



Dell Streak Teardown

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INTRODUCTION

The Streak is new to the ever-expanding Android smartphone market. The behemoth also happens to be Dell's first smartphone, so we felt it proper to give it the royal iFixit treatment and see what makes it tick.

This is also the first device to receive a subjective "repairability" score from iFixit. We're listing the good and not-so-good repair aspects of the phone (as well as its score) in the final step of the teardown. Check it out!



TOOLS:

- [iFixit Opening Tools](#) (1)
 - [T5 Torx Screwdriver](#) (1)
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Step 1 — Dell Streak Teardown



- At long last, the Dell Streak has arrived on American soil. More importantly, it has landed in the hands of iFixit. And we all know what that means...
- The Dell Streak features:
 - 5" 800x480 TFT LCD Display
 - 5 MP rear-facing camera and VGA front-facing camera
 - Android 1.6 (Donut) operating system
 - 1 GHz Qualcomm 8250 Snapdragon processor
 - Corning Gorilla Glass front panel

Step 2



- The battery cover detaches easily, like all battery covers should.
-  Boy, this looks kind of [familiar](#)...

Step 3



- After the rear panel is gone, the battery can be easily removed from its home.
- The Streak's 3.7 V 1530 mAh (5.66 Whr) battery reportedly powers the gargantuan device for...well...we don't know how long.
- ❗ The fact that Dell didn't [publish](#) the battery life hints at the fact that it isn't too great. What do you expect from a 5" display?
- The inner face of the battery is covered with a sheet of steel, rather than plastic, to decrease its overall thickness. Perhaps the Streak also doubles as body armor?


Step 4



- After the battery is removed, the pre-installed 16 GB microSD card can be slid out of its socket.
- There you have it for Dell's approved user serviceability. Now let's void some warranties!

Step 5



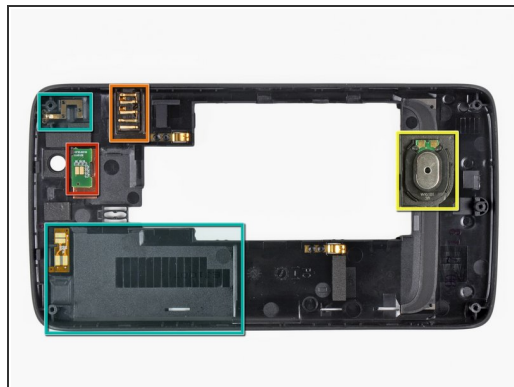
-  The rear of the device features a noticeable absence of screws. Looks like we're gonna have to dig for them.
- A plastic opening tool is all that's needed to remove the bezel securely stuck to the top edge of the Streak.
 - We found the screws! This is a good sign.

Step 6



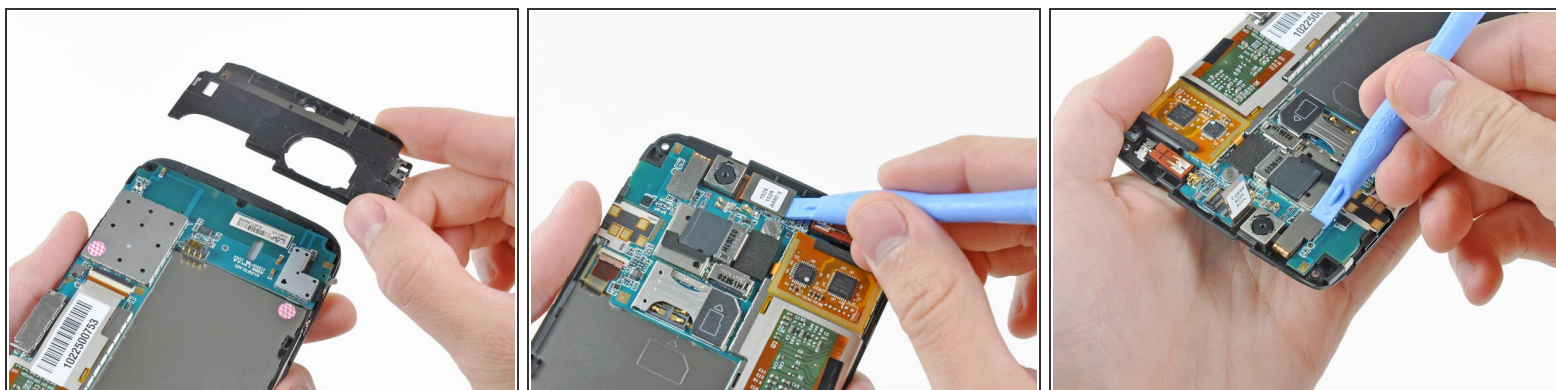
- Similarly, the lower bezel can be easily pried up from body of the Streak.
- ⚠ The capacitive control circuitry is securely attached to the inner face of the lower bezel, so it's highly advised to pry up the bezel from below (as pictured), to make sure the circuit does not receive any damage.
- Since the connector is inside the device, it's a good idea to leave the bezel attached for now.
- After a bit of digging, the five T5 Torx screws securing the rear case can be removed.

