

64HD™ 

EXPERT
**Installation &
Assembly Guide**
For All Standard N64 Models

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Gamebox^{LLC} can, in no way, be held liable for any damage to the user's property, or the user's health from following these instructions. While these instructions aim to give the user a comprehensive and safe guide to completing this modification, there are many potential variables that could result in the unit that the user is attempting to modify requiring more restorative measures. There is also a serious risk of, injuries, and death when working with electronics. At the time of this guide's writing these consoles are rapidly aging, and even working units should be recapped as soon as possible. Chemicals associated with some of these processes are quite toxic and should be handled with care and adult supervision. Results may vary. "64HD", "Gamebox", "Gamebox Systems", "gamebox.systems", its associated internet domains, and the associated logos in this document are trademarks(™) of Gamebox^{LLC}, A Limited Liability Company. This document, text and, images contained there-in are property of Gamebox^{LLC} ©2023 Gamebox^{LLC}, all rights reserved.

Kit Contents:

- 64HD PCB
- HDMI daughter PCB
- RCP flex cable
- 15 pin FFC
- No cut AV shroud
- HDMI PCB mounting bracket
- 2x 5mm M2 screws

Tools Required:

- Gambit screw driver
- Phillips size 0 and 2
- Soldering iron (fine tip recommended for drag soldering)
- Solder (Leaded recommended, leadless can lead to poor solder joints and other issues with the installation. Use unleaded at your own risk)
- Flux (liquid or normal will work fine)
- Wire gauge 30 to 32 (too small of gauge will cause issues, 34 and smaller)

