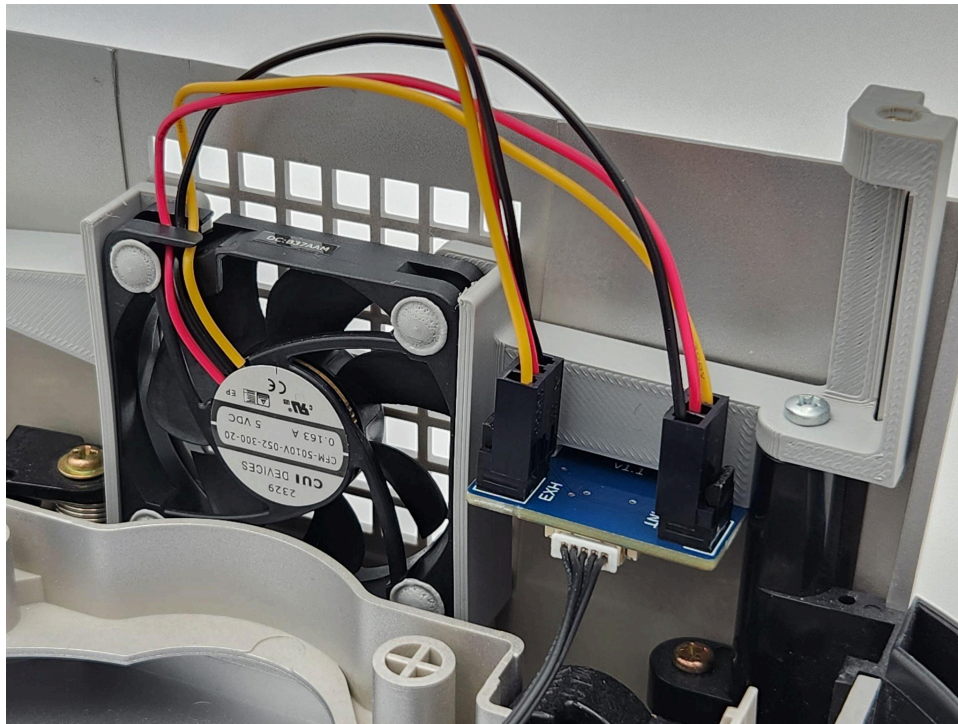
- 11.** Secure the power button standoff assembly inside the top shell using (x2) M3 x 8mm thread-forming screws, tightening carefully.



