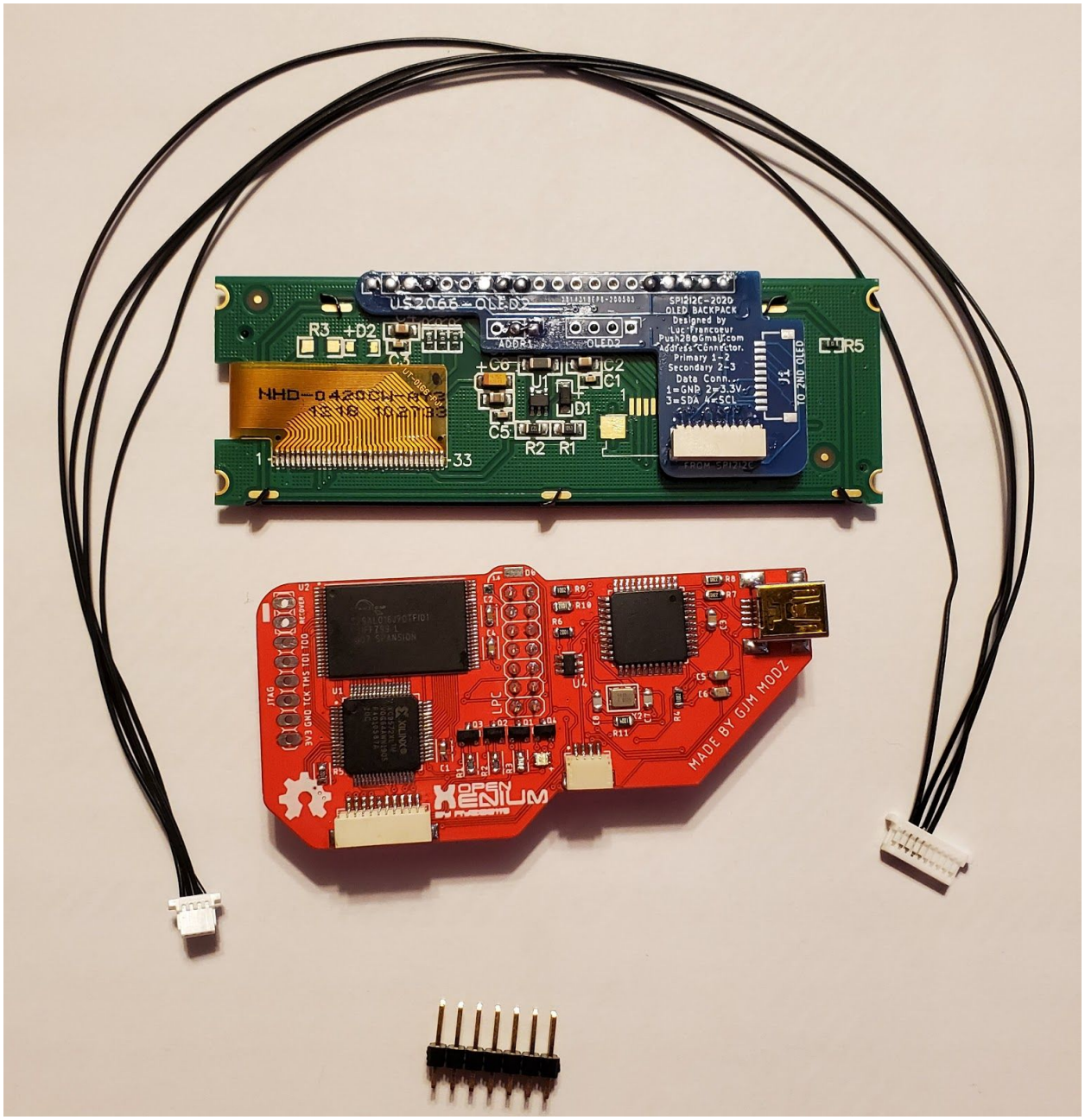
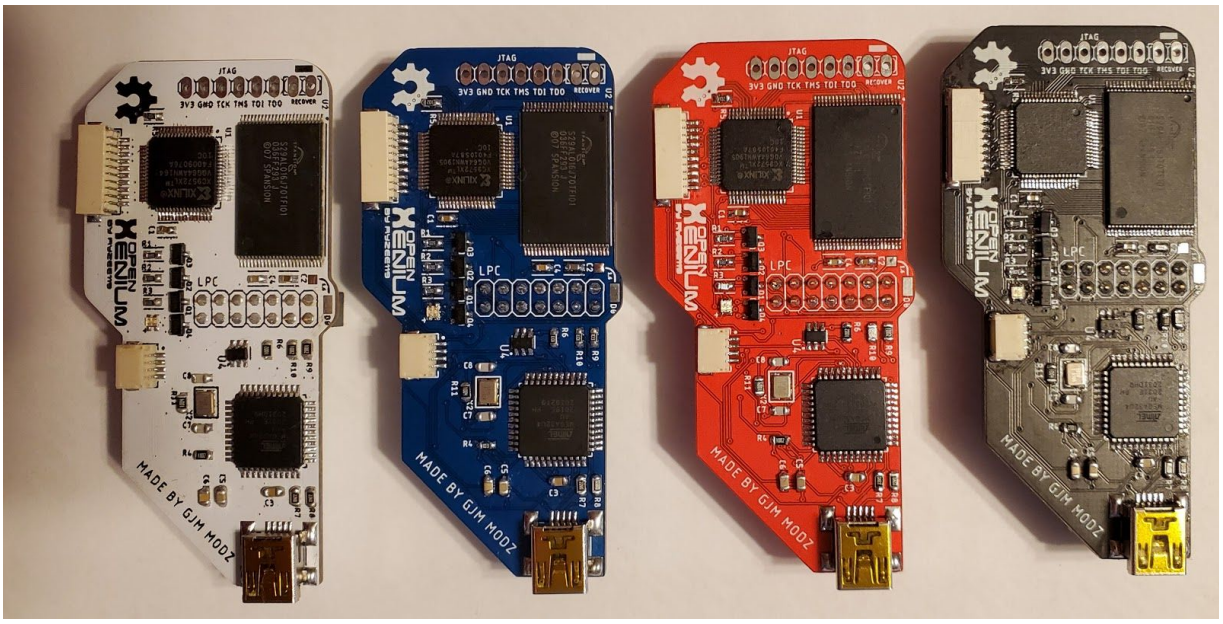


What's included:

Oled Open Xenium, daughterboard, pin header, wire harness and a Character OLED; 4x20 NHD-0420CW-AB3(not included)



Oled Open Xenium installation Guide
For 1.0v to 1.6v Original Xbox

Thank you for purchasing!

