



Zanco Tiny T1 Teardown

Teardown of the Zanco Tiny T1, performed on December 20, 2018.

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INTRODUCTION

We've seen (and torn down) pretty much everything, but now Zanco's Tiny T1 is here. It's oblivious to your obsession with screen-to-body ratios, impervious to your petty PPI comparisons, and contemptuous of those quadruple-digit smartphone price tags—but it might just take the thin-and-light crown for good. Join us for the Tiniest teardown we've ever done. It's gonna be big.

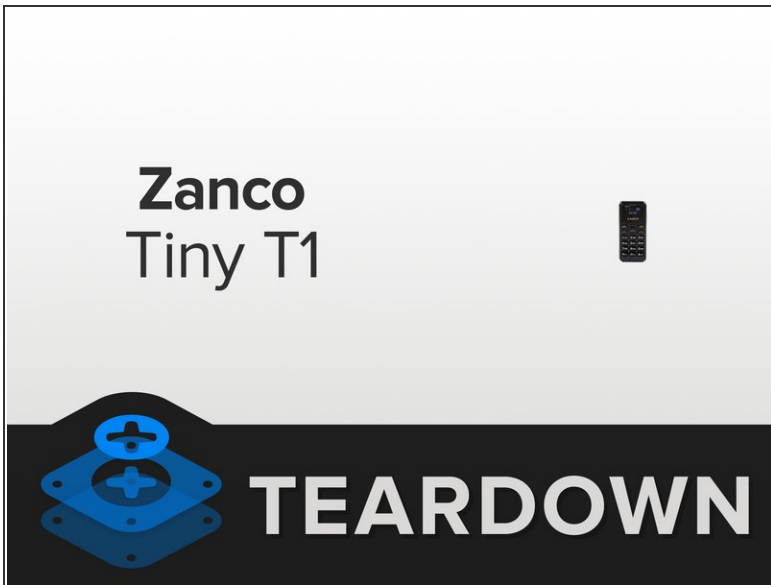
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TOOLS:

- [Spudger](#) (1)
 - [Tweezers](#) (1)
-


Step 1 — Zanco Tiny T1 Teardown



- The Tiny T1 may be small—but is it mighty? We'll let its specs do the talking:
 - Mediatek MTK6261D SoC
 - 0.49" OLED display with 64 x 32 pixel resolution (146 ppi)
 - Built-in voice changer
 - 32 MB RAM and 32 MB ROM
 - Backlit keyboard
 - 2G network connectivity
 - MicroUSB port


Step 2