RCP Flex Cable Installation

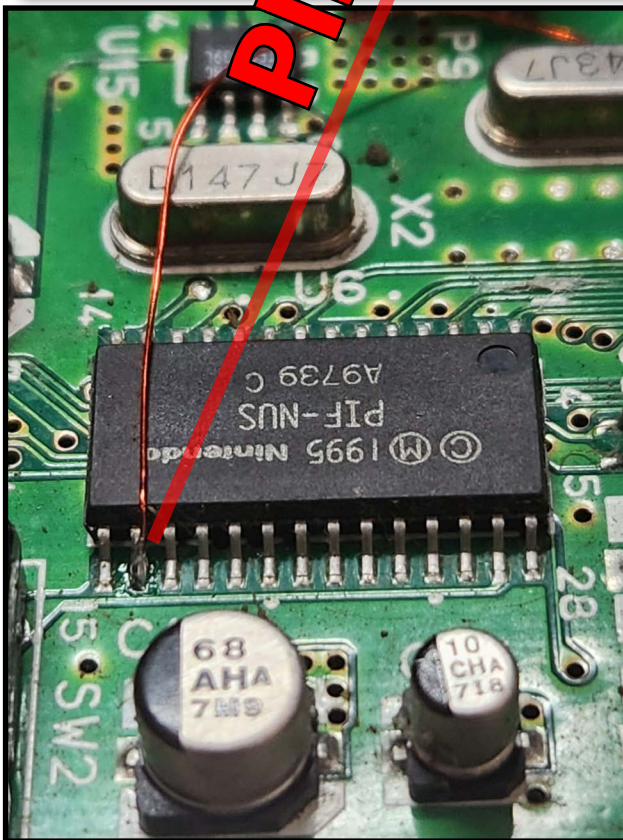
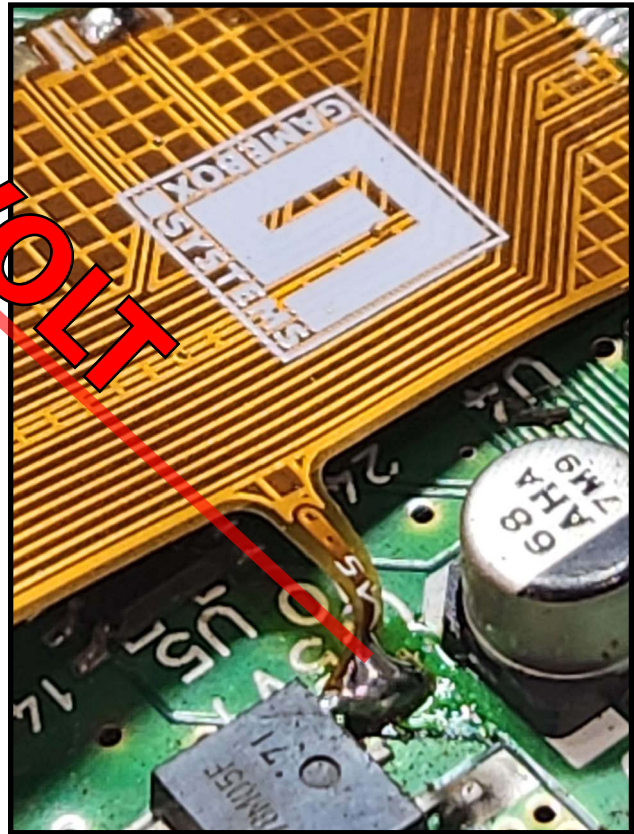
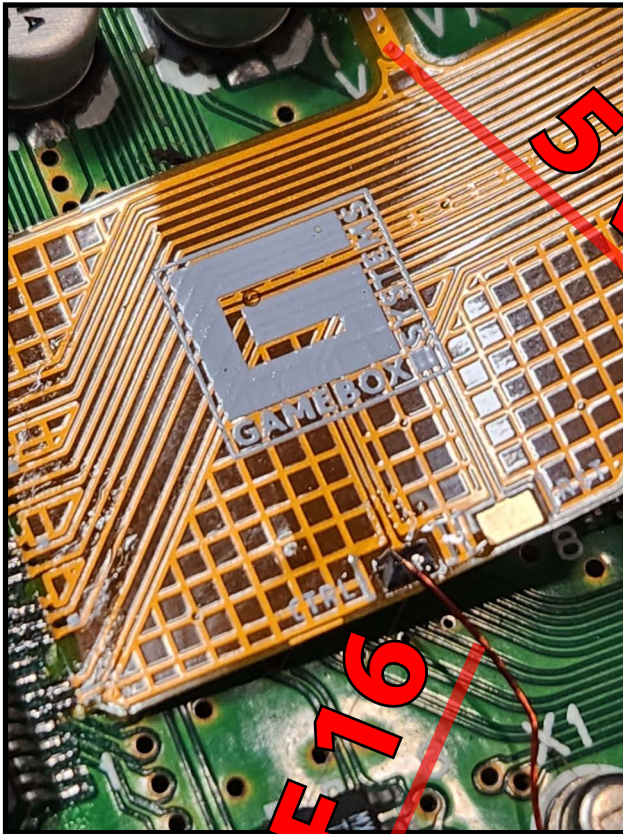
STEP 1



Solder the RCP flex cable starting at Pin 6 (as shown above).

RCP Flex Cable Additional Connections

STEP 2



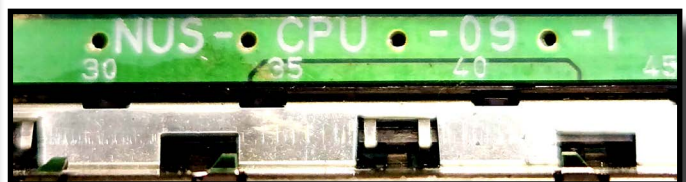
Solder the flex contact to the N64 motherboard location marked "5v" in silkscreen (shown above).

FAILURE TO MAKE THIS CONNECTION PROPERLY WILL RESULT IN THE 64HD PCB FAILING TO BOOT WHEN THE CONSOLE POWERS ON.

For N64 motherboard revisions 01-05 (shown left). Use a small amount of 30 gauge wire to connect the CTRL breakout pad on the RCP flex cable to PIN 16 on the PIF. The Reset pad isn't populated.