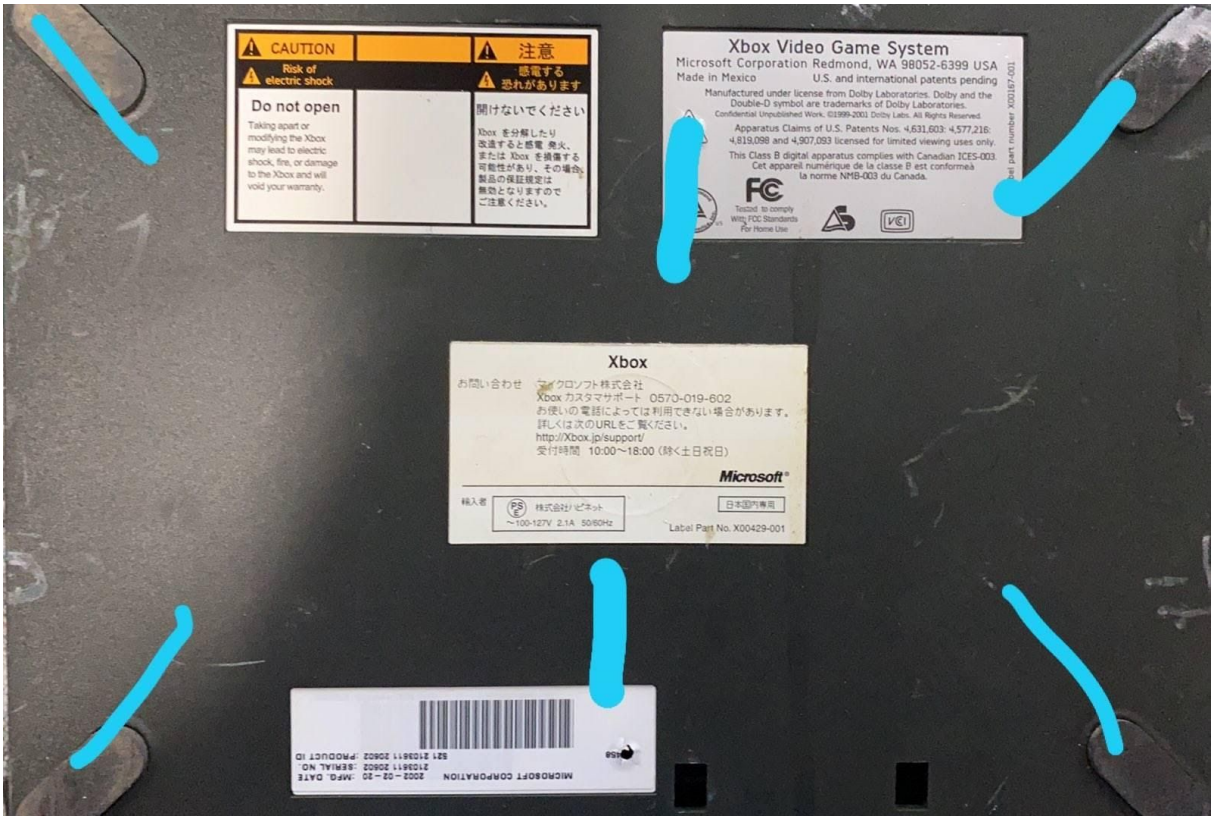
To begin the installation, you will need some tools to first remove the motherboard from the Xbox.

<u>Tools needed:</u>
T10 and T20 screwdriver bits
Wire 30awg
Flat head screwdriver
Side cutter
Soldering iron
Desolder wick
Flux (recommended but not needed)

Step 1 - Turn xbox over

Turn Xbox upside down (highly recommend a towel to not damage lid).

Where the 6 blue lines are is where we need to remove the screws.



Step 2 - Remove the Lid

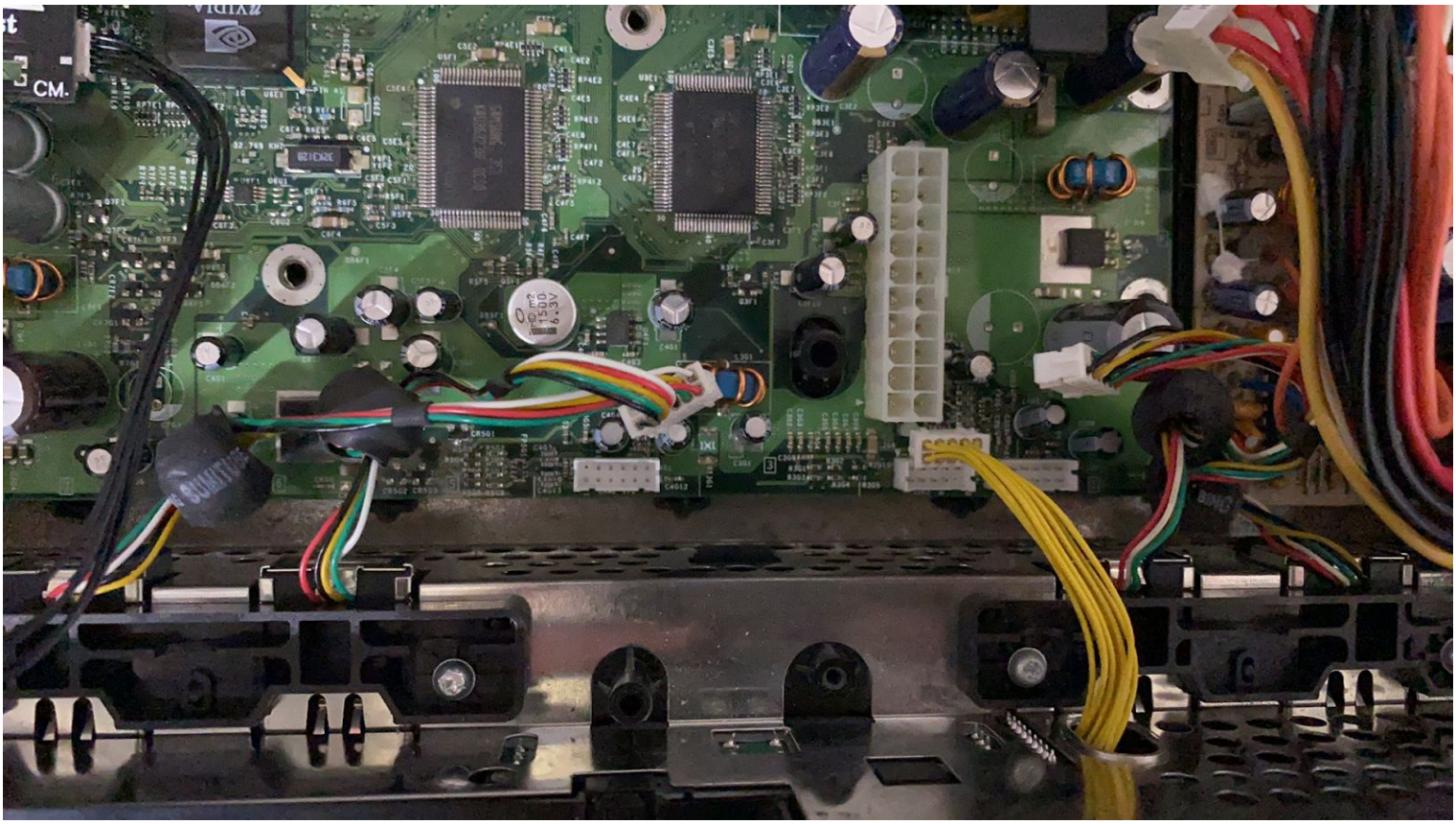
Remove the lid once all 6 screws are taken out. Once the lid is off, you will see the hard drive on the right and dvd drive on the left. We are now going to remove the IDE cable and power cable from the hard drive swap. Pull back towards the back of the xbox (the power cord might be hard to remove, give it a good wiggle and pull back). Once removed place it out of the way.

