



iPod Touch 2nd Generation Teardown

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INTRODUCTION

We disassembled this iPod on September 10, 2008.

TOOLS:

- [Metal Spudger](#) (1)
 - [Phillips #00 Screwdriver](#) (1)
 - [Spudger](#) (1)
-

Step 1 — Teardown



- The new iPod Touch comes in a smaller, transparent plastic case.
- Someone asked if we should turn it on, or check out the new software before we took it apart. But we're just a little too eager for that.

Step 2



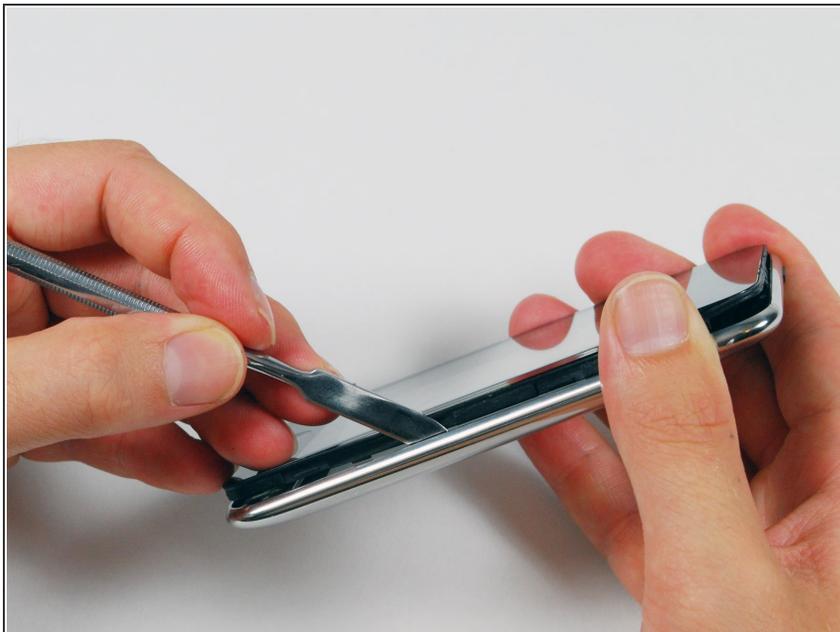
- Also included in the box:
 - Earphones
 - USB 2.0 cable
 - Dock adapter
 - Polishing cloth

Step 3



- As expected, the form has been updated to match the iPhone 3G's shapely curves.
- ⓘ Note that the antenna cover is also transformed. It was a rectangle on the 1st Gen Touch.

Step 4



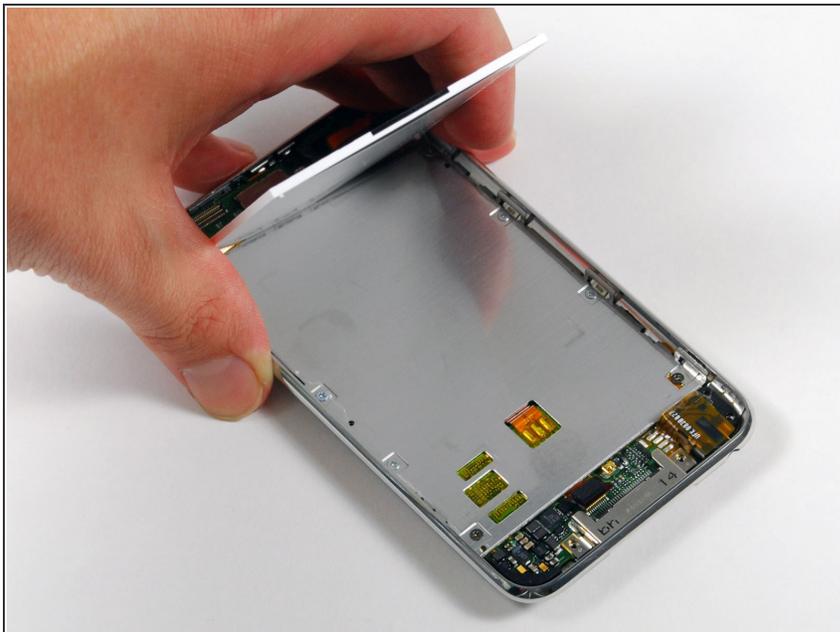
- Removing the glass display and touch screen digitizer combo.

Step 5



- The bare LCD display.
- Apple gives the size as 3.5 inches (diagonal) with a 480x320 pixel resolution at 163 pixels per inch.

Step 6



- There are no screws securing the LCD. Instead, it's held in place with a little double-sided tape.

Step 7



- Removing the metal backing.
- The battery is held to the backing with two strips of light adhesive, but peels off easily.

