iMac Intel 21.5" EMC 2889 Teardown

iMac Intel 21.5" EMC 2889 Teardown on October 14, 2015.

Written By: Sam Goldheart

INTRODUCTION

It's mid-October and great weather for Apple picking! We've been eager to sink our teeth into a new Mac, so we've brought home a fresh, locally-sourced refresh of the 21.5" iMac: the iMac Intel 21.5" EMC 2889. What's inside this juicy new device? Let's find out. It's teardown time!

Looking for this iMac's pixel-packed twin? Check out our teardown of the **iMac Intel 21.5" Retina 4K Display**.

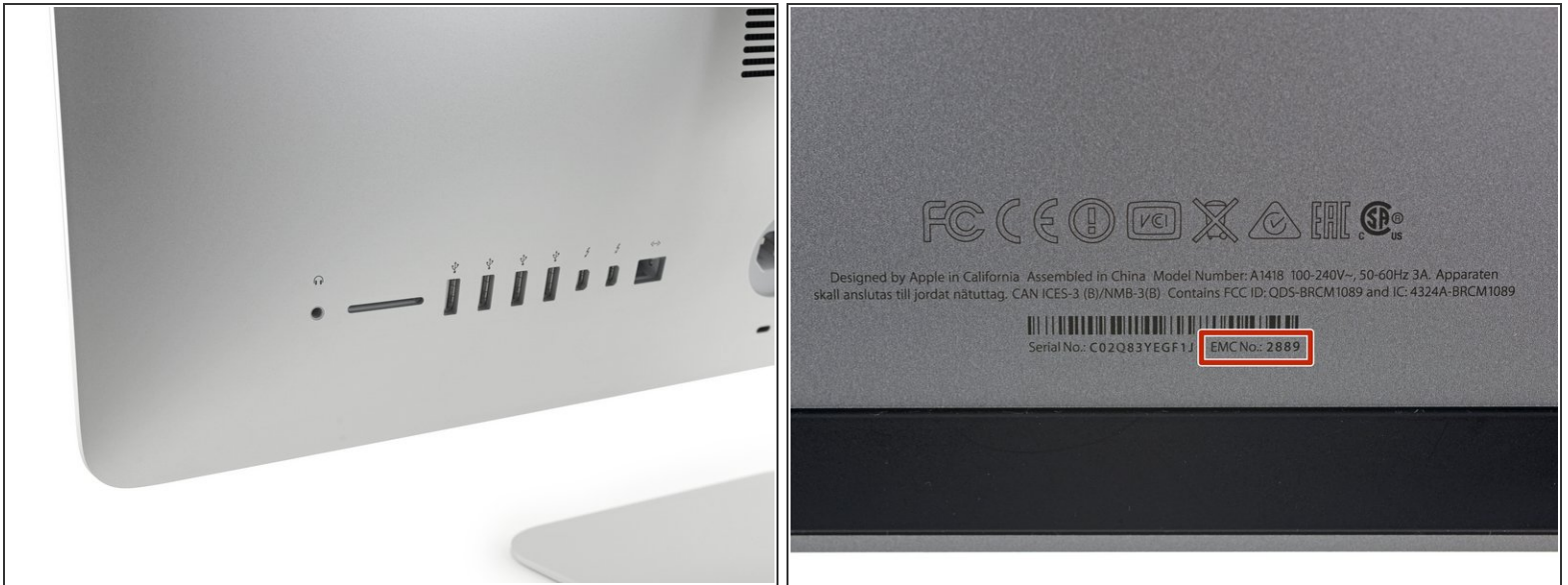Find us on Twitter, Instagram, or Facebook for more tech news.

TOOLS:

- iMac Opening Tool (1)
- T5 Torx Screwdriver (1)
- T10 Torx Screwdriver (1)
- Spudger (1)
- iMac Service Wedge (1)
- T8 Torx Screwdriver (1)

This document was generated on 2021-03-06 01:17:27 AM (MST).

Step 1 — iMac Intel 21.5'' EMC 2889 Teardown

- The 2015 edition of the 21.5" iMac has some newfangled specs:

  - 1.6 GHz dual-core or 2.8GHz quad-core Intel Core i5

  - 8 GB (4x2 GB) of 1867 MHz LPDDR3 RAM (Configurable to 16GB)

  - Intel HD Graphics 6000 or Intel Iris Pro Graphics 6200

  - 1 TB (5400-rpm) hard drive, configurable up to 1 TB Fusion Drive or 256 GB of flash storage.