Now we need to swap to our T10 bit to remove the three screws holding the dvd and hard drive to the xbox case.
Remove the 3 screws in blue.

Now that the three screws are removed, lift the hard drive out of the way and release the power cord from the caddy. Once done, move to the dvd drive slowly lifting it up. Unplug the IDE cable and power cord. Lift up and out of the xbox.

Step 3 - Unplug all the ports

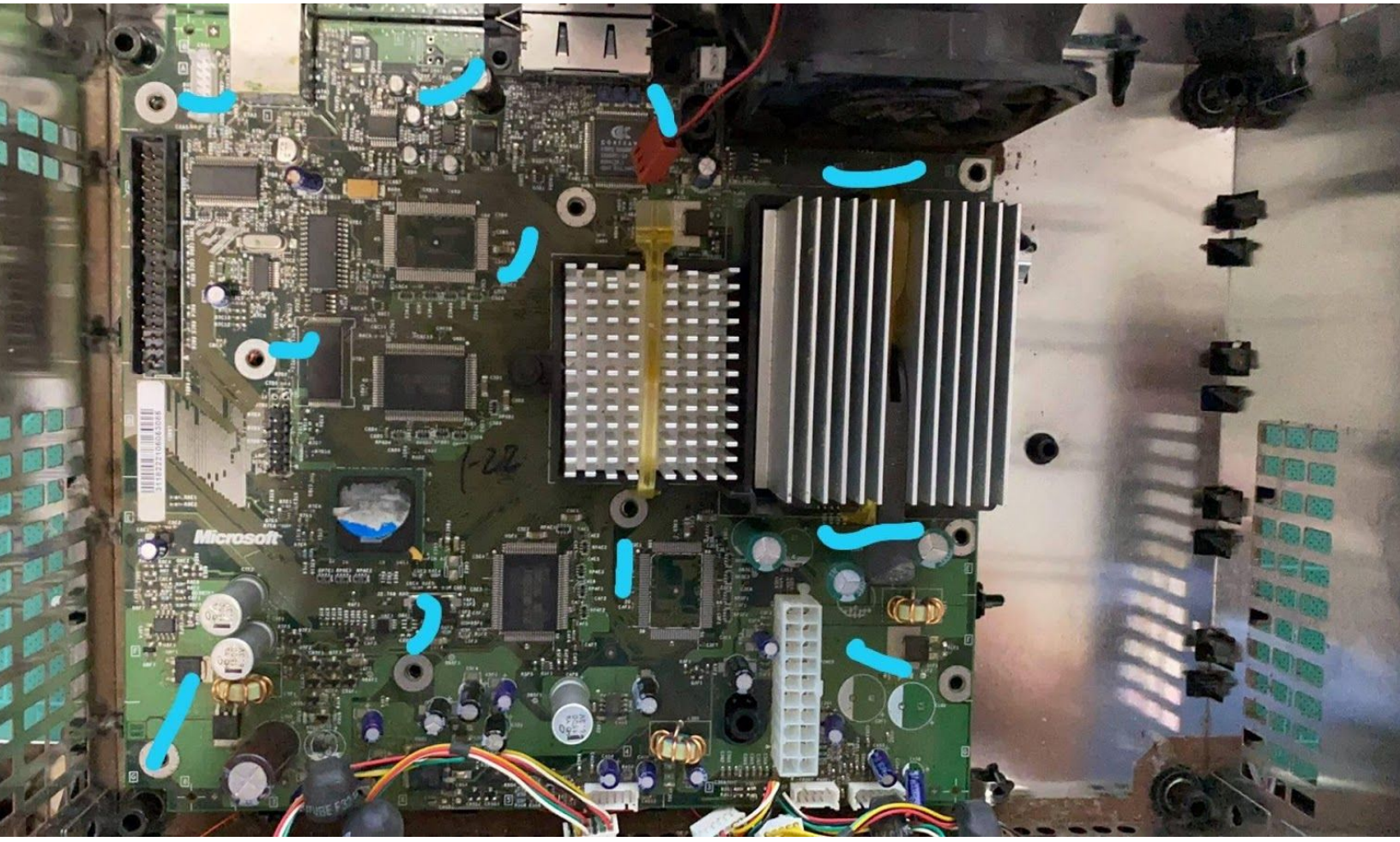
To remove the motherboard, we need to unplug the psu, both controller ports, power on/off board and the fan as pictured below.



Step 4 - Removing the motherboard

With your T10 bit, remove all 11 screws as shown below and the fan power wire.

Once done, remove the board from the console.