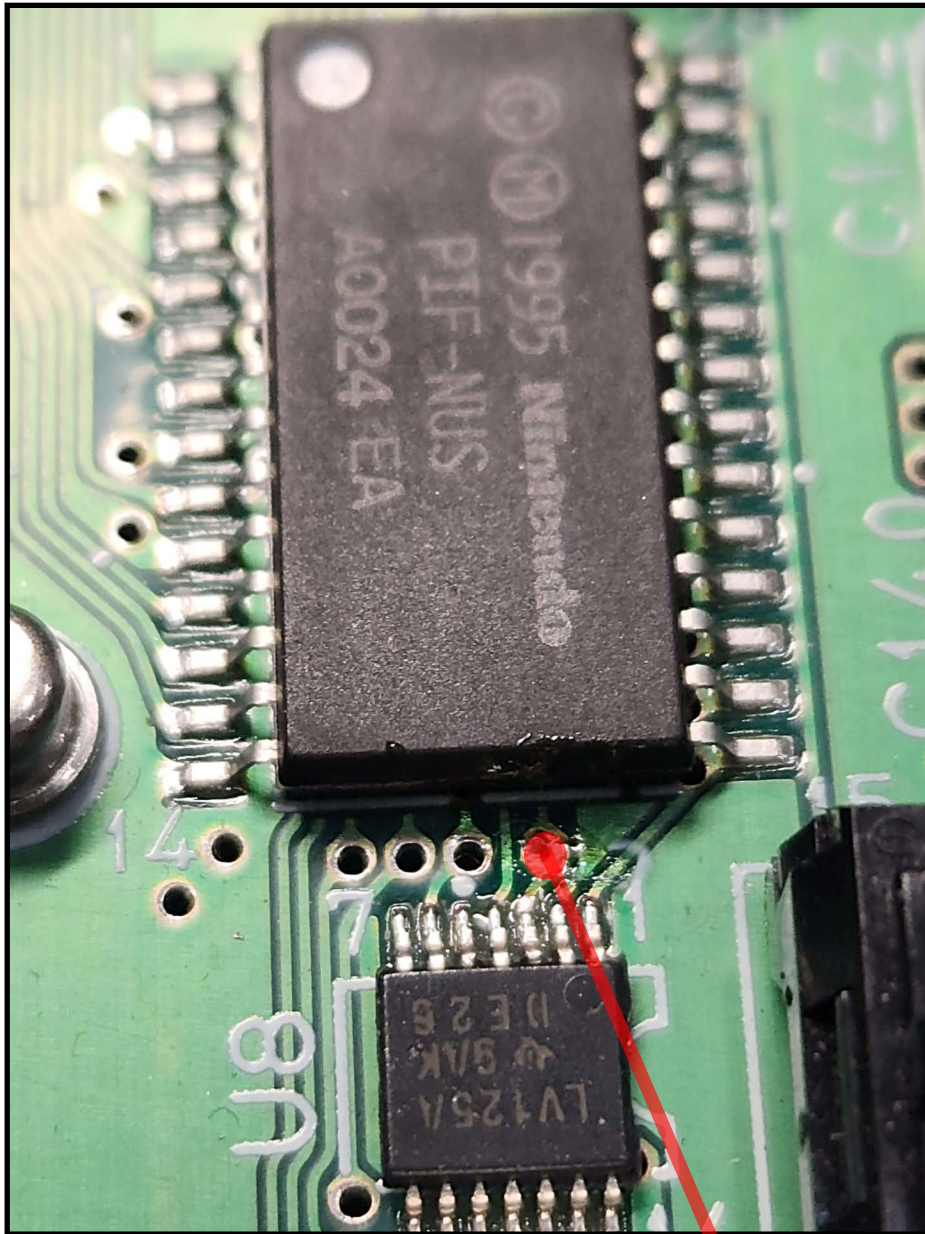
For motherboard revisions 06-09 please see the next page.

The motherboard revision can be found near the cartridge slot (shown below).