Step 7



- After some light prying with a plastic opening tool, the rear case comes off with ease.
- ⓘ The thick Gorilla Glass front panel is visible at this point. Its rugged construction should be able to withstand drops from above waist height.
- The rear case houses many components, including:
 - LED flash
 - Headphone jack
 - Loudspeaker (for speakerphone)
 - Antennas

Step 8



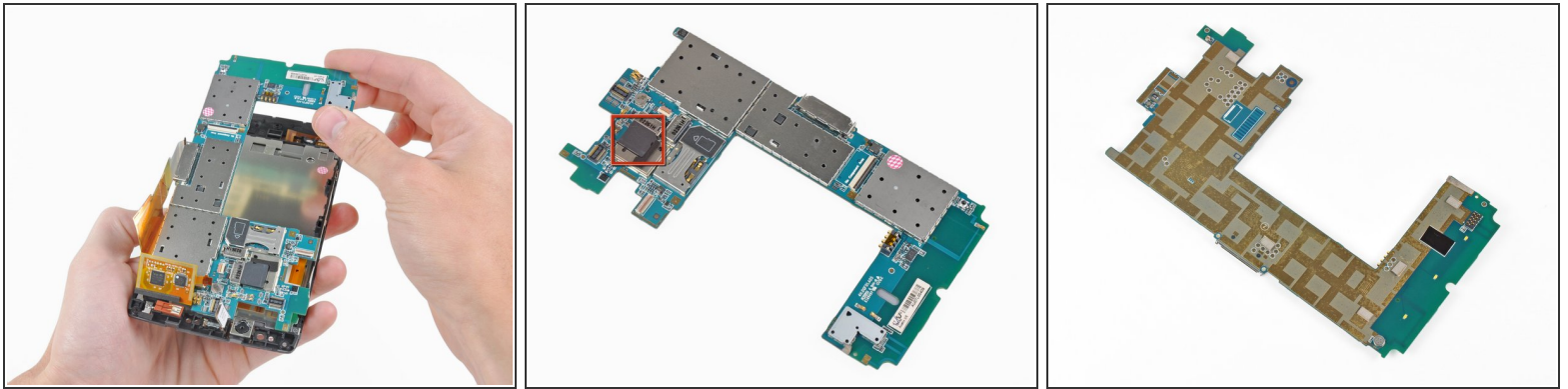
- The digging continues as we remove a small plastic bezel attached to the lower edge of the motherboard.
- At this point, both the front-facing and rear-facing cameras can be disconnected from the motherboard.

Step 9



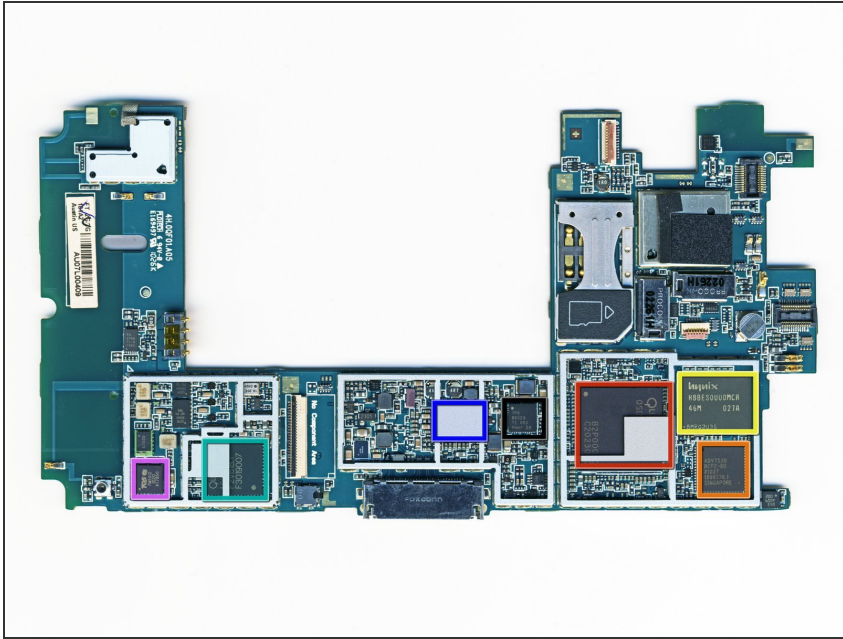
- Before lifting out the motherboard, the touchscreen, LCD, and control button ribbon cables must be disconnected.