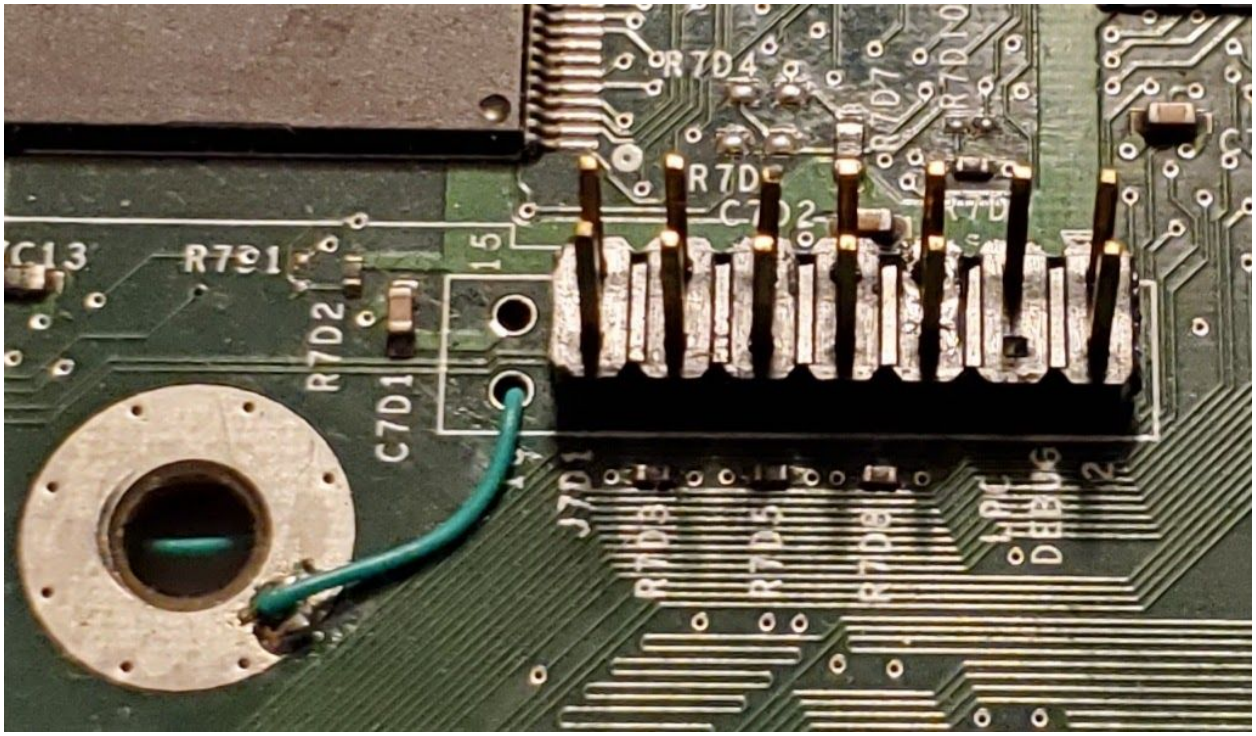


Step 5 - Installing the Pin Header

Now that you have the motherboard removed, you will first start with installing the pin header.

Grab the pin header that came with the modchip and try to insert it into the Xbox's LPC Port from the top side of the motherboard (where all the ports and the CPU/GPU heatsinks are). You may run into a problem with a 1.0 version where the header has solder already in the header slot. This is where your desolder wick will come into play. Use it to remove the solder to install the header.
You will need to remove one pin before soldering the header on for a 1.0 to 1.4v xbox. A small flathead screwdriver should work. After pushing out the extra pin and reinserting the pin header, it should look like this:

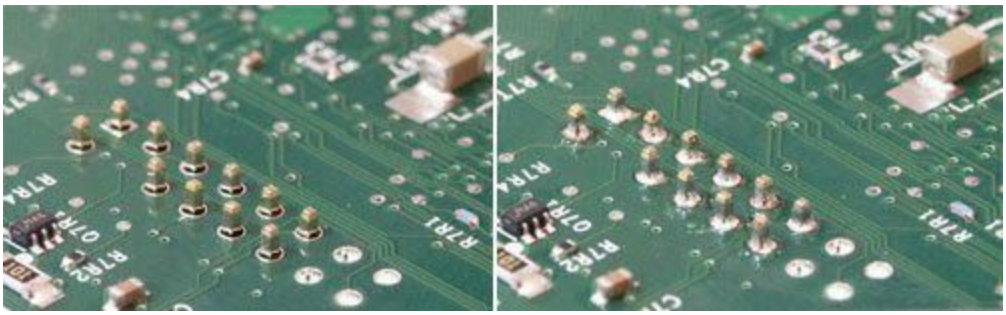
V1.0-1.4



After reinserting the pin header, you will need to solder the pin header from the underside of the board. Before doing so you will need to temporarily secure the pin header or else it will fall out of the port when going to the underside of the board. Tape is a great way of going about doing it.

Now that the pin header is inserted into the LPC port and is secured, you will now start to go to the underside of the board and solder it in.

