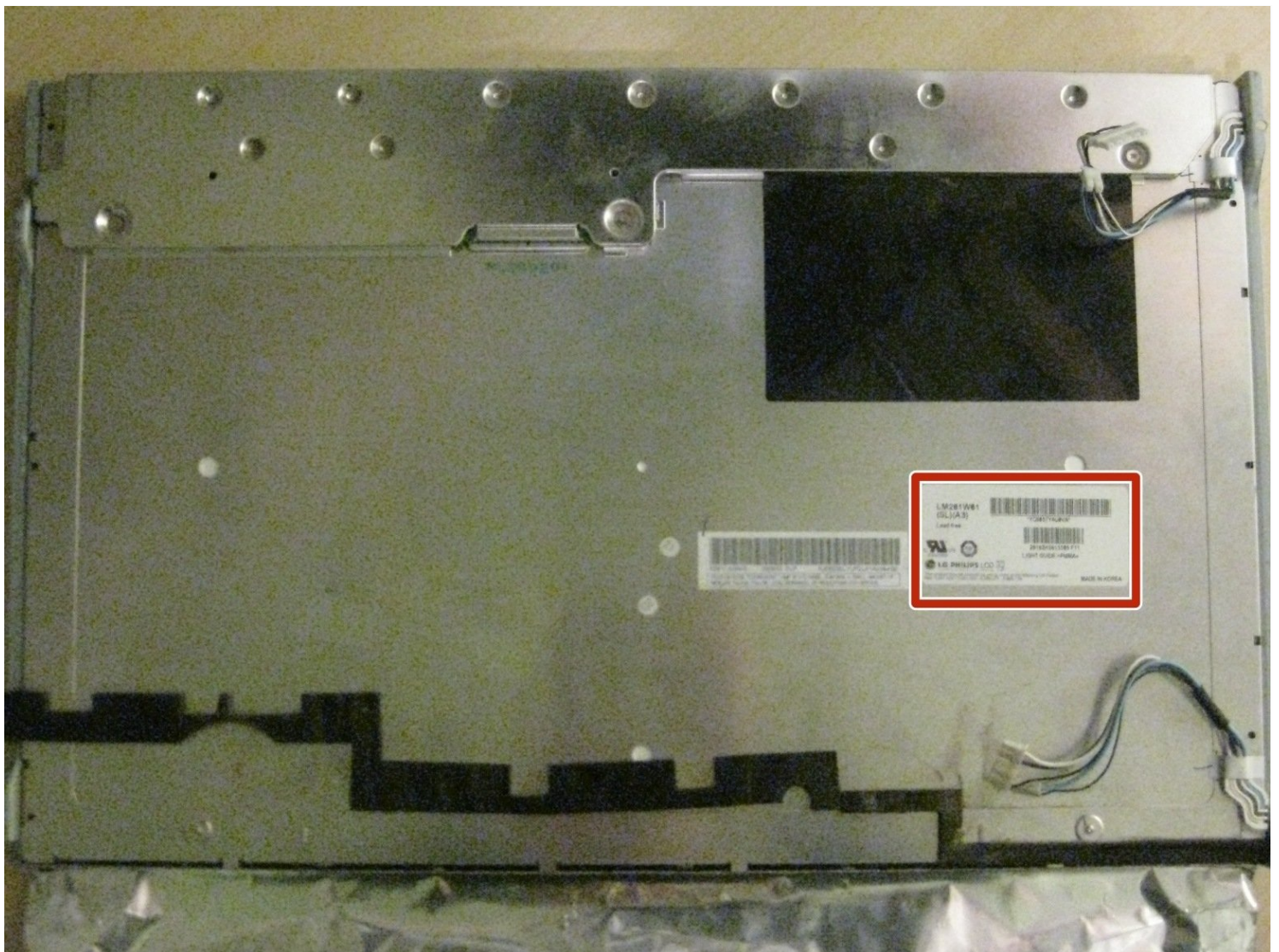




## Board

This guide is a prerequisite for the guide "How...

Written By: Olympia Mac Repair



# INTRODUCTION

This guide is a prerequisite for the guide "[How To Convert An iMac Into An External Monitor](#)"

## Background

The question *"Can I mod my older iMac to use it as a monitor?"* has been asked on iFixit and many other internet forums for years. This guide attempts to teach others how to complete the first phase of such a project.