Step 8



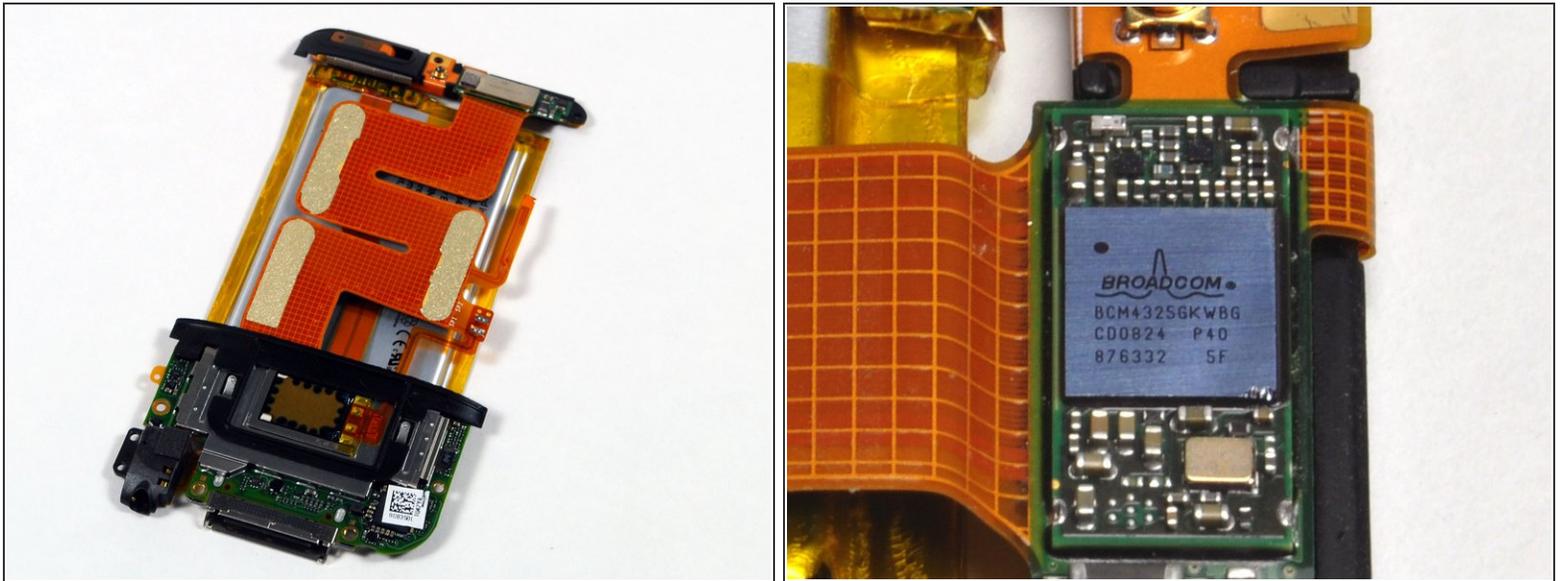
- Disconnecting the display data cable.
- Note the residue from the glue holding the battery to the metal backing.
- This is getting exciting!

Step 9



- Removing the battery.
- The WiFi antenna and circuitry are at the bottom of the image, near the thumb.

Step 10



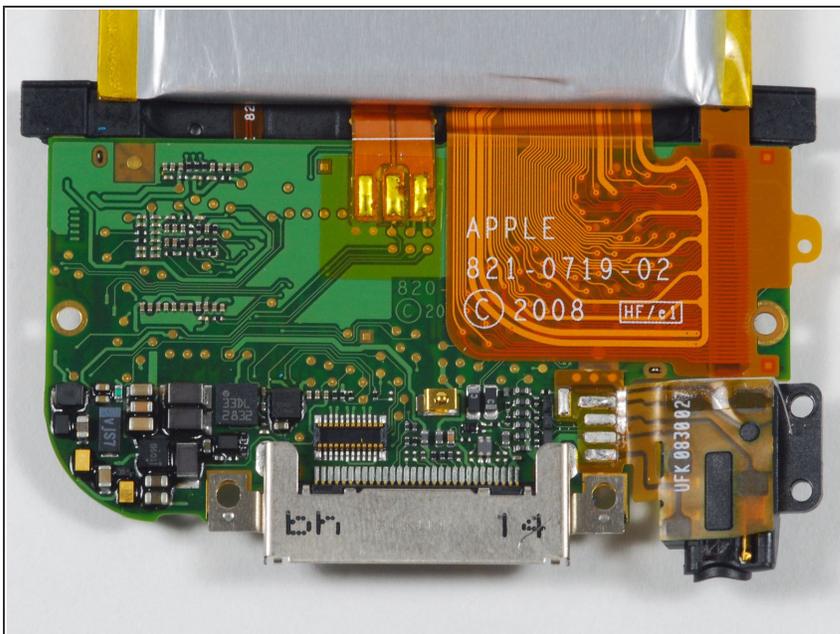
- The large orange cable connects the WiFi antenna (upper left) to the logic board.
- ⓘ The size, shape, and characteristics of the cable prevent external noise from interfering with the digital signals as they travel along the device.
- At the top of the picture above the battery is a metal cover. Underneath the cover is a Broadcom [BCM4325](#) Wi-Fi and Bluetooth chip. Yes, that's right, Bluetooth! Apple has said nothing of this publicly.
 - This particular bluetooth chipset supports BT2.1+EDR. No word yet on whether the one Apple included supports [A2DP](#), which would enable stereo headphones.
 - ⓘ This chipset also offers FM support, but Apple has displayed zero interest in FM historically, and there are no signs of that trend changing.
 - Part numbers: BCM4325GKWBG CD0825 B76332 P40 SF