Step 10



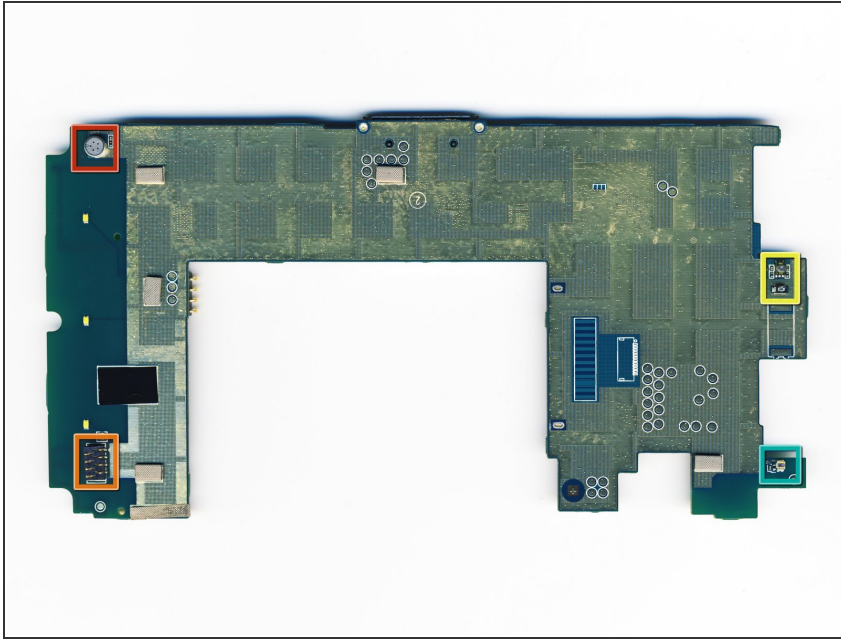
- The "C"-shaped motherboard comes out easily. Rather than using daughterboards like the [Droid 2](#), the Streak has all components attached to this singular motherboard.
- ⓘ This is most likely due to the extra space afforded by designing the Streak around its 5" LCD.
- A 2 GB non-user accessible microSD card can be seen near the top of the motherboard.
 - This card is used to house system & applications files only, and Dell doesn't want you to remove it.

Step 11



- Big players on the motherboard include:
 - Qualcomm [QSD8250](#) Snapdragon processor
 - Analog Devices [ADV7520](#) Low Power HDMI™/DVI Transmitter
 - Hynix [H8BES0UU0MCR](#) NAND-based MCP
 - Qualcomm MXU6219 RF Transceiver
 - Qualcomm PM7540 Power Management chip
 - TriQuint Semiconductor TQS 7M5012 Power Amp (Quad-band GSM)
- Texas Instruments [TPS 65023](#) Integrated Power Management IC

