



iPod Touch 5th Generation 16 GB 2014 Teardown

Teardown of the revised 5th generation iPod Touch, performed on June 26, 2014.

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INTRODUCTION

Apple has quietly introduced an updated version of the iPod Touch 5th Generation 16 GB. What exactly is Apple trying to sneak past us? We're about to find out. Join us as we explore the newest addition to the iPod Touch family. Ladies and gentlemen, we present the iPod Touch 5th Generation 16 GB 2014 teardown.

This teardown train stops for no one! Friend us on [Facebook](#), trade tweets with us on [Twitter](#), and get touchy feely on our [Instagram](#).



TOOLS:

- [iOpener](#) (1)
 - [iSlack](#) (1)
 - [Spudger](#) (1)
 - [Phillips #000 Screwdriver](#) (1)
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Step 1 — iPod Touch 5th Generation 16 GB 2014 Teardown



- The new and improved iPod Touch 5th Generation 16 GB economy model now features a 5-megapixel iSight camera, bringing it up to par with its 32 and 64 GB brethren.
- Let's take a look at the technical specifications:
 - 4-inch (diagonal) widescreen Retina display with Multi-Touch IPS technology
 - 802.11a/b/g/n Wi-Fi (802.11n 2.4GHz and 5GHz) + Bluetooth 4.0
 - 5-megapixel, 1080p iSight camera with LED flash and a $f/2.4$ aperture FaceTime 1.2 MP HD camera capable of capturing HD video (720p) up to 30 fps
 - New iPod touch loop
 - Three-axis gyro + accelerometer
 - 16 GB storage capacity

Step 2



- The iPod Touch 5th Gen 16 GB 2014 gains the wrist-strap peg previously reserved for the upper echelons of the Touch line—though you'll have to shell out some more dough for the strap itself, which is sold separately.
- We spy a revised model number tattooed on the back: A1421.
 - Wait just a minute—we've seen that number before, on the similar, but [higher-end iPod Touch 5th Generation variants](#).
- ⓘ This retro model number is yet further proof that this device isn't an update of the previous 16GB version so much as a throwback to the 5th Gens of olde.

Step 3



- OPEN [SESAME](#)! Since that trick didn't work, we turn to the [iOpener](#).
- ⓘ When it comes to opening an iPhone, the [iSlack](#) is our favorite tool by far. But how will it fare against the adhesive of the iPod Touch? With enough heat from an iOpener, the iSlack shucks this iPod like a [pistachio](#).
- ...And we're in. This iPod opens in the classic clam-like fashion, with familiar innards, and not a pearl in sight.

Step 4



- The first major change is unearthed: The headphone jack no longer has the bit of tape found in its beefier-storaged cousins.
- ⓘ On your left: a tapeless aux port. On your right: imagery from an [iPod Touch 5th Generation repair guide](#) featuring fancy tape removal.
- That makes your repair [one step](#) easier, and probably saves Apple [billionths and billionths](#) of pennies!
- Then again, maybe they just forgot the tape in this unit...

Step 5



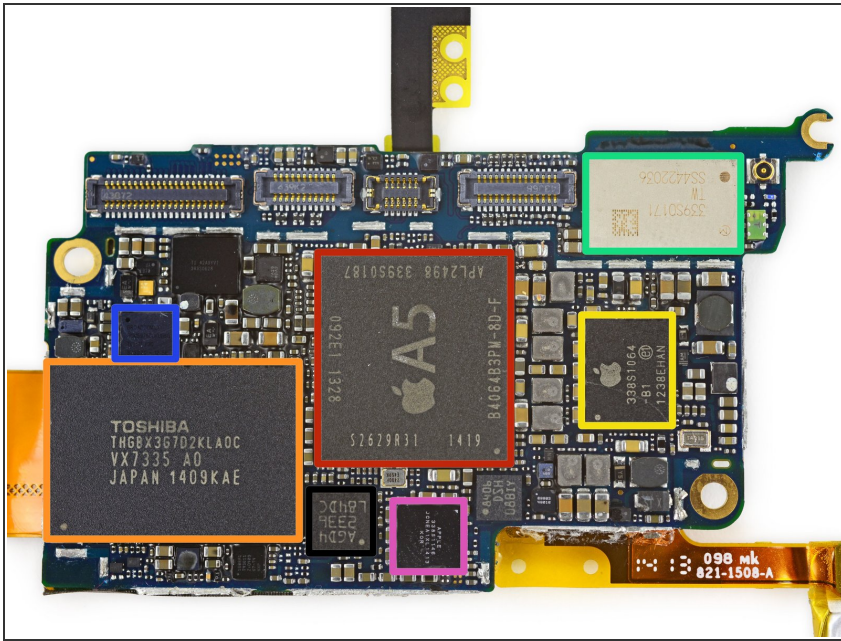
- Commence separation! Here we can see the wonderful mess of guts that have been stuffed inside this iPod.
- Since this is the same device, we won't announce it as news—but Apple certainly likes to play the "[how many components can we cram onto a single cable](#)" game in their iPods.
- ❗ The logic board, front-facing camera, battery, Lightning connector, headphone jack, speaker, and home button are all soldered together to [form a single conglomerate](#).
- This reigning champion rests easy, assured of its claim to the title. While the rest of us [plot its demise](#).