Step 11



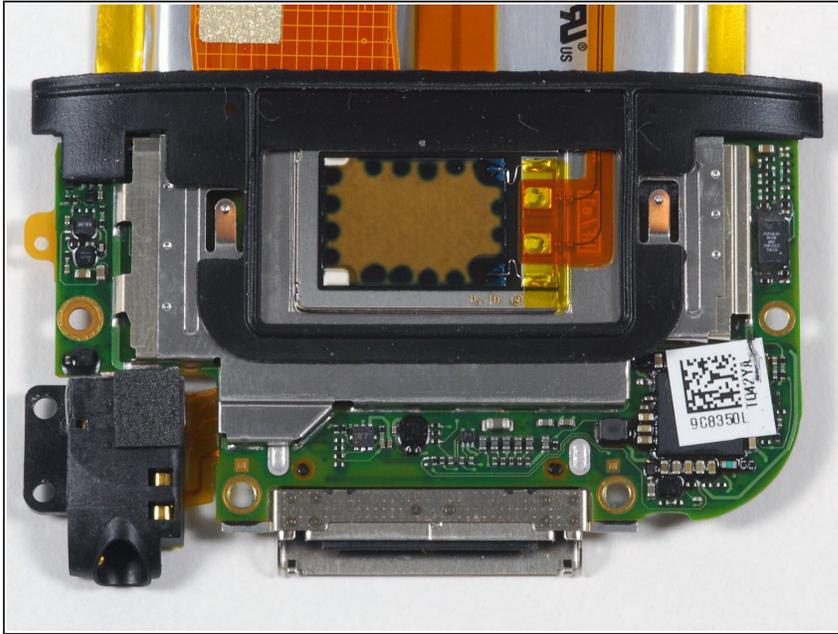
- The other side of the wireless circuitry, battery, and logic board.

Step 12



- You can see the dock connector in the center and the headphone jack on the right.
- ⓘ Note the small gold "square" above the dock connector. It's actually a conducting spring that rests against the home button. The button acts as a switch, connecting the spring to ground (the dock connector) when it's pressed.

Step 13



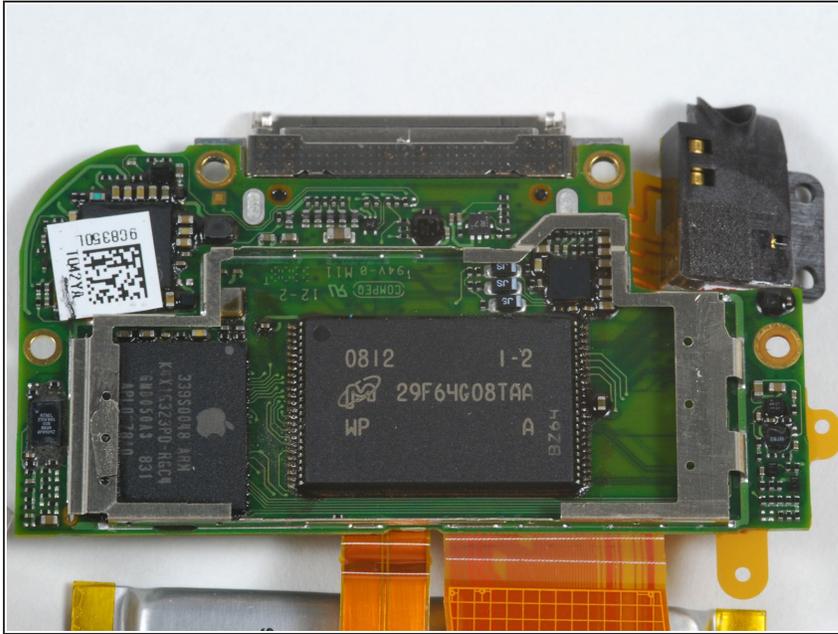
- The logic board.
- We think the brown rectangle in the center is the speaker. It looks like the two wires in the orange ribbon cable on the right of it run to the new volume control dial.

Step 14



- The battery. 3.7 V Lithium-ion polymer, as expected. Apple part number 616-0404. No word yet on the mAh rating.

Step 15



- The logic board again, this time with (what we think is) the speaker removed.
- The NAND flash memory is a Micron MLC chip: [MT29F64G08TAAWP](#)
- The processor is an Apple-branded Samsung-manufactured ARM with SDRAM on the package, similar to the iPhone processor.

Step 16



- The end.