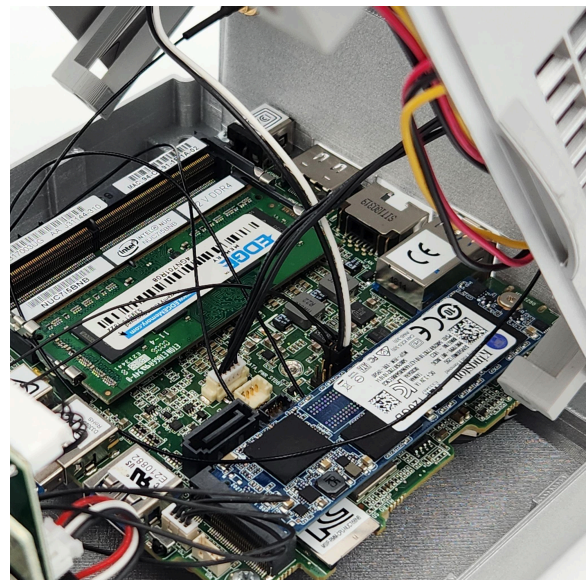
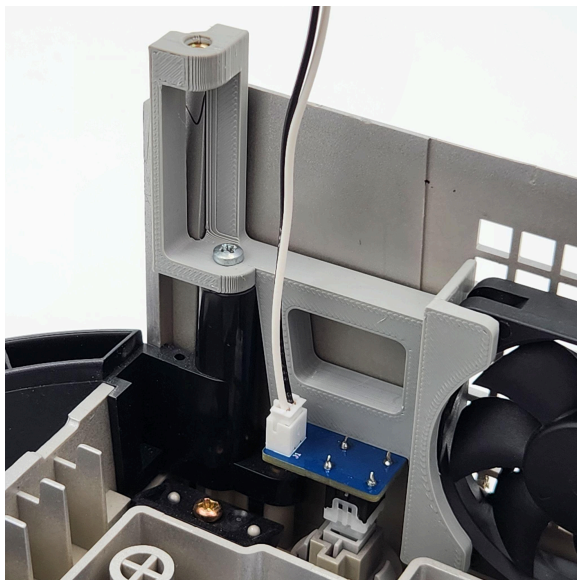
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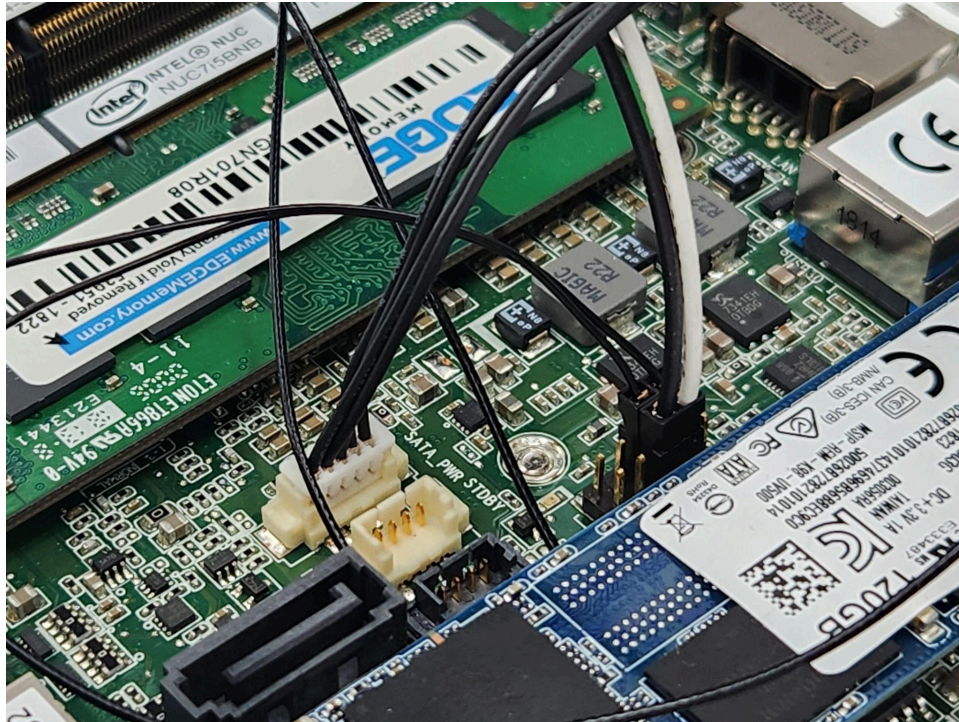
- 13.** Plug the intake and exhaust fan connectors into the “INT” and “EXH” headers on the fan hub board, respectively. Plug the fan hub harness into the 5-pin fan hub header.



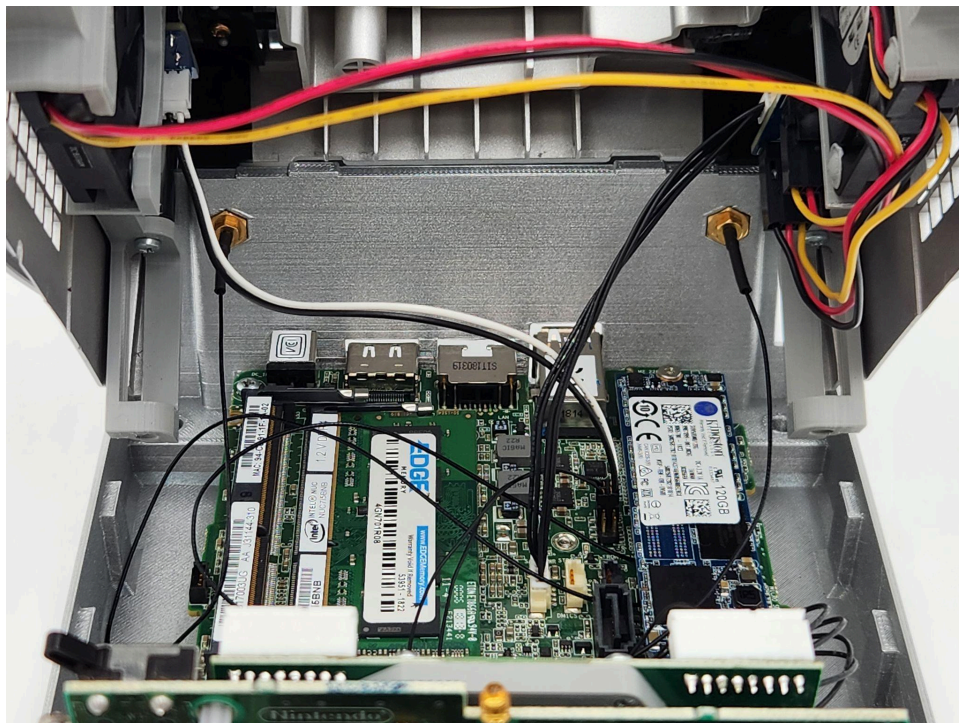
- 14.** Connect the power button harness from the power button board to the motherboard front panel header, referring to the motherboard manual for pinout.