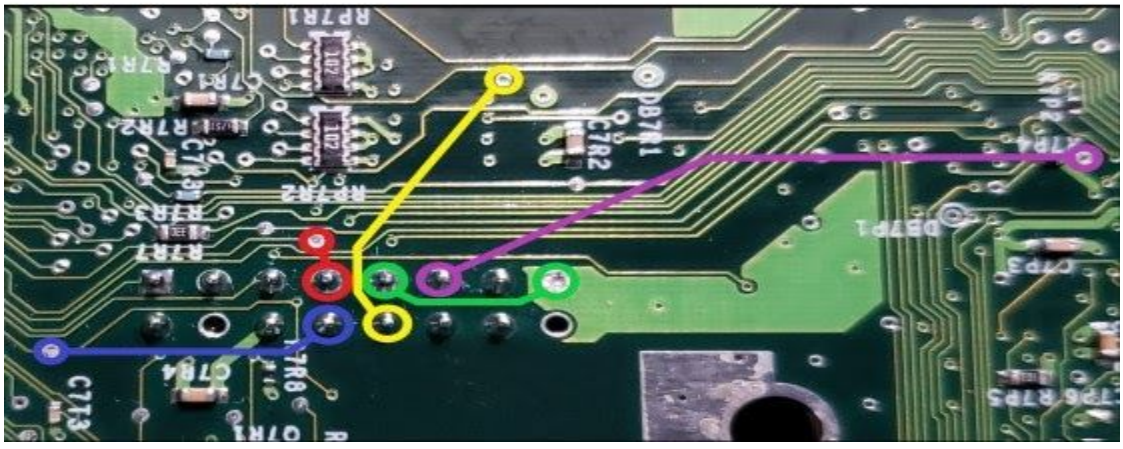
Before After



Step 5a - 1.6v xbox only

V1.6
Rebuild the LPC Debug Port

Use a wire install

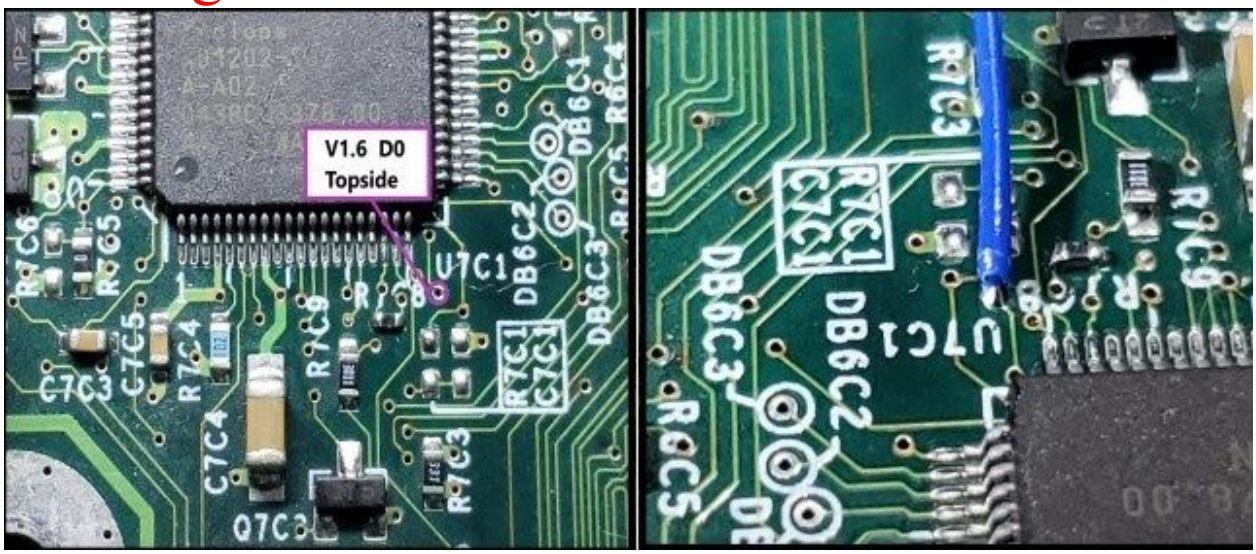


or

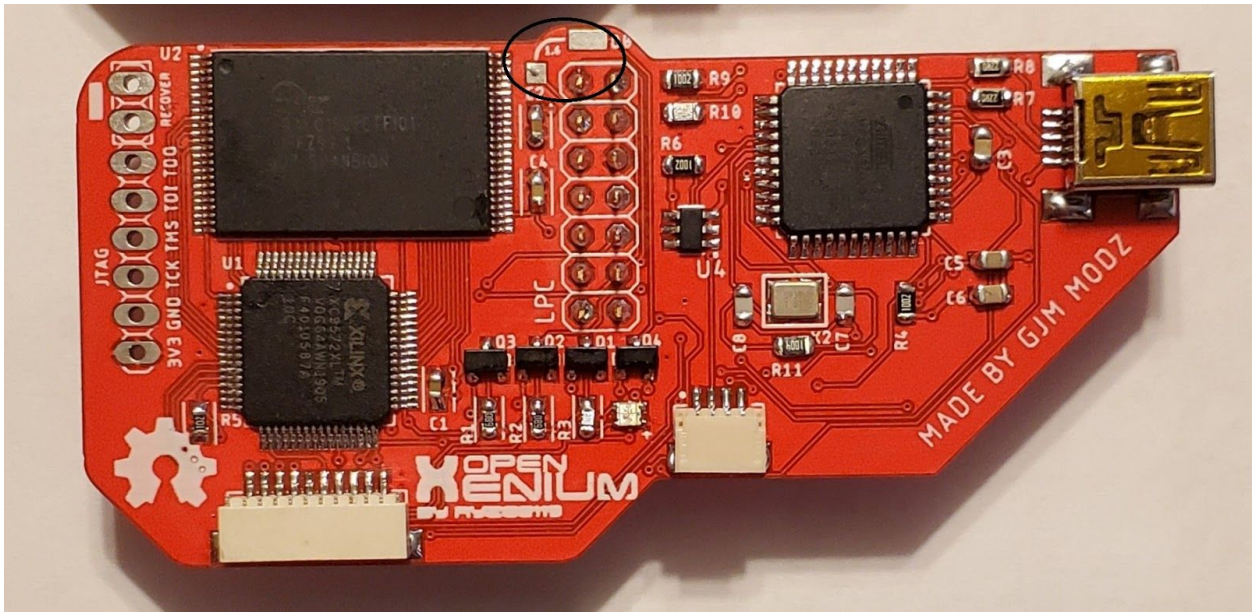
v4 lpc rebuild board provided

On a 1.6v xbox you will solder the D0 from the xbox motherboard to the D0 on the modchip. Bridge the D0 on the chip to the adjacent pad(shown in 3rd pic below)

Do not ground D0 on a 1.6v xbox.