Alternate PIF Location On Later Revisions

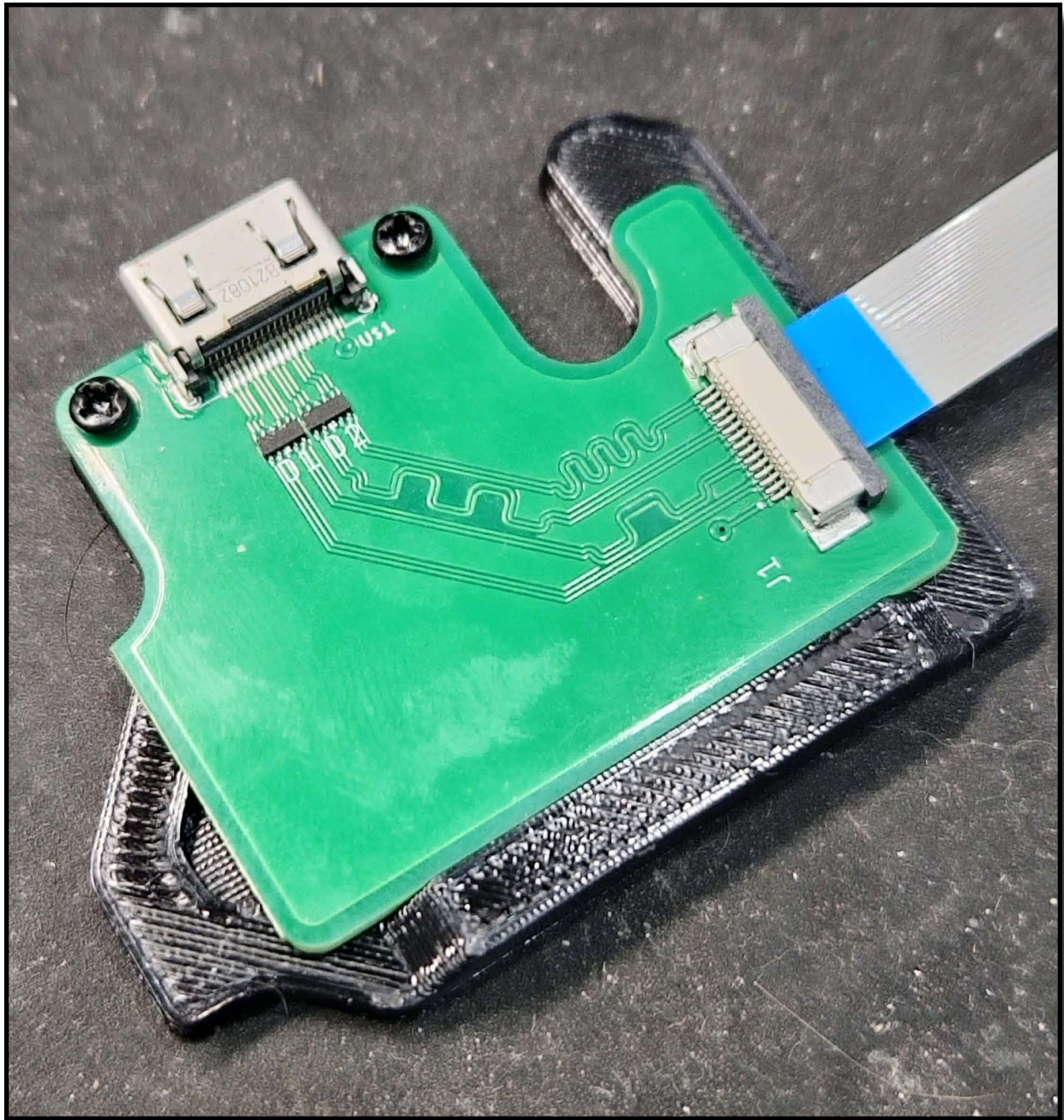
STEP 3



For motherboard revisions 06-09 you must wire the CTRL pad to a VIA located next to the PIF chip instead of directly to the chip itself. **IF WIRED DIRECTLY TO PIF 16 THE USER WILL BE LOCKED OUT OF THE OSD.** Use a gentle abrasive or razor to remove the solder mask on the VIA before tinning and making the connection. The VIA is the 4th VIA point that is closer to PIN 15 of the PIF chip.