  - 802.11ac Wi-Fi + Bluetooth 4.0

- (i) More on those accessories later...

This document was generated on 2021-03-06 01:17:27 AM (MST).

© iFixit — CC BY-NC-SA

www.iFixit.com

Page 3 of 13

Step 2

- As tempted as we are to play with the new Magic things, we briefly turn our attention to the ~~port side~~ rear of this refreshed iMac.

  - The ports on the rear: headphone jack, SD card slot, four USB 3.0, two Thunderbolt 2, and gigabit ethernet.

- This iteration iMac keeps the standard 21.5" model number, A1418 but adopts a new EMC number: 2889.

Step 3

- Thanks to our specially designed iMac service wedge, opening is a breeze. The wedge keeps the hinge solid while you work—no flop, no slop.

- Nope, there's no pizza here folks. We're just using our handy iMac opening tool to cut the display adhesive. We're on a roll!

- Just as with the previous generation, the display cables on the new iMac keep the opening procedure from being totally painless.
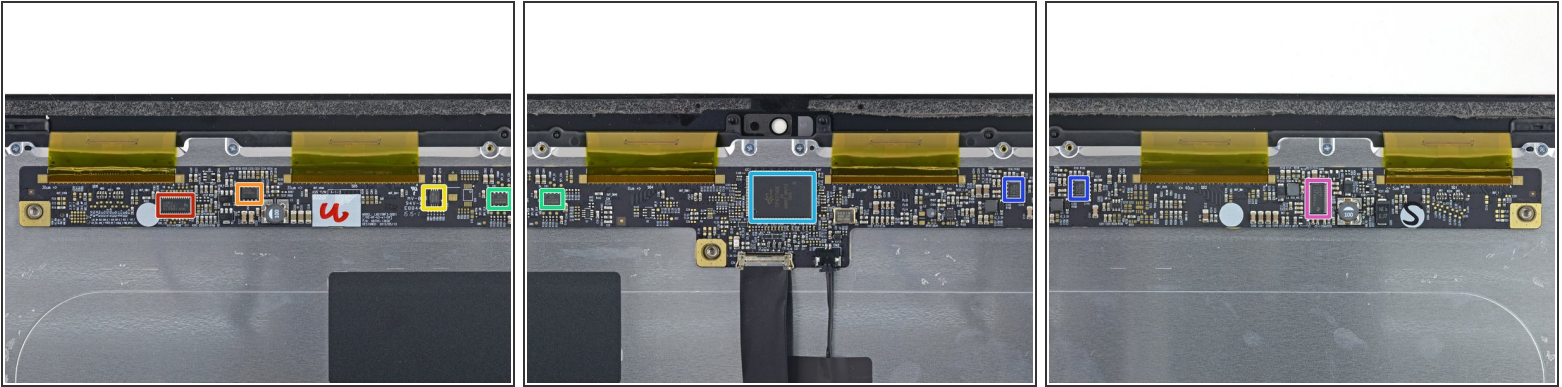
Step 4

- The multi-talented iMac opening tool helps us slice away the last of the adhesive.

- [We have separation](#)—and the display's away!

- Time to see what this machine is really packing...

　　　　　　　　　　www.iFixit.com

Step 5

(i) Once [again](#), this high resolution display is brought to you by LG.