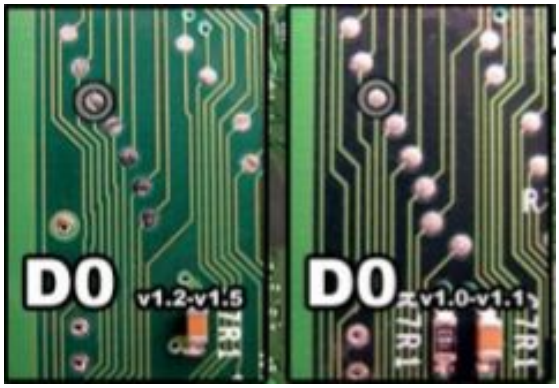
Bridge these pads for 1.6v install

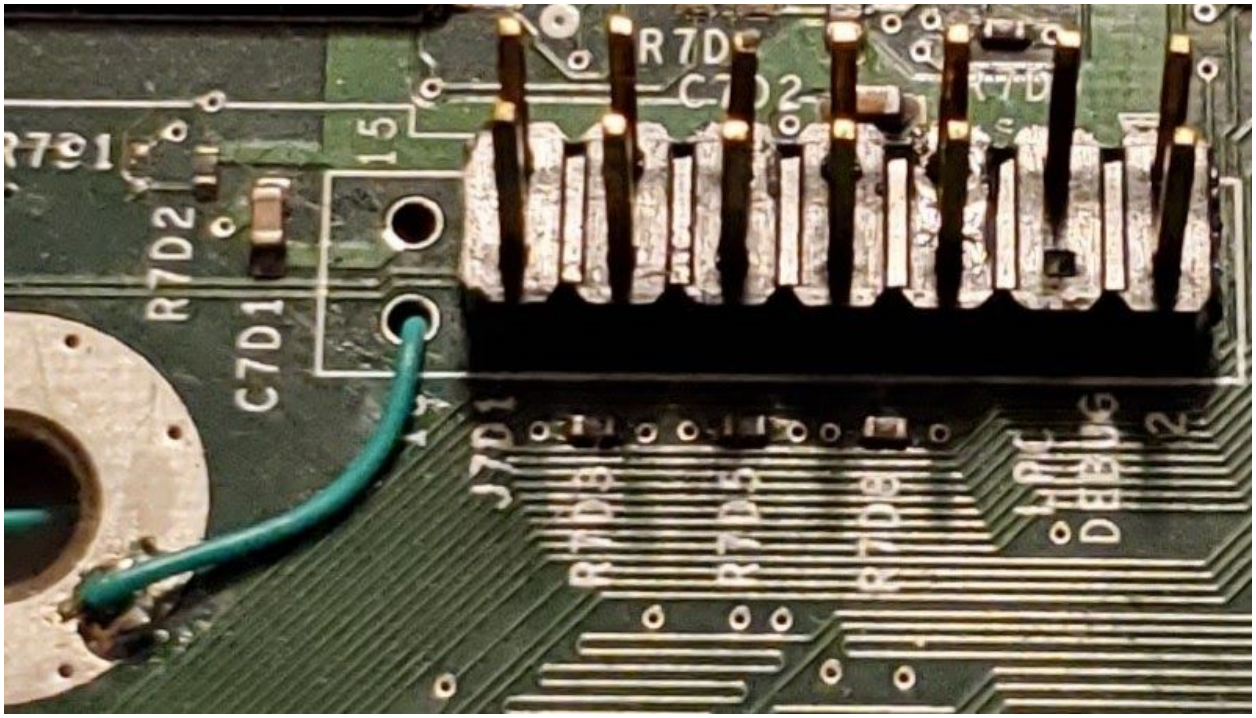


Step 6 – Grounding the D0 Point for V1.0 to 1.4V

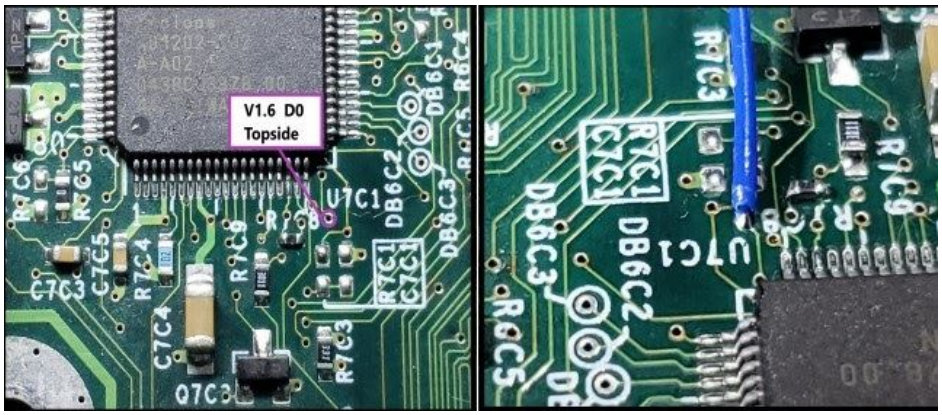
After following on how to install the pin header you will need to wire the D0 point on the modchip. Below is a photo showing where the D0 point is. You will need to run a long enough wire to come to the top of the motherboard to where the modchip is.

For Xbox versions 1.0 to v1.4:



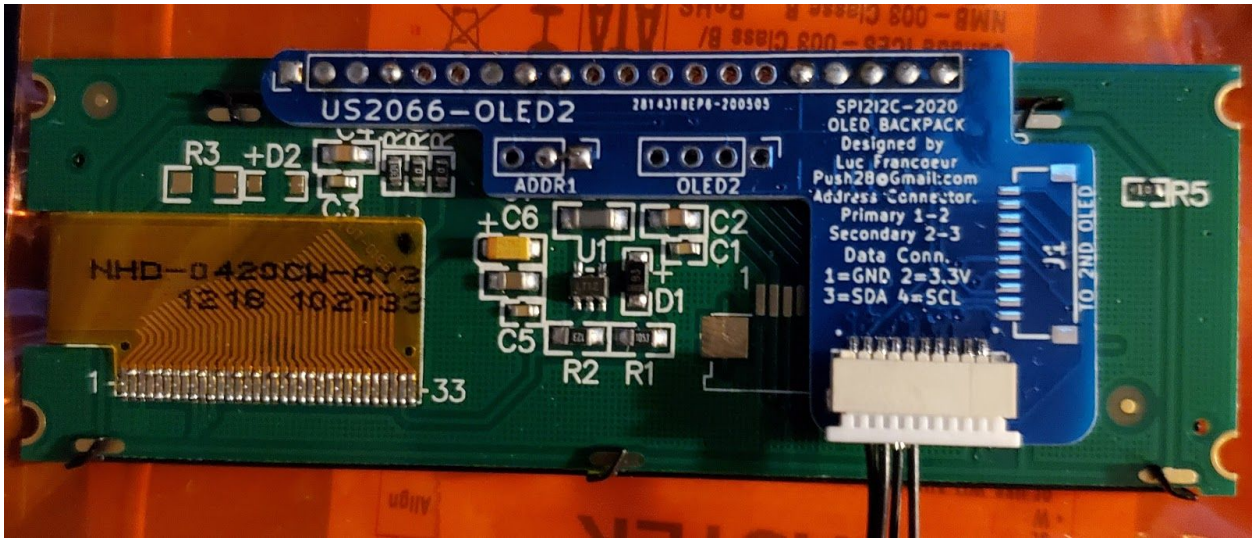


For Xbox version 1.6:



Step 7 - Installing the daughterboard to the oled

Do not use any cleaners or too much flux on these oled screens. It will damage them.