In summary, to convert an iMac to work as an external monitor, one must:

- Completely teardown the iMac, removing everything.
- **Install a video control board, new inverter, and new power supply** into the empty iMac shell.
- install new video-in ports on the exterior case.
- Re-install the screen, reassemble the iMac case.

Following this guide will allow you to purchase the correct **video control board, new inverter, and new power supply** for your iMac, and will prepare you to complete a full iMac external monitor conversion.

Steps 1-14 are pulled from a standard iFixit guide. Steps 15-17 are original to this guide. If you have an iMac that is a different model than the one shown in steps 1-14, **this guide can still be used.**

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### TOOLS:

[Phillips #1 Screwdriver](#) (1)

[Plastic Cards](#) (1)

[TR10 Torx Security Screwdriver](#) (1)

[T6 Torx Screwdriver](#) (1)

[TR8 Torx Security Screwdriver](#) (1)

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## Step 1 — Access Door



- Loosen the two Phillips screws securing the access door to your iMac.

ⓘ Both screws remain captive within the access door.

- Remove the access door.

**⚠ Before beginning the repair, unplug the computer and press and hold the power switch for 20-30 seconds, to discharge internal capacitors.**

## Step 2 — Front Bezel



- Remove the following screws along the lower edge of your iMac:
  - Three 6 mm T8 Torx screws
  - One 8 mm T8 Torx screw (Right side of the RAM slot on 2105)



### Step 3



- ① Re-orient your iMac so it sits upright on the stand.
- Insert a [plastic card](#) up into the corner of the air vent slot near the top of the rear case.
- Push the card toward the top of the iMac to release the front bezel latch.
- Pull the front bezel away from the rear case.
- Repeat this process for the other side of the front bezel.
- ① It may be necessary to apply several layers of duct tape to the top of the access card to aid in releasing the latches. Or use two cards for the additional thickness.
- If the bezel refuses to release, try lifting the lower edge of the front bezel slightly away from the rear case (detailed in the next few steps) and repeat the latch release process.

## Step 4



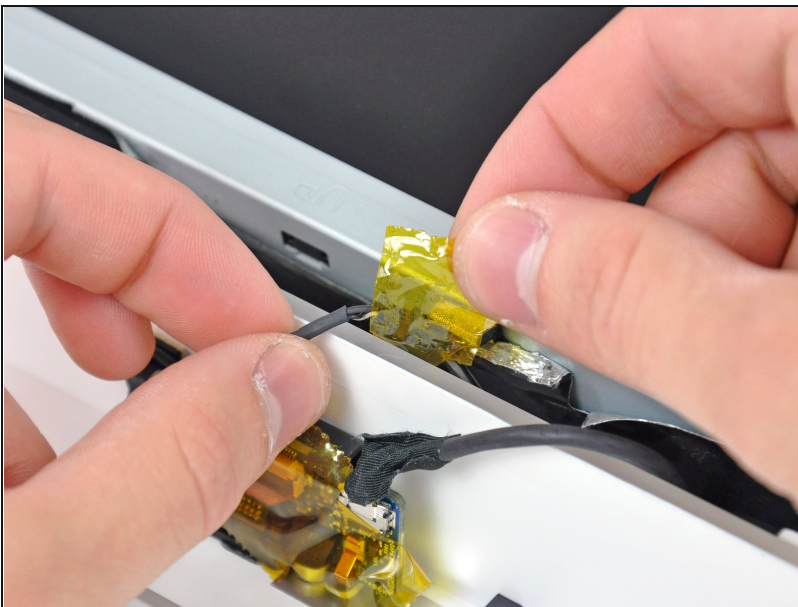
- Lay your iMac stand-side down on a flat surface.
- To lift the front bezel off the iMac, simultaneously:
  - Use your thumbs to press in the RAM arms and hold the iMac down.
  - Use your index fingers to pull the small bridge of material on the front bezel toward yourself.
  - Pull the front bezel up with your index fingers.
- Once the small bridge of material has cleared the RAM arms, lift the front bezel by its lower edge just enough to clear the bottom edge of the rear case.

## Step 5



- Lift the front bezel off the rear case and rotate it away from the bottom edge of the iMac, minding the camera and microphone cables still attached to its upper edge.