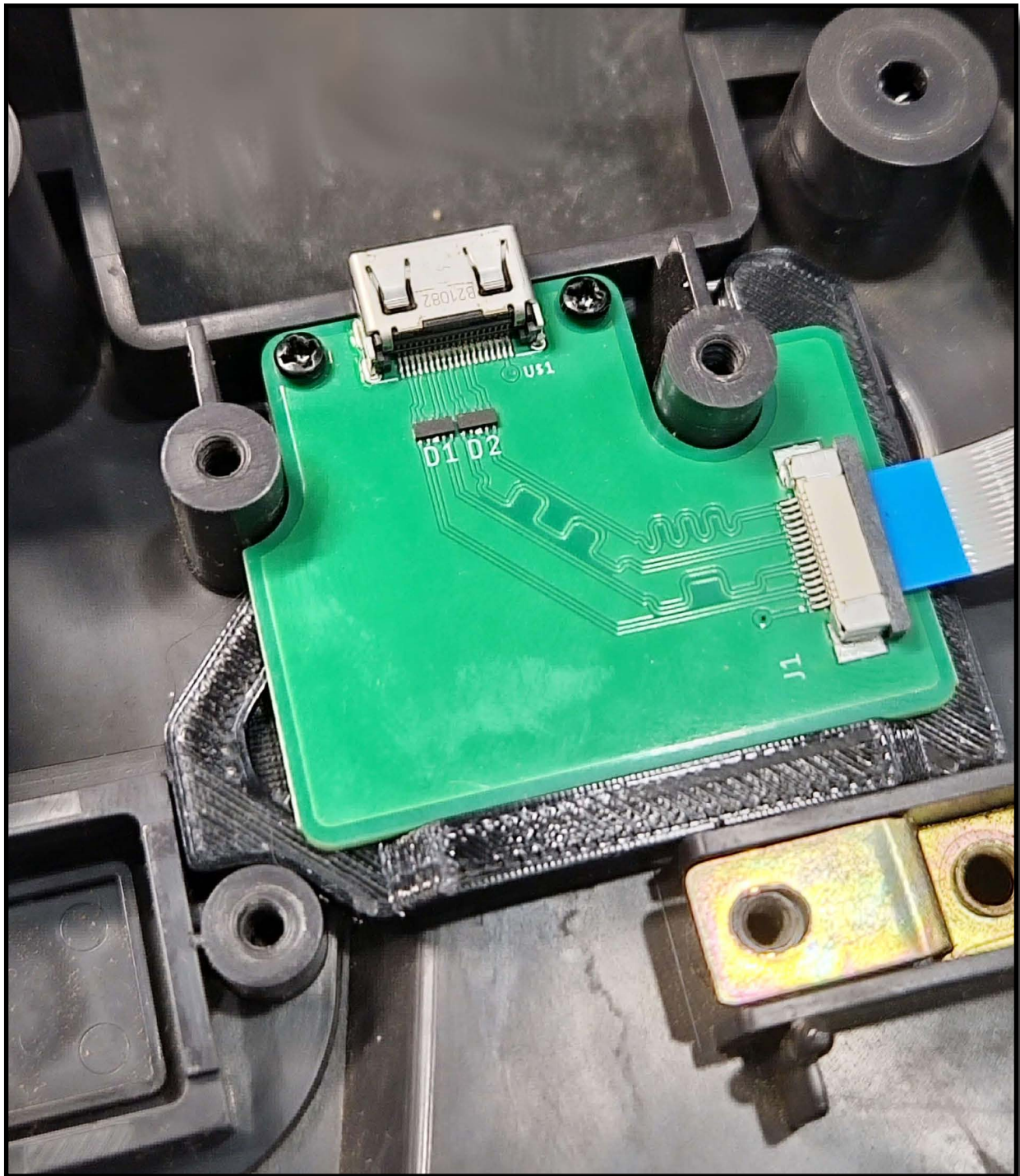
HDMI Daughter PCB Installation

STEP 4



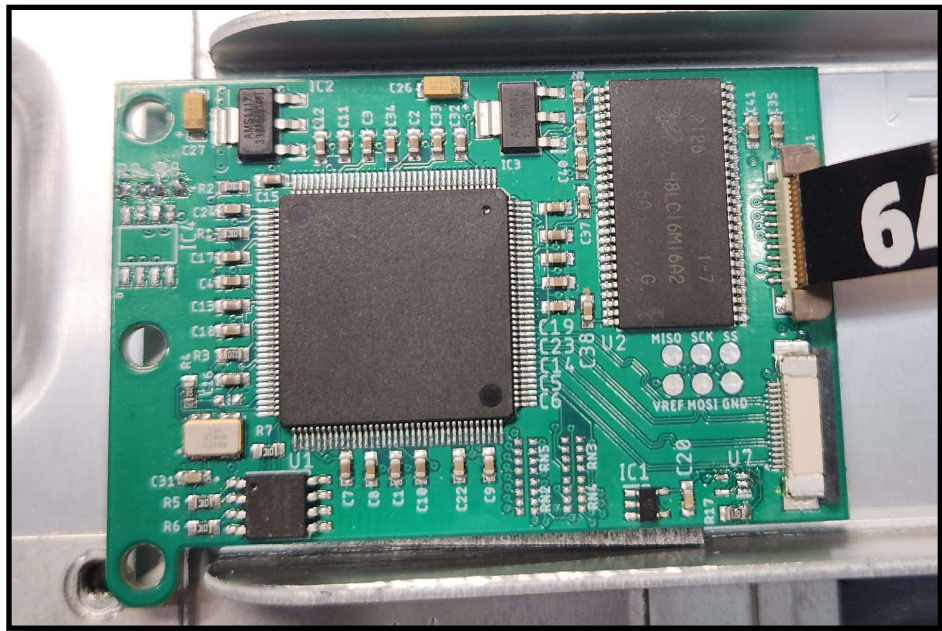
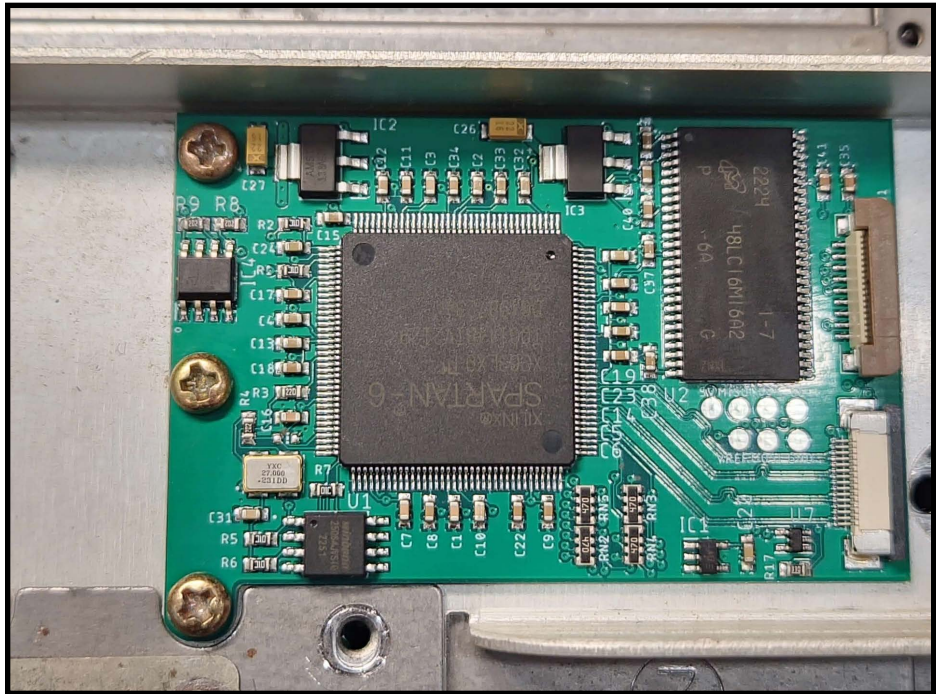
Mount the HDMI daughter PCB to included bracket using the included M2 screws. Install the daughter PCB's 15 pin FFC.

HDMI Daughter PCB Installation STEP 5



Place bracket in the bottom N64 shell(as shown above). Place bottom motherboard shielding over the bracket.

