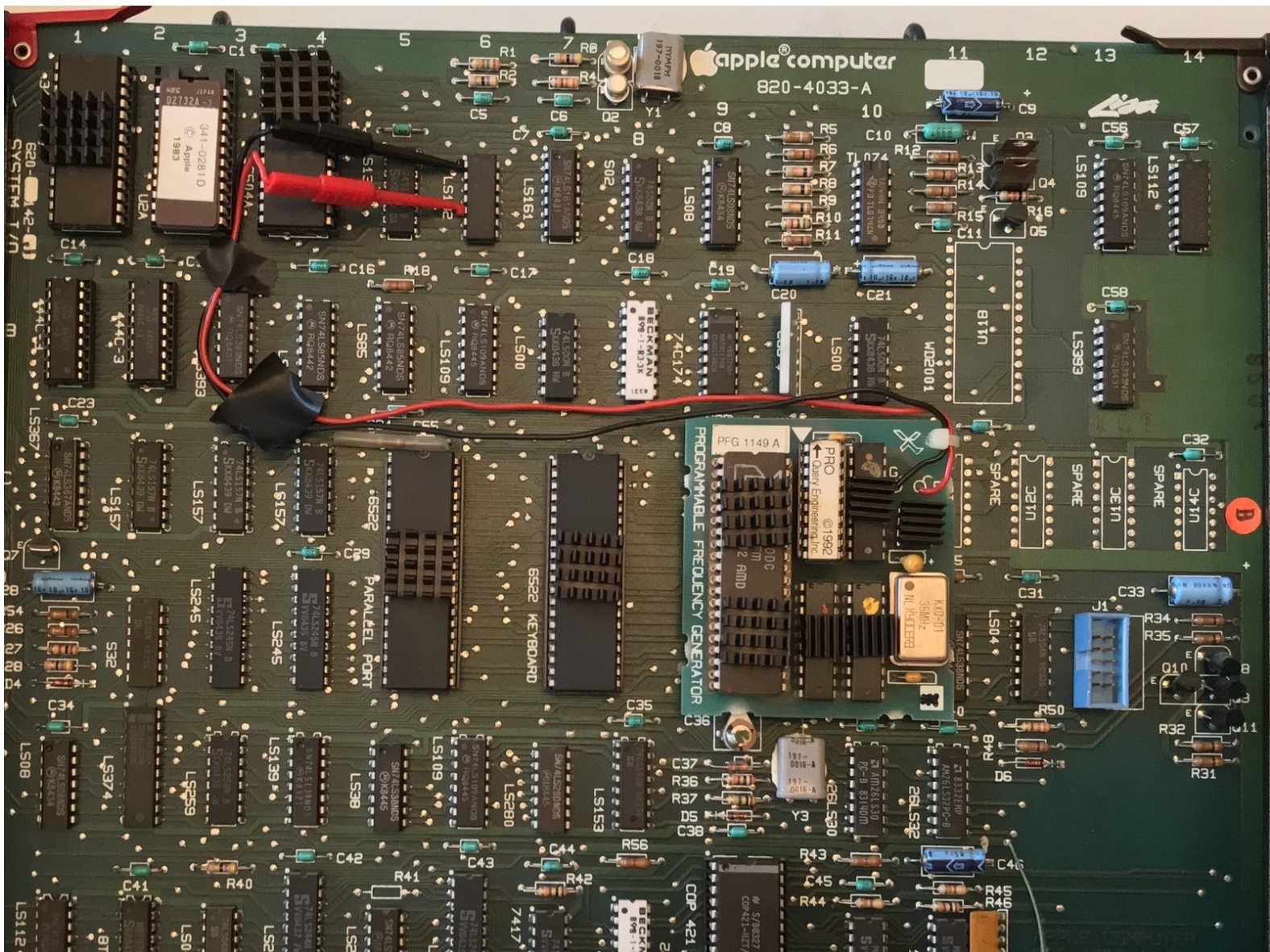




Apple Lisa MacWorks II PFG Instalation

This guide demonstrates how to install the MacWorks Plus II (MW+II) PFG

Written By: LisaGuide



**TOOLS:**

- [Philips head screwdriver](#) (1)

