6/29/07 10:27 PM iPhone Disassembly



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iFixit> iPhone Live Disassembly







2007-06-29 18:44:13

We've procured our iPhone, and it's on the way to our photo studio now.

We purchased two 8 GB iPhones.

The phone has arrived!

2007-06-29 18:49:34

OK, so here's a quick overview of the basics.

> The iPhone is 4.5x2.4x0.5", and weighs 4.8 ounces (0.3 pounds). For reference, 18 iPhones weigh the same as 1 MacBook Pro.

The display is 3.5" diagonal, 480x320 resolution. That's 153,600 pixels, or 12% as many as a 15" MacBook Pro.

2007-06-29 18:50:44

If you can't tell, we're stalling while we figure out how to get it open.

The iPhone supports four major different wireless protocols.

The List: Quad-band GSM (850, 900, 1800, 1900 MHz), 802.11b/g WiFi, EDGE, and Bluetooth 2.0 + EDR.

2007-06-29 19:11:08

Random facts:

The iPhone has a 2 Megapixel

It also has H.264 video decoding, most likely in hardware.

Sorry for the server hiccup, we should be back online.

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2007-06-29 19:13:33

Front of the iPhone. The battery was partially charged when we got it.



2007-06-29 19:14:23

iPhone's back.



2007-06-29 19:27:25

We've got the iPhone apart. It was a little bit tricky.

We removed the black antenna plate first.

You can see the grounding screw on the back panel holding the antenna cable and connecting the front and back case.



2007-06-29 19:21:20

Separating the front and back case.

There's a headphone jack cable to disconnect before you can completely remove the back panel.



2007-06-29 19:30:33

At last! The moment you've all been waiting for. $\protect\ensuremath{\mbox{}}$

The battery is huge, and soldered to the logic board.

You can see the SIM card bracket and headphone jack on the rear panel.



2007-06-29 19:27:41

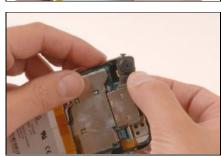
The battery has Apple model # 616-0290 L1S1376APPC.

3.7 V Li-Ion Polymer battery

You can see at least two antenna cables connecting to the logic board.











2007-06-29 19:29:35

Disconnecting the two antenna cables.

There's a dab of glue underneath both of the antenna connectors, presumably for reliability.

One has to imagine that Apple was extraparanoid about reliability on this phone. They've certainly learned their lessons from the iPod.

2007-06-29 19:35:37

Removing three Phillips #00 screws securing the logic board to the front panel. The screws are:

Where the screwdriver is

Underneath the black camera in the upper right hand corner.

To the left of the battery wires that are soldered to the logic board.

2007-06-29 19:38:34

Removing the camera, on the top of the phone. This is the standard camera.

2007-06-29 19:38:59

Removing ten Phillips #00 screws around the perimeter of the iPhone.

2007-06-29 19:38:59

Lifting up the logic board. There are three connectors underneath. They are speaker, touch sensor, and display cables.

Disconnect the two connectors on the left side of the image.



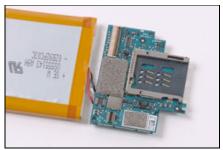
2007-06-29 19:38:59

Disconnect the remaining connector.



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Flip up the retaining bar to free the dock connector cable.



2007-06-29 19:38:59

Close-up shot of the logic board. The logic board is two layers thick, so it's difficult to see components.

We haven't found a way to pry the two sections apart without damaging the logic board, so it's virtually impossible to tell you what's in there.



2007-06-29 19:38:59

View of the iPhone with the logic board and battery removed.



2007-06-29 19:38:59

Disconnect the antenna cable to the left of the dock connector.



2007-06-29 19:38:59

Peel up the antenna ribbon sheet from the large black plastic piece

You can now see why the iPhone has the black lower section of the back case. The antenna encompasses this entire region.





2007-06-29 19:38:59

Remove the hollow black plastic piece that was covered by the antenna.

 $\begin{array}{l} \hbox{There is some empty space within it} \\ -\hbox{ the only open internal space}. \end{array}$

2007-06-29 19:38:59

The iPhone is completely apart!

The phone had about 16 screws total, unlike many iPods. The iPod Nano only has three screws.

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