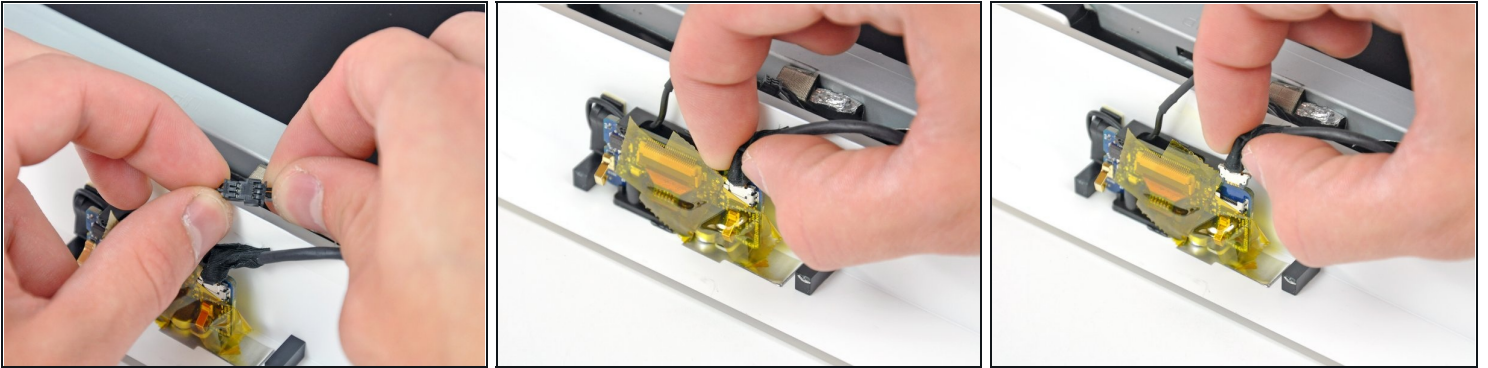
## Step 6



- ⓘ If necessary, remove the strip of tape covering the microphone cable connector.
- ★ The microphone connector is located near the inside of top edge of your iMac.



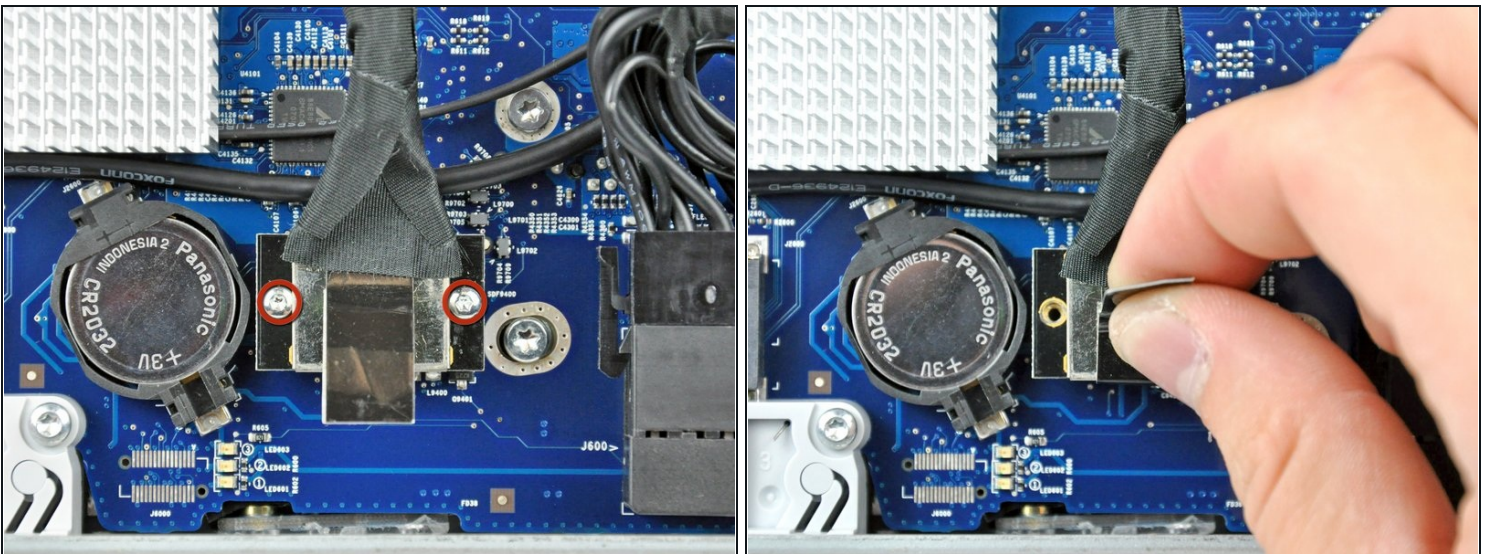
## Step 7



- Disconnect the microphone cable.
- Disconnect the camera cable by pulling its connector away from the socket on the camera board.