Step 12



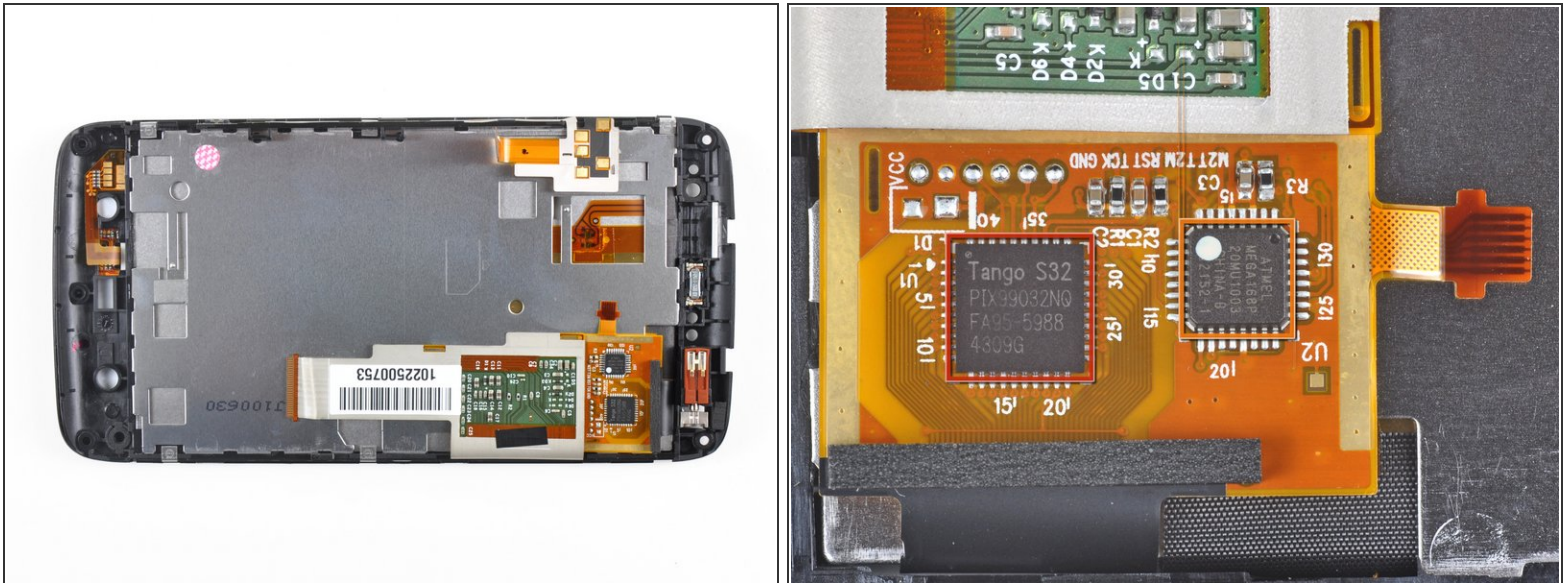
- The back of the motherboard is relatively featureless, with a few notable exceptions:
 - Microphone
 - Pressure contacts for the capacitive controls on the lower bezel
 - Proximity sensors to tell the touchscreen when your face is pressed against it
 - Ambient light sensor for the front-facing camera.

Step 13



- The Streak's cameras pretty closely resemble the iPhone 4's [front](#) and [rear](#) facing cameras.
- The auto-focus rear-facing camera is good for 5 MP still images, while the front-facing camera shoots at VGA quality.

Step 14

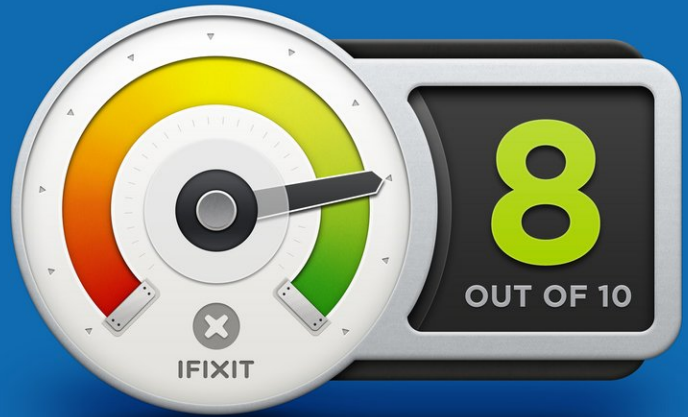


- Sadly, the Streak's LCD is permanently adhered to the front panel glass. However, that LCD/glass subassembly is held in the front panel with very strong 3M adhesive, and could be removed with enough careful prying.
- ❗ The LCD is bonded to the front panel glass to increase the strength of the device and sensitivity of the capacitive touch panel.
- The inner face of the front panel assembly isn't all that exciting. The ear speaker and vibrator motor can be seen near its top edge.
- The touchscreen ribbon cable houses:
 - Pixcir's [controversial](#) Tango S32 Touchscreen controller
 - Atmel's ATmega168P 8-bit AVR microcontroller

Step 15



REPAIRABILITY SCORE:



- **Dell Streak Repairability: 8 out of 10** (10 is easiest to repair)
 - *Good:* Replacing the battery is super easy and takes less than one minute.
 - *Good:* Opening the device requires prying the bezels and removing five screws.
 - *Good:* Cables use standard connectors, including our favorite, [ZIF](#) connectors.
 - *Neutral:* The rear panel feels cheap and deforms easily for a \$600 device.
 - *Bad:* The LCD is bonded to the Gorilla Glass, increasing the cost of fixing the device if you break just the glass.

To reassemble your device, follow these instructions in reverse order.