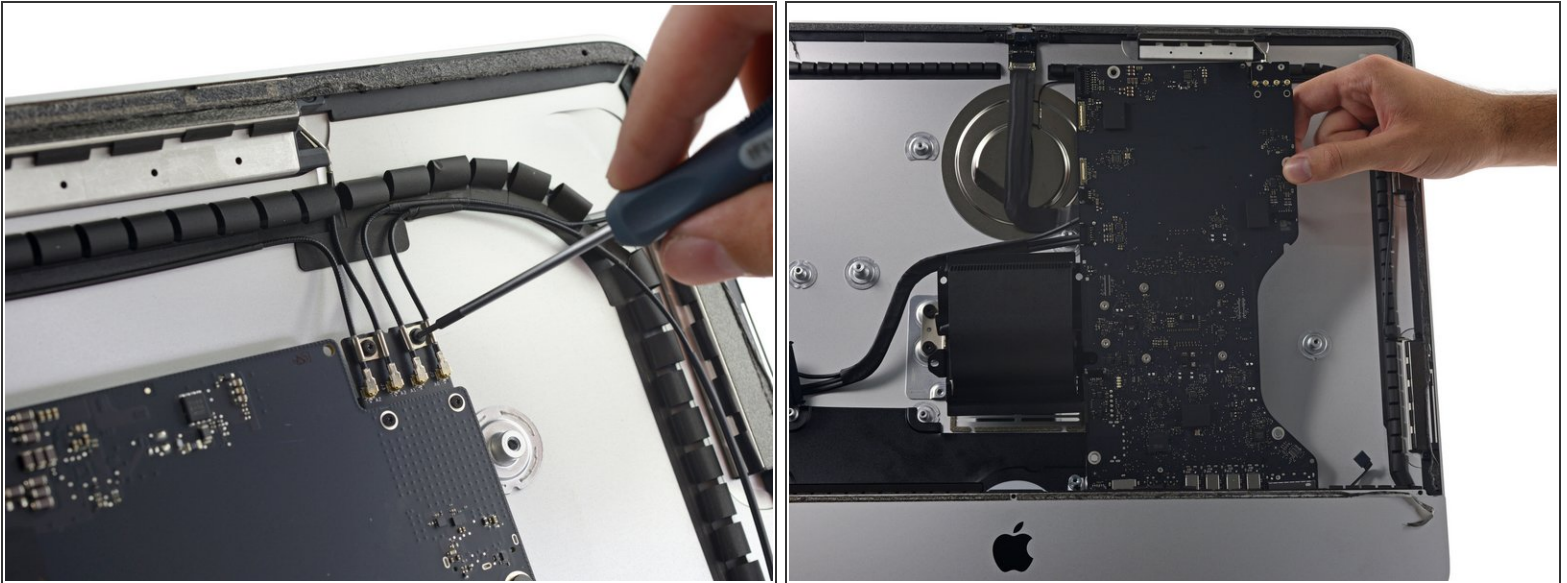- A few turns of the old screwdriver shows us the first glimpse of the good stuff.

This document was generated on 2021-03-06 01:17:27 AM (MST).

© iFixit — CC BY-NC-SA   www.iFixit.com   Page 7 of 13

Step 6

- Like previous iterations, this iMac display gets its own full set of control hardware:

  - Texas Instruments BUF16821 Programmable Gamma-Voltage Generator

  - Richtek RT8250 Synchronous Step-Down Converter

  - ST Microelectronics 404RP K516

  - Winbond W25X20CL 2 Mb Serial NOR Flash Memory

  - Parade DP627HDE DisplayPort LCD timing controller

  - Texas Instruments TPS54231 Step-Down Converter

  - Texas Instruments TPS65161 Bias Power Supply for TFT LCD Panels

This document was generated on 2021-03-06 01:17:27 AM (MST).
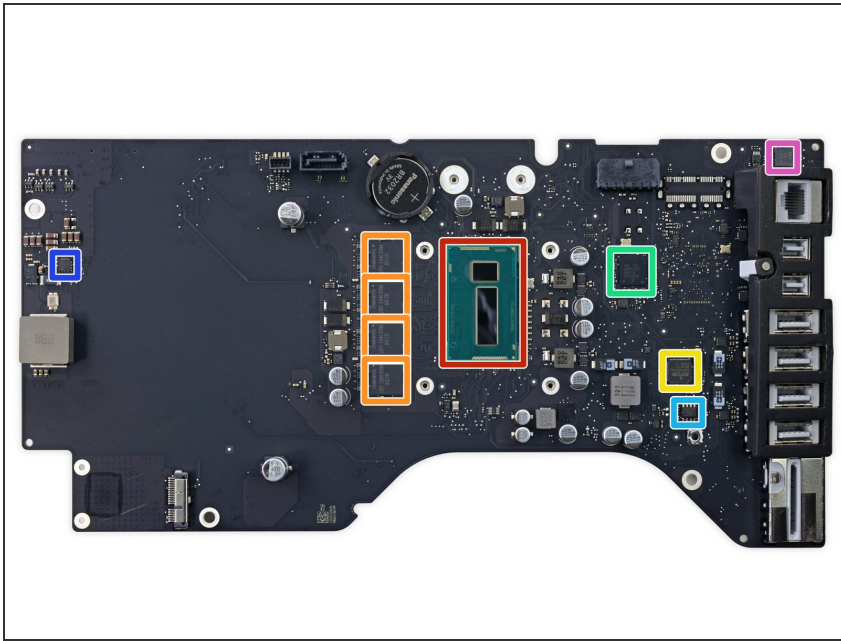
Step 7

- Are we lost in time or are does this look exactly the same as last year's 21.5" iMac?