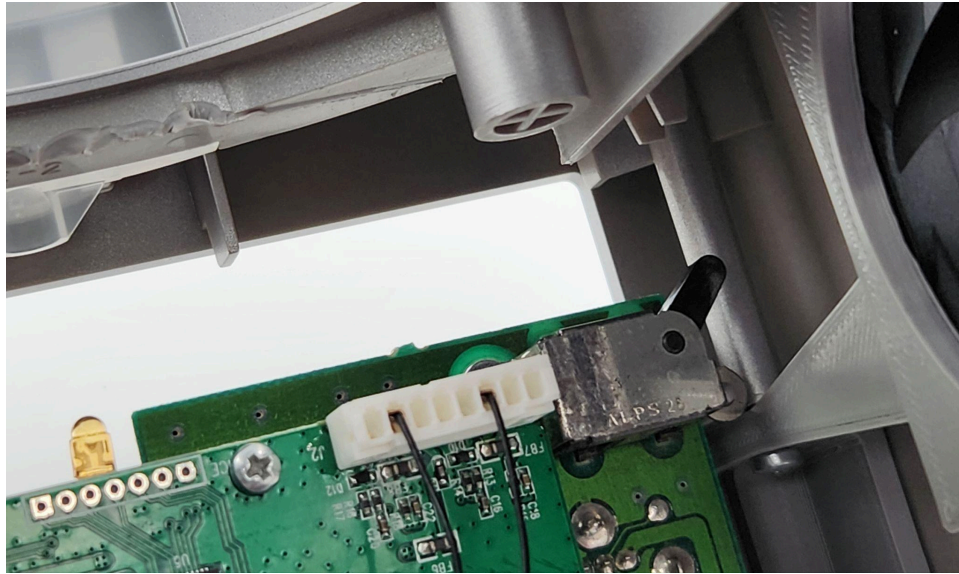
- 15.** Plug the fan hub wire harness into the motherboard SATA power connector.



- 16.** With the lid open and holding the top shell directly above the bottom shell, slowly slide the top shell onto the front panel first.



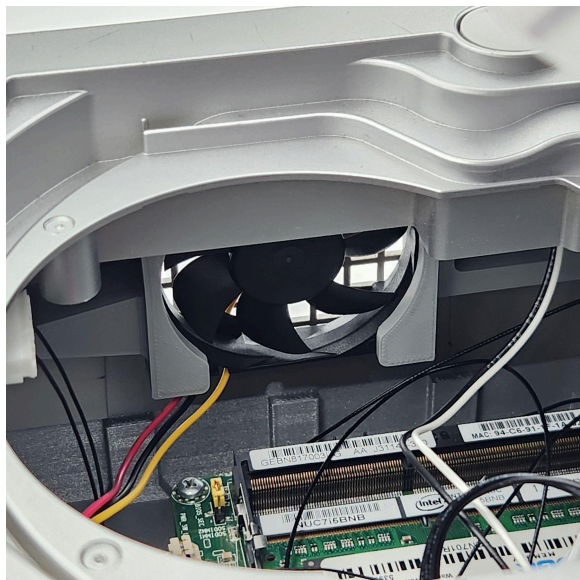
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