**PARTS:**

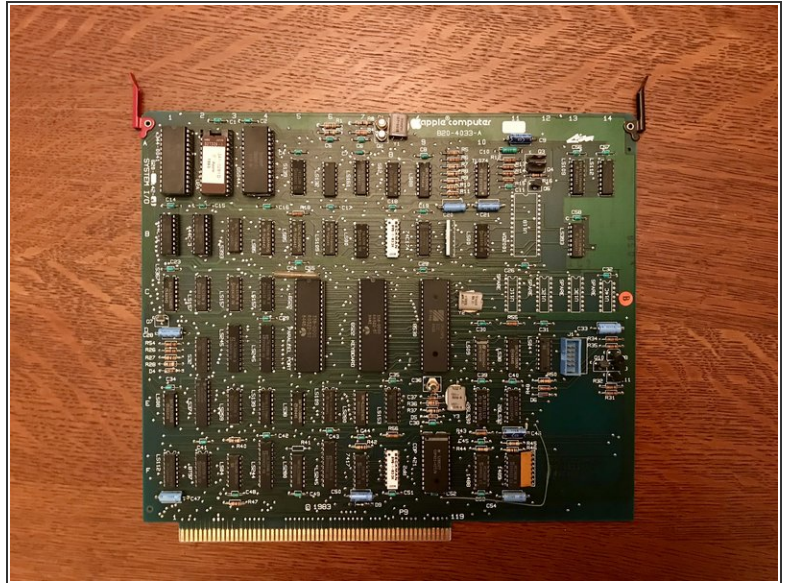
- [MacWorks Plus II Kit](#) (1)

Step 1 — Disassembly



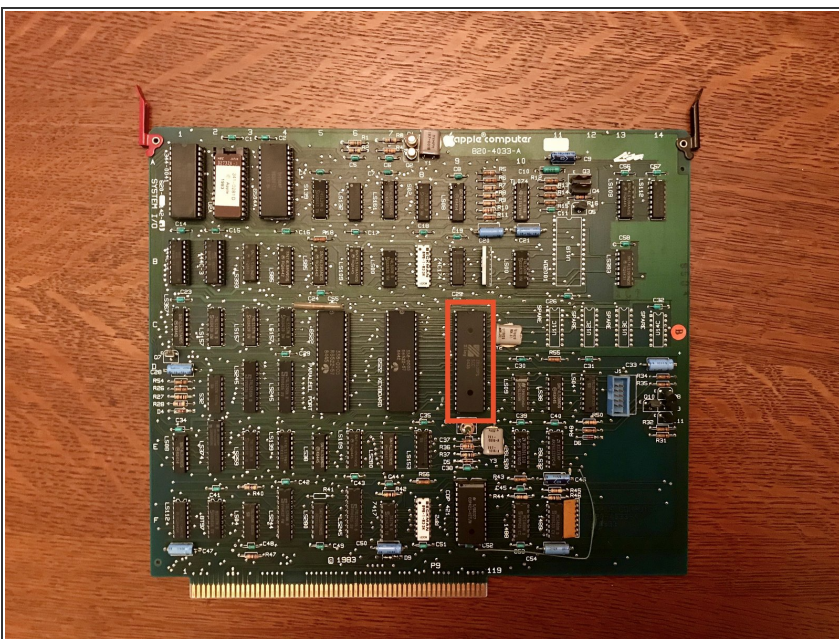
- Follow the [Apple Lisa Disassembly Guide](#) to remove the Lisa's real panel.
- Remove the Lisa's Card Cage.

Step 2 — Remove I/O Board



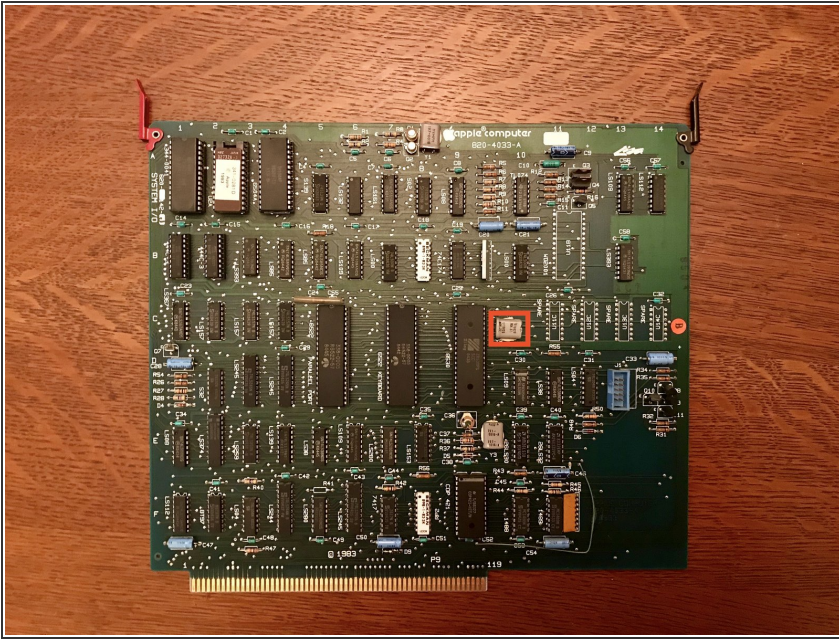
- Remove the Lisa's I/O Board. The I/O Board's clips are marked in red.
- Release both clips holding the I/O Board.
- Pull the I/O Board up to remove it.