⚠ The camera cable connector and socket are delicate and easily bent. Remove with caution.

## Step 8 — Display



- Remove the two 5 mm T6 Torx screws securing the display data cable connector to the logic board.
- Pull the display data cable connector up off the logic board by its black pull tab.

## Step 9



- Peel back the EMI tape from the two vertical edges of the display.
- ☑ During reassembly, it is helpful to use several small strips of tape to hold the EMI shielding along the left and right edges of the display footprint out of the way before lowering the display into the rear case of your iMac.

## Step 10



- Allow the lower EMI shield to hang down from the display.
- Remove the four 7.5 mm T10 Torx screws securing the display to the rear case.
- ⓘ The screws are recessed, so a thin magnetic screwdriver aids in removal. Most bit drivers are too short to reach these screws.



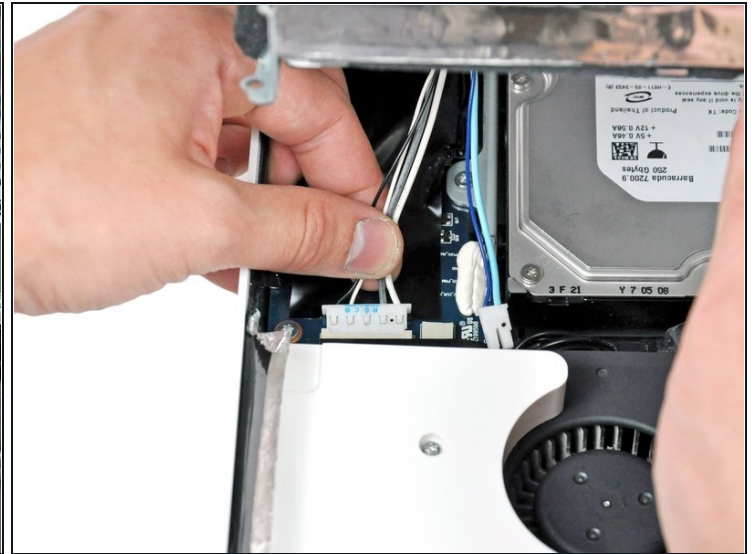
## Step 11



- Lift the lower edge of the display and rotate it toward the top edge of your iMac.

⚠ Do not lift it too much, as the inverter cables are still attached.

## Step 12



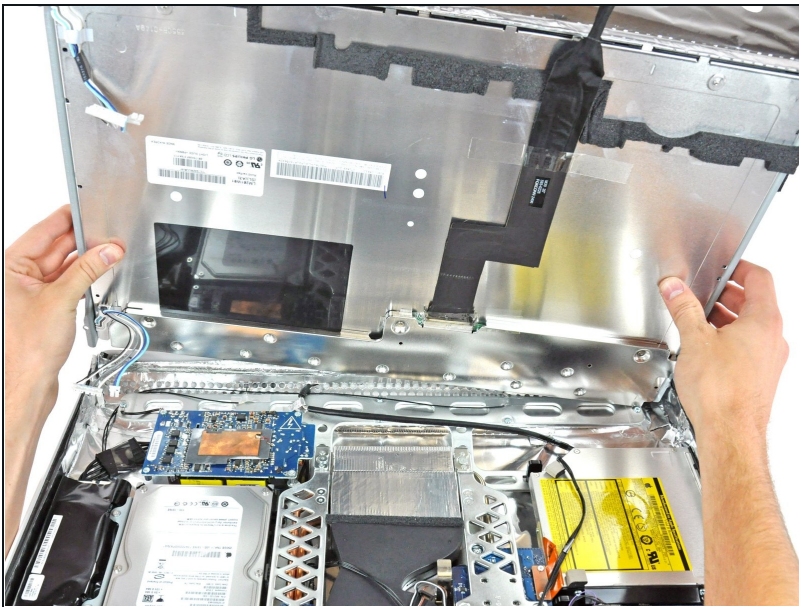
- Disconnect both inverter cables from the inverter board.
- ⓘ These connectors are seated very tightly in their sockets. It is helpful to use your fingernails or the tip of a spudger to push the ears on either side of the connectors to dislodge them from their sockets. A small pair of hemostats helps a lot.