  - (i) Answer: Time travel has not been invented *yet*.

- 📌 Despite the similar appearance, the Fusion Drive in this model has a significantly smaller flash partition than the previous generation.

- We've yet to see something new or interesting here—if you're really itching to see how the speakers, hard drive, and fan come out, check our previous gen guides for details!
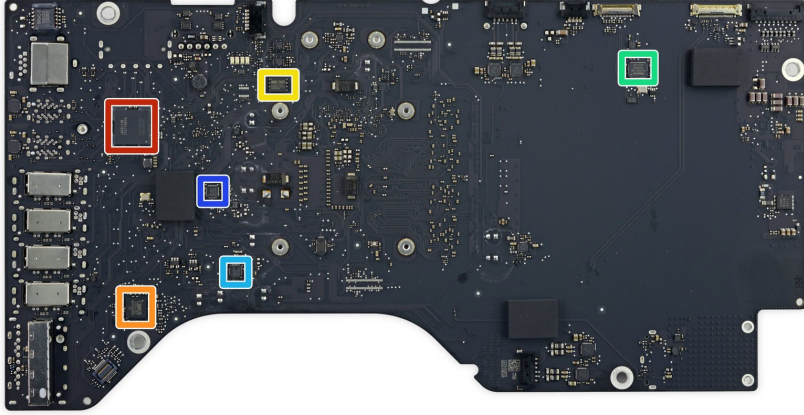
Step 8

- Our breakneck advance on the logic board is stymied by a bit of novelty!

- The antenna cables are now fastened to the AirPort card with new screw-secured cable clamps.

- AirPort card released, the logic board is free to be wriggled out of the rear case.
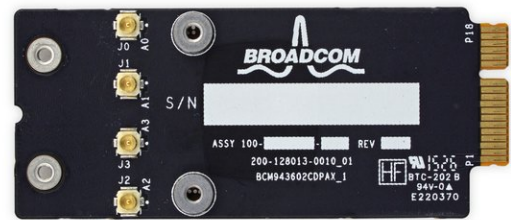
www.iFixit.com

Step 9

- Next up—the logic board:
  - Intel [SR26C](#) Core i5-5250U 1.6 GHz Processor (3M Cache, TurboBoost up to 2.70 GHz) with Intel HD Graphics 6000
  - Samsung [K4E6E304EE-EGCF](#) 2 Gb LPDDR3 1867 MHz SDRAM (4 chips for a total of 8 GB)
  - Broadcom BCM5776 Gigabit Ethernet Controller
  - Texas Instruments [LM4FS1EH](#) SMC Controller
  - Adesto [AT45DB021E](#) 2 Mb SPI Serial Flash Memory
  - National Semiconductor 545AR6SU
  - Delta 8904C-F Filter

Step 10

- ● Intel **DSL5520** Thunderbolt 2 Controller

- ● Cirrus Logic 4208-CRZ Audio Controller

- ● Macronix **MX25L6473E** 64 Mb Serial Multi I/O Flash Memory

- ● Vimicro **VC0359** Camera Processor

- ● Intersil **ISL62383CHRTZ** Power Supply Controller

- ● Intersil ISL95826

Step 11

- ● We also take the time to remove the AirPort card, but it's more of the same ol', same ol'.

- ● See the 2013 teardown for details on this bad boy if you really gotta know.

This document was generated on 2021-03-06 01:17:27 AM (MST).

Step 12

- iMac 21.5" EMC 2889 Repairability Score: **1 out of 10** (10 is easiest to repair)

  - Cutting the tape to open the iMac isn't too difficult with the right tools, but it must then be replaced to complete any repair.

  - The RAM is still soldered to the logic board—you're stuck with what you bought.

  - The Fusion Drive connector is again missing from the logic board, killing all hope of storage hacking.

  - The CPU is soldered to the logic board, and cannot be replaced or upgraded.

  - The glass and LCD are fused together, increasing the cost of replacement.