Step 3 — Removing the 8530 Chip



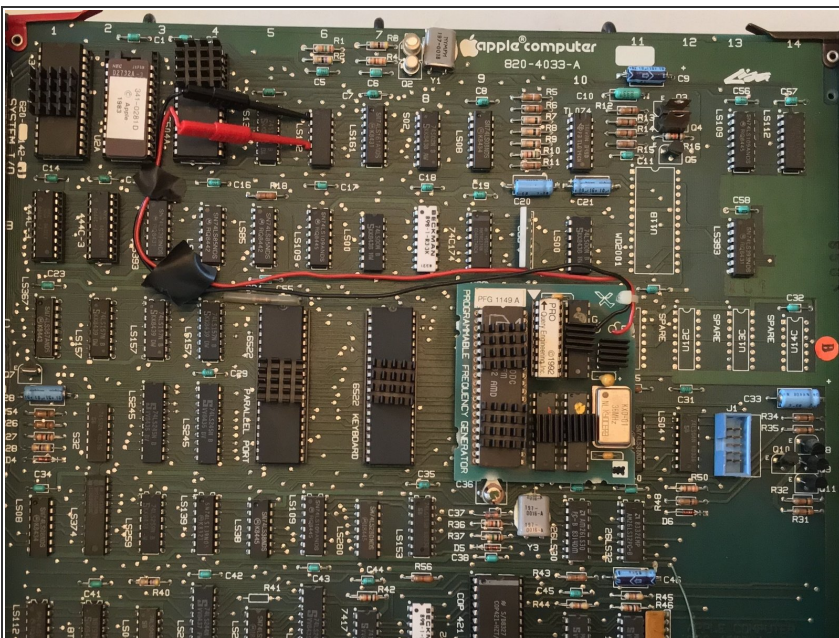
- Remove the chip marked 8530 at location 9D.

Step 4 — Crystal Insulation



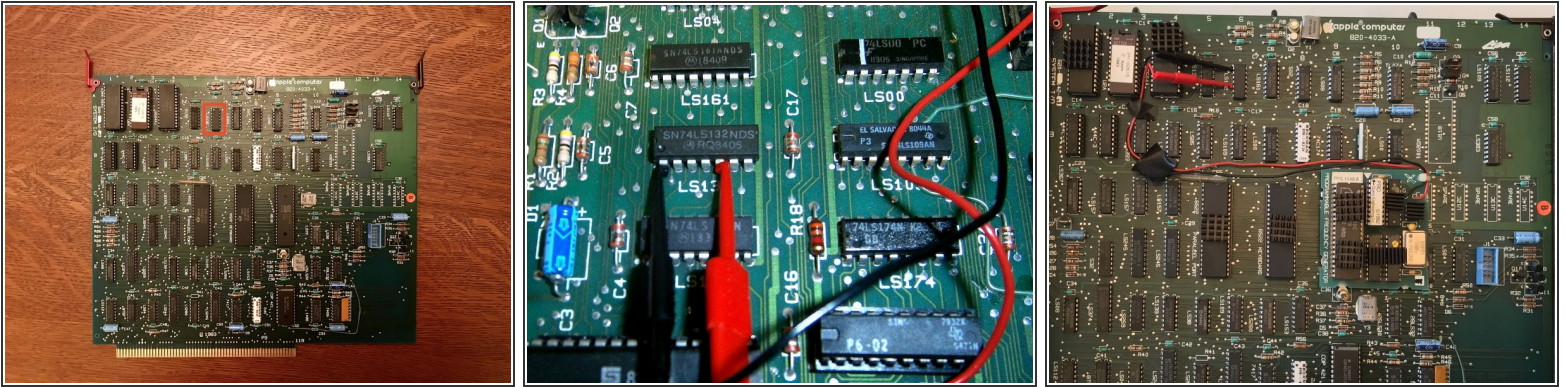
- Next to the chip removed in step 3 is a crystal. These are not always installed with a plastic coating. The crystal shown in the image is insulated.
- If your crystal is not insulated then tape a small piece of cardboard on top of it.

Step 5 — Installing the Daughter Board



- Ensure the pins on the MW+II PFG (Programable Frequency Generator) are perfectly straight. If they are not then slightly bend them into place.
- Insert the PFG into the 8530 socket.

Step 6 — Attaching Red and Black Wires



- Locate the chip marked LS132 located at 6A.
- Connect the Red and Black wires as shown in the second image on this step.
- It is best to place a piece of electrical tape on the wires to help hold them in place.

Step 7



- Replace the I/O Board back into Lisa's Card Cage.
- Replace Lisa's Card Cage Back into the Lisa.
- Replace the rear panel on the Lisa.
- MacWorks + II (MW+II) floppy images can be found [here](#).
- The MW+II manual can be found [here](#) which includes detailed instructions how to instal thel MW+II software.

- MW+II supports Macintosh System Software up to Macintosh System 7.5.5.
- Supports over 10MB of RAM (more than 4MB requires an XLerator.)