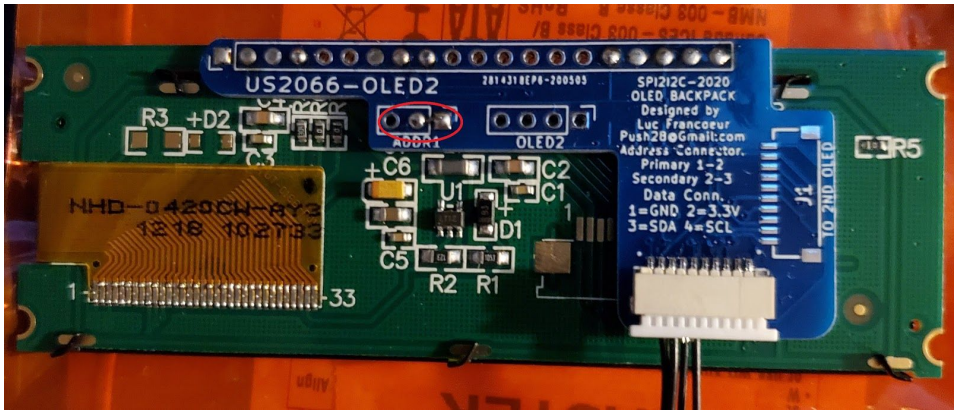


Add a very little amount of flux to each hole on the daughterboard and oled screen. Do not overdo it.

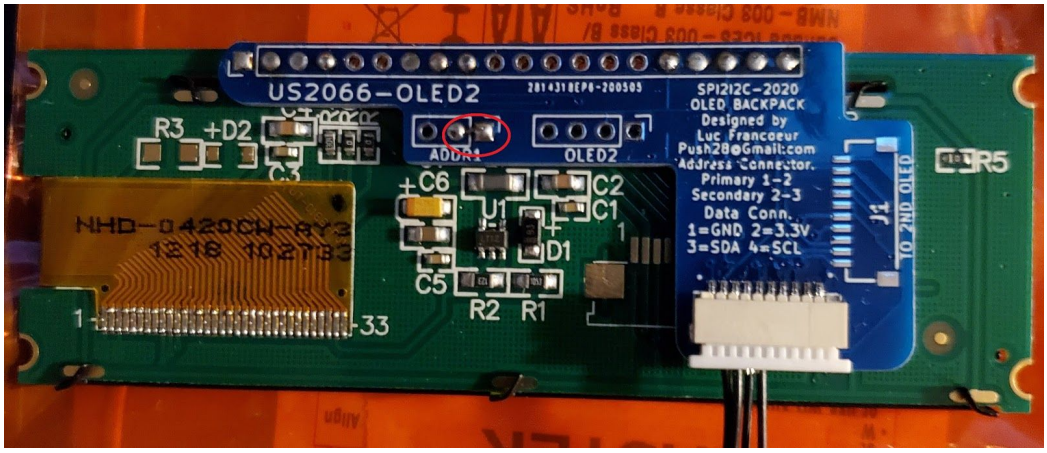
Solder each hole from both sides.

Clean off excess flux with a q -tip and no cleaners at all.

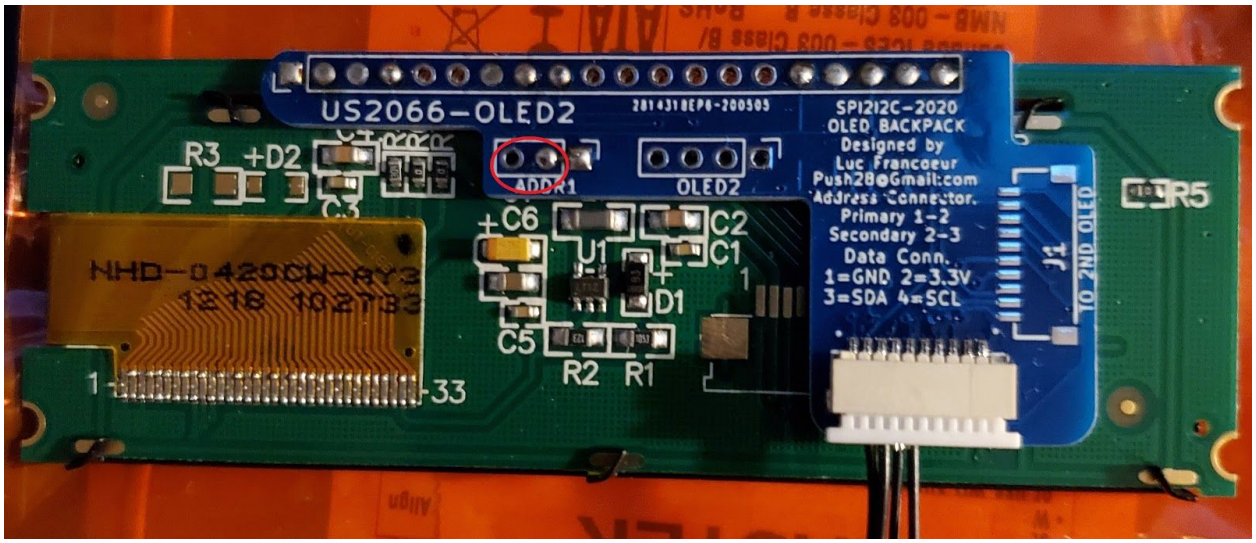
Setting up for single or dual oled install



Bridge 1 and 2 at ADDR1 for a single oled screen(pic below).



For a second oled screen bridge 2 and 3 at ADDR1(pic below).



Step 8 - Programming the Oled OpenXenium with Arduino ide software

These will come preinstalled with code for use single oled.