## Step 13



- Disconnect the two inverter cables at the top edge of the inverter using the method explained in the previous step.

## Step 14



- Rotate the display until it is nearly perpendicular to the rear case and lift it up to peel it off the EMI shield stuck to its top edge.



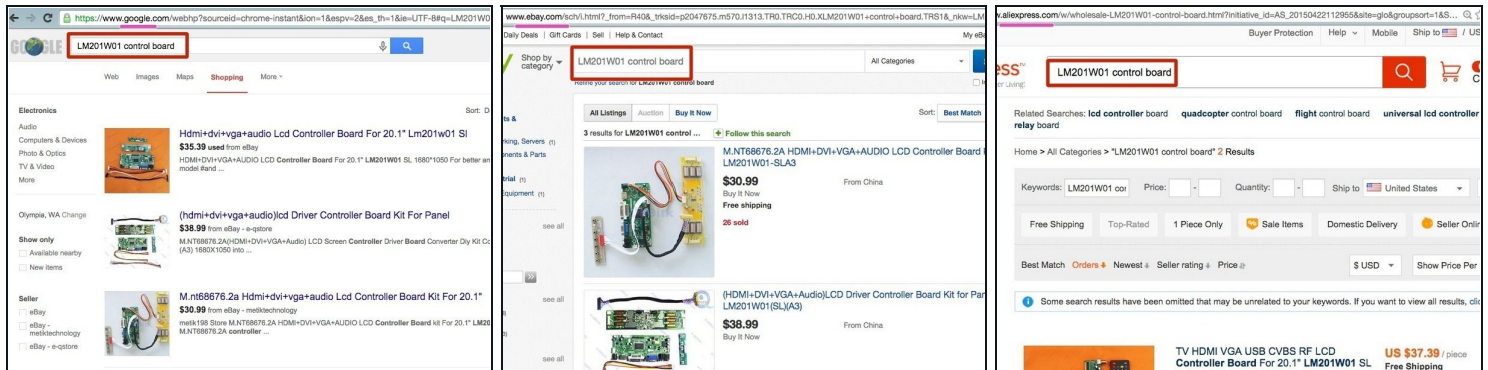
## Step 15 — Identify Make & Model Number



- Lay screen on it's face. Locate the sticker on the back, which lists the Make, Model, and Model Number.
- This screen, from a 2006 iMac A1207, is an LG model *LM201W01*. **Yours Will Most Likely Be Different**
- The example searches shown in the next step use the model number *LM201W01*. Again, **Yours May Be Different**, so adjust accordingly.



## Step 16 — Locate and Purchase A Video Driver Board for your Screen



- Using a search engine of your choice, search for the following phrase: "your-screen-model control board".
- Other good places to find such parts are ebay.com and aliexpress.com.
- Be sure that the control board which you purchase, comes with an inverter board for your screen's backlight.
- **Purchase the control board.** Expect shipping times of 2+ weeks if ordering parts from Asia.

## Step 17 — Purchase A Power Supply



- The vast majority of control boards do not come with a power supply. **Check the specifications listed by the vendor** to get the power supply requirements for your board.

- You'll need to get both the Voltage (typically 12v for 12-21" screens, or 19v for 24+" screens) and the Amperage. The control board's voltage specification must be followed exactly, while the amperage specification is a 'minimum required': In general, using a power supply with a higher amperage than the requirement is a good thing.
- Shown here: A generic 12V 5A power supply purchased online for \$8.
- You may not need to purchase a power supply because **you may already have one**: check around your home or office for the unused power supplies of old electronics such as old modems, routers, coffee makers, etc. You may have one sitting in your box of spare/used electronics. Check before buying!

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## What To Do Next

**Congratulations!** You have successfully identified your iMac's screen make and model, and ordered a control board and (optionally) a power supply for it.

**If you are doing this guide as part of the "[How To Convert An iMac Into An External Monitor](#)" guide, return to that guide now.**