Step 6



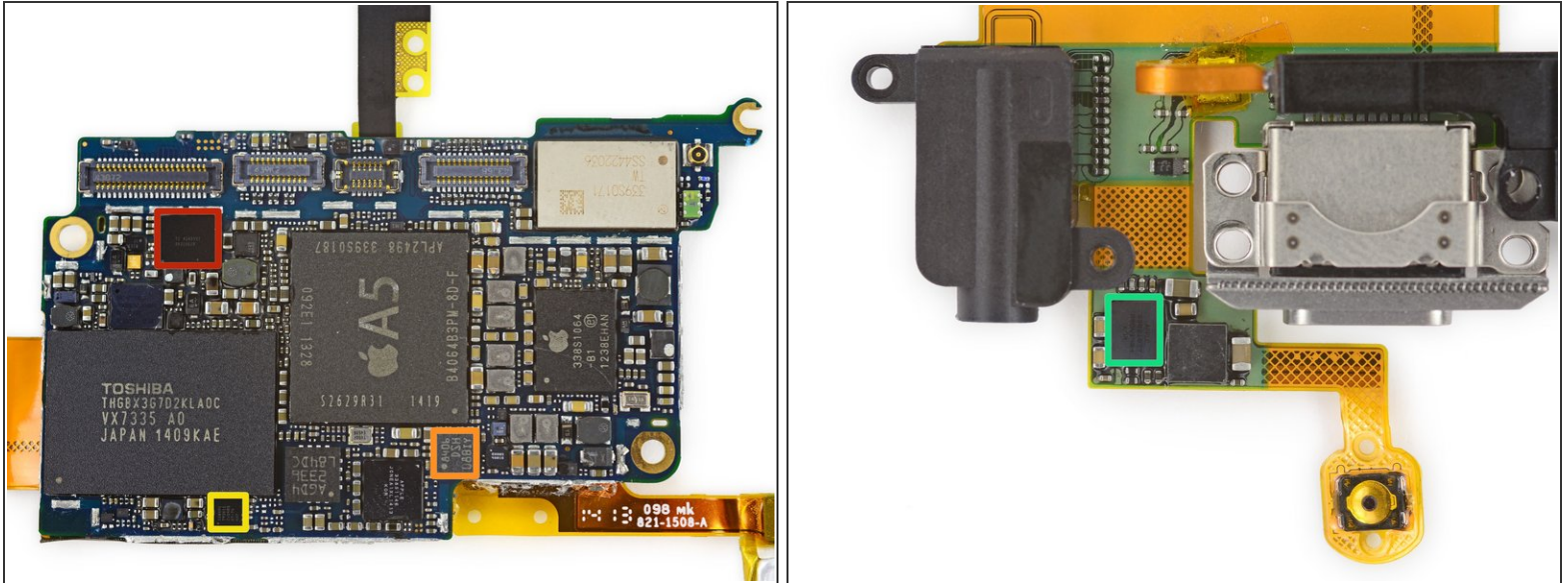
- Apple probably chose this humble device to introduce a revolutionary new camera, said no one.
- Actually, this looks very much like [the camera we found in the other A1421 models](#). It packs a five-element lens with a hybrid IR filter and an $f/2.4$ aperture. It's able to capture 5 MP images or 1080p (full HD) video at 30 FPS.

Step 7



- What sorts of integrated chips will we find on the logic board? Let's see:
 - Apple A5 dual-core processor, with 4 Gb (512 MB) of Elpida Mobile DDR2 RAM, denoted by the B4064B3PM silkscreen label
 - Toshiba TH6BX3G7D2KLA0C 128 Gb (16 GB) NAND flash
 - Apple [338S1064-B1](#) dialog power management IC (similar to the [Apple 338S1131](#))
 - Murata 339S0171 Wi-Fi module
 - Broadcom [BCM5976](#) touchscreen controller
 - [338S1146](#) Apple/Cirrus Logic audio codec
 - STMicroelectronics AGD4 2336 L84DC low-power, three-axis gyroscope

Step 8



- Integrated chips galore! Let's check out the rest of the smorgasbord:
 - Texas Instruments [343S0628](#) touchscreen controller
 - STMicroelectronics 8406 DSH 08BIY
 - NXP Semiconductors [1608A1](#) display interface controller
- Hiding between the Lightning connector and headphone jack, we ([again](#)) find:
 - Apple [338S1077](#) Cirrus Logic audio codec

Step 9



REPAIRABILITY SCORE:



- (Still) [no surprises here](#), the iPod Touch 5th Generation 16 GB 2014 Repairability score: **3 out of 10** (10 is easiest to repair).
- While very difficult, opening the case and replacing components is not impossible.
- The battery is flanked by notches that make prying it out of the rear case fairly easy.
- Many components are soldered together, requiring either a very difficult or a very expensive repair if any one part breaks.
- There are no external screws. Instead, a combo of clips and adhesive makes it difficult to open the case.
- Ribbon cables connected to the logic board run over the top and connect on the bottom, making it difficult to remove the board or disconnect the cables.