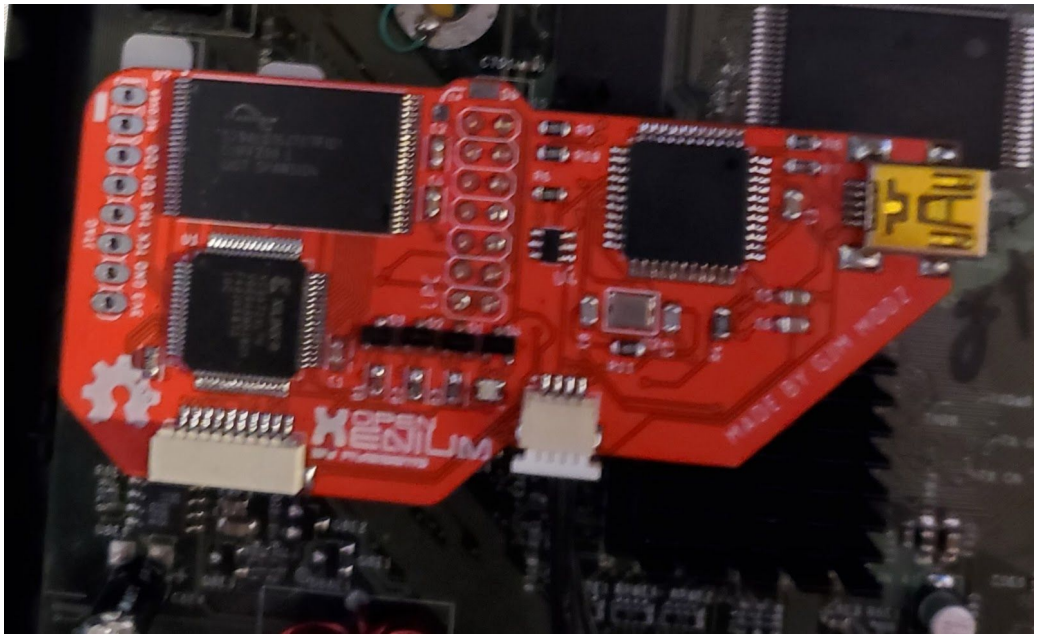
For dual oled install ask the seller to program it or refer to the github page for programming for dual oled.

You will need to install arduino ide software.

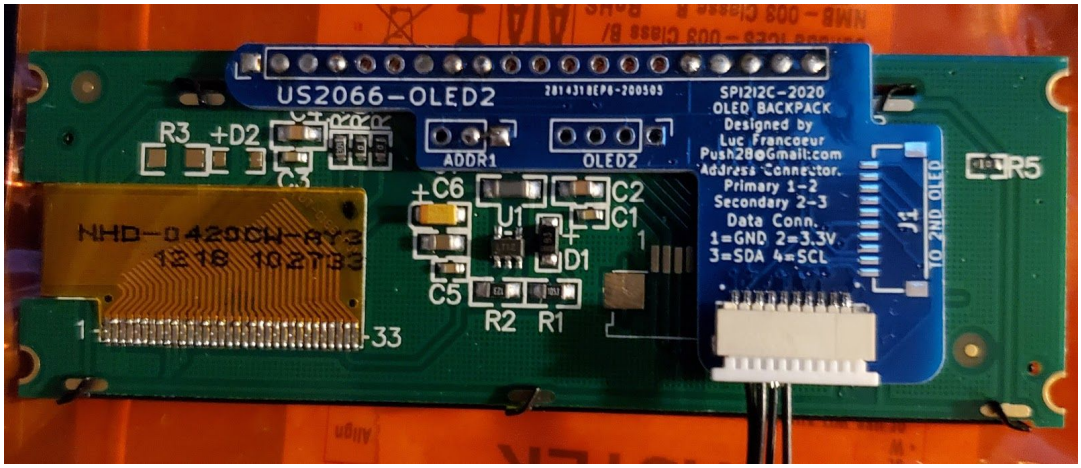
Use a usb cable to update the code for a dual oled install.

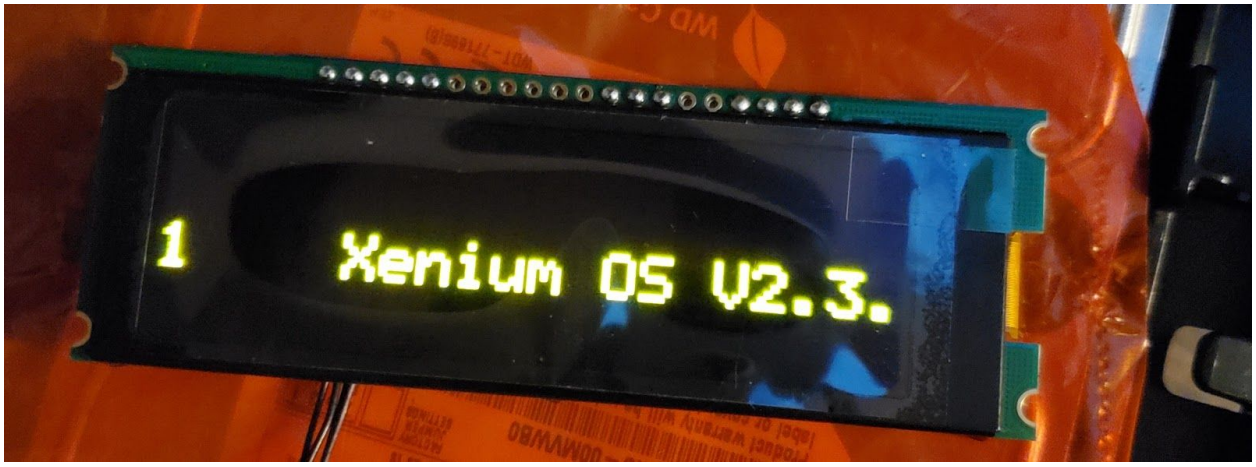
Step 9 – Installing the Oled Open Xenium

Place the modchip onto the pin header, plug in the 4 pin connector of the wire harness to the 4 pin connector on the modchip. Then, insert the 10 pin connector of the wire into the daughterboard 10 pin connector installed on the oled screen.
Turn on the xbox.



+


US2066-OLED2
SPI2I2C-2020
OLED BACKPACK
Designed by
Luc Francoeur
Push28@Gmail.com
Address Connector.
Primary 1-2
Secondary 2-3
Data Conn.
1=GND 2=3.3V
3=SDA 4=SCL
ADDR1
OLED2
TO 2ND OLED
J1
R3
+D2
C6
C2
C1
U1
D1
C5
R2
R1
R5
NHD-0420CW-AY3
1-33


1
Xenium OS V2.3.

To reassemble the Xbox, install the oled screen in faceplate(3d printed bezel available) and test it out.

Congrats! . You are done. If you find your Xbox is fragging (flashing red and green) or if it’s not booting the modchip, please check and/or reflow all your soldering.

Thank you to everyone who had a helping hand in building this.

All the guys from Project OG-OLED

&

Team Donkey