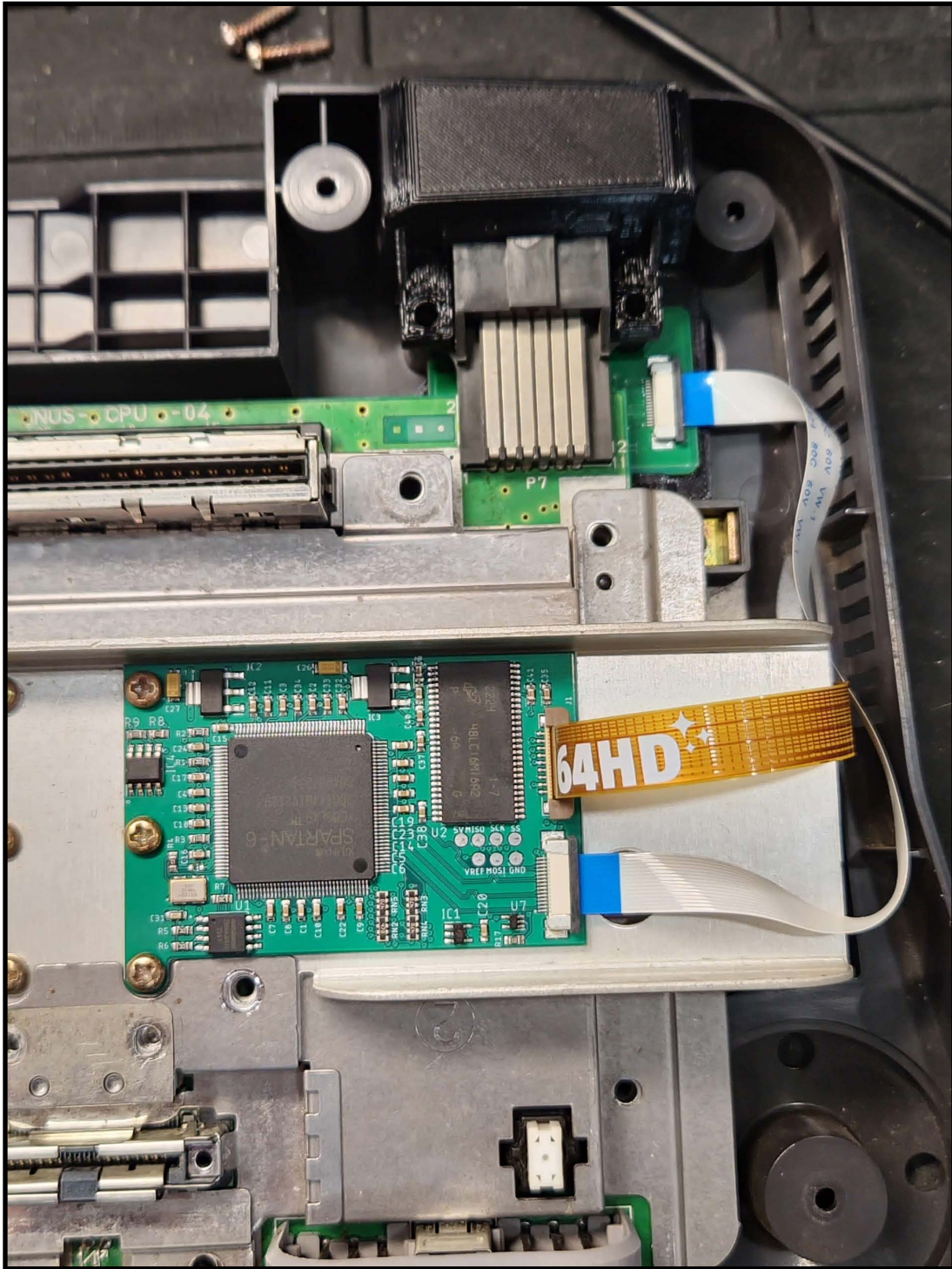
64HD PCB Installation STEP 6



Replace the N64 motherboard. Install the no-cut A/V shroud. Install the top motherboard shield. Remove the screws shown, line up the 64HD main PCB, and reattach the screws.

NOTE: If your motherboard is a later model that does not include these screw holes, use the included double sided foam tape to secure the 64HD PCB down to the N64 heatsink.

