

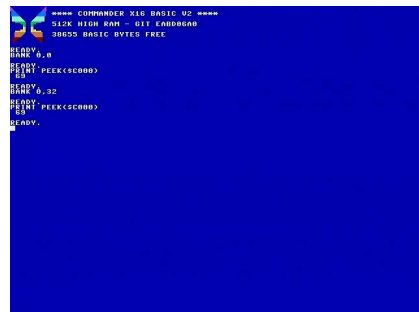
OtterX

Bodge Board Installation

1

Why install?

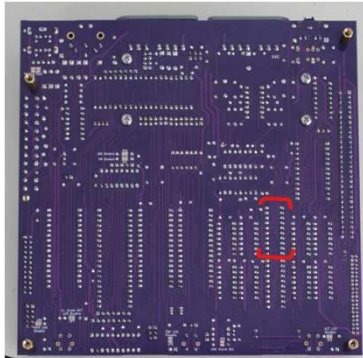
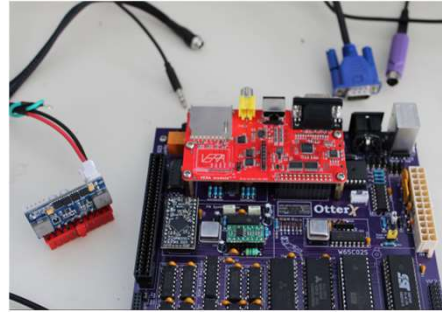
- The ROM onboard the OtterX does not stop responding if the ROM bank is above 31.
- Current board is not compatible with X16 expansion ROM cartridges
- Example: Bank 0 and 32 return the same value because the ROM responds to both.



2

Getting started

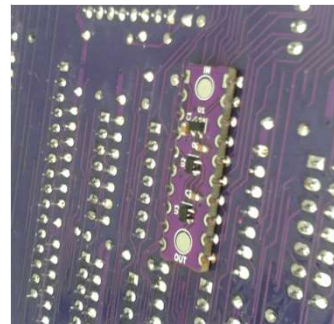
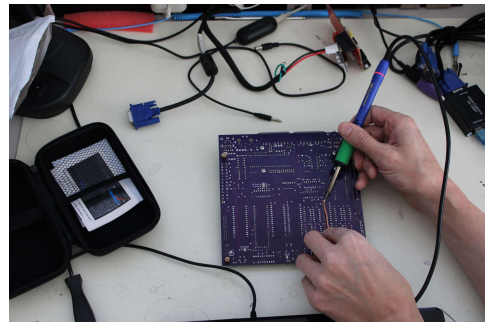
- Remove board from case, if installed
- Unplug power
- Remove peripheral connectors
- Install the bodge board on the bottom of the PCB directly under the ROM bank register, U5.



3

Site Preparation

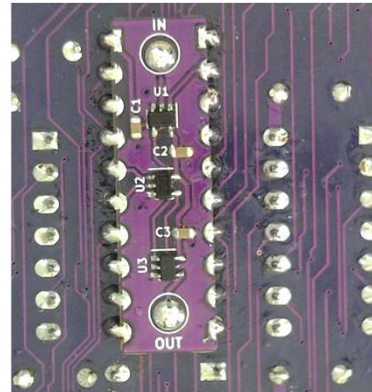
- Use solder braid / wick to remove excess solder from the bottom of U5. It is not necessary or advised to desolder U5 completely.
- Check fit of bodge board. It doesn't have to lie perfectly flat but will if enough excess solder is removed from U5 pins.



4

Solder board to PCB

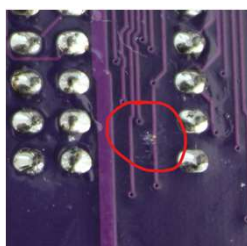
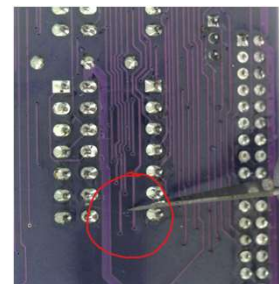
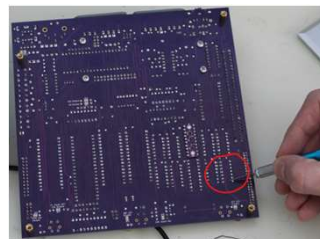
- Solder all 20 pins to the bodge board. Ensure there is solder connecting the pins of U5 and both the main PCB pads and bodge board pads.
- Place a dab of solder on both the “IN” and “OUT” pads on the bodge board.



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Cut ROM enable trace

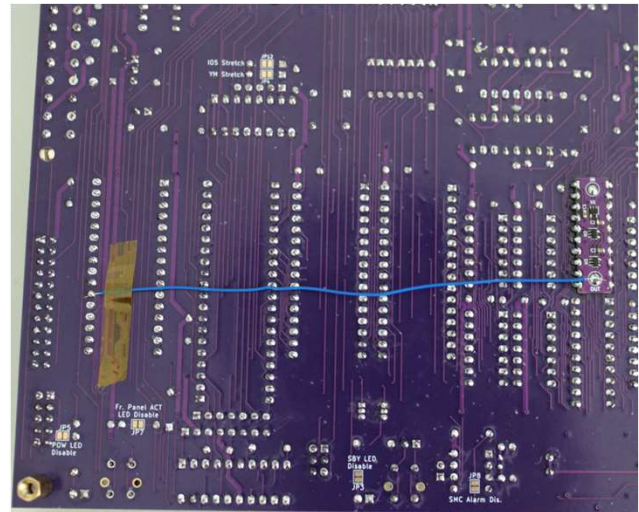
- Carefully cut trace running under U4.
- Use a sharp hobby knife or other blade.
- Do not use diagonal or flush cut pliers.
- Use gentle pressure and 15-20 strokes to break the connection.



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Connect bodge wire 1

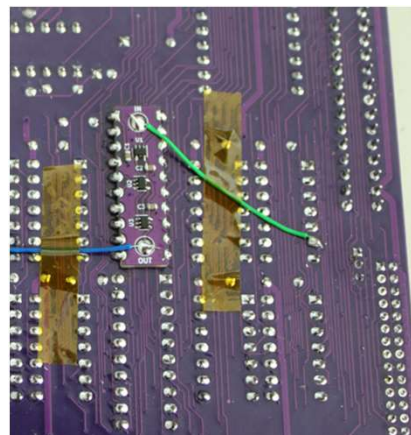
- Connect the long bodge wire from the “OUT” pad of the bodge board to the pin on shown on the bottom of U7. Sixth up from the bottom left of U7.
- Use tape to secure wire if desired.



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Connect bodge wire 2

- Connect the short bodge wire from the “IN” pad on the bodge board to the pin shown on the bottom of U14. It is the 2nd pin from the bottom right.
- Use tape to secure if desired.



8

Test bodge board functionality

- Use the commands shown at the READY prompt.
- Verify that the results when bank 0 and bank 32 are selected are different.



```
**** COMMANDER X16 BASIC V2 ****
512K HIGH RAM - 011 EABD06A0
38655 BASIC BYTES FREE

READY
BANK 0,0
READY
PRINT PEEK(5C000)
69
READY
BANK 0,32
READY
PRINT PEEK(5C000)
132
READY.
```