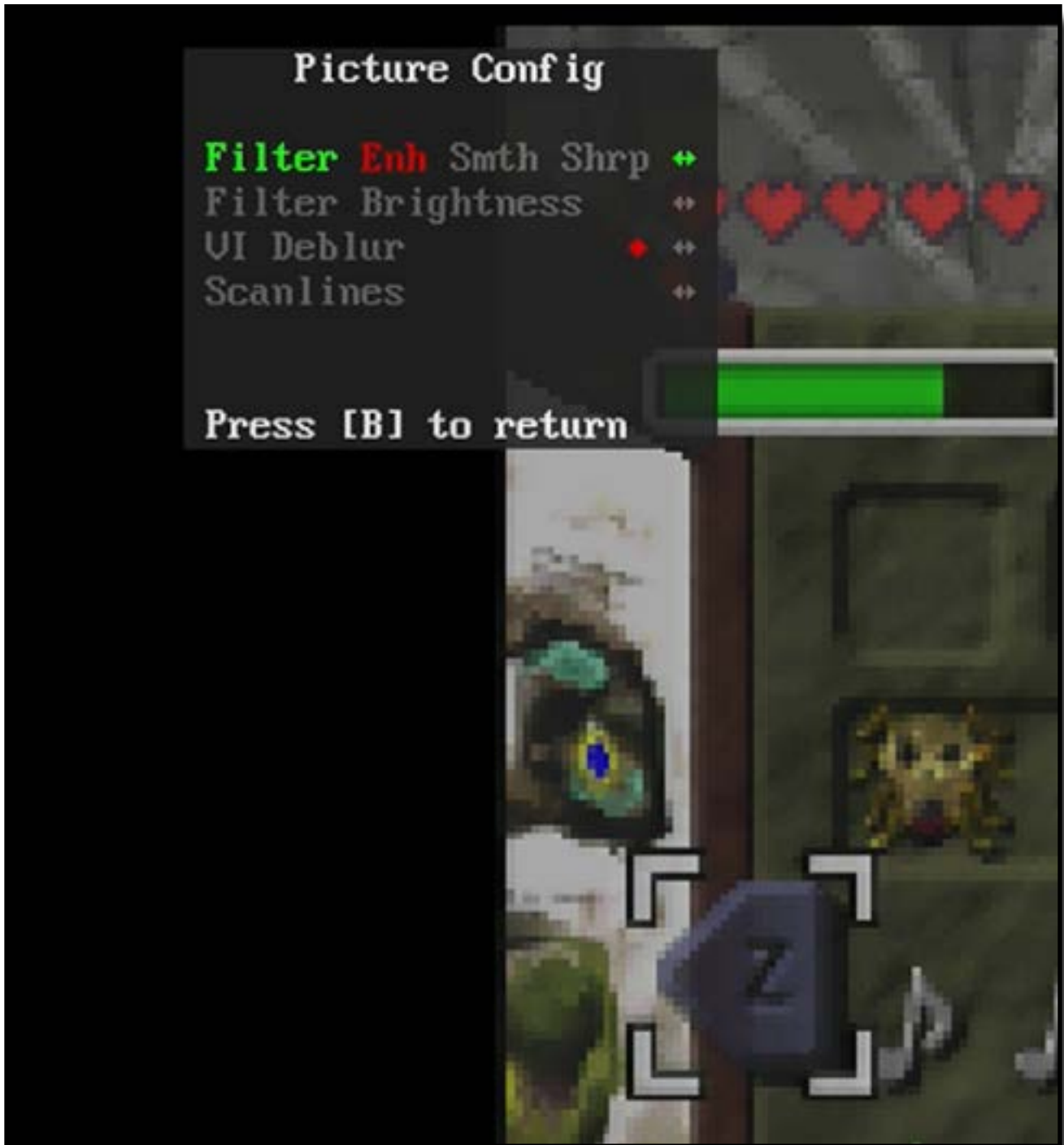
Flex Cable Attachments STEP 7



Insert flex cables into the corresponding sockets as shown (above).

Final Assembly & Testing

STEP 8



Double check to make sure all flex cables are properly attached. Test the system before putting the top shell back in place.

L + R + C-DOWN + DPAD-DOWN -> enter OSD
L + R + LEFT DPAD + C-LEFT -> enter 240p mode
L + R + UP DPAD + C-UP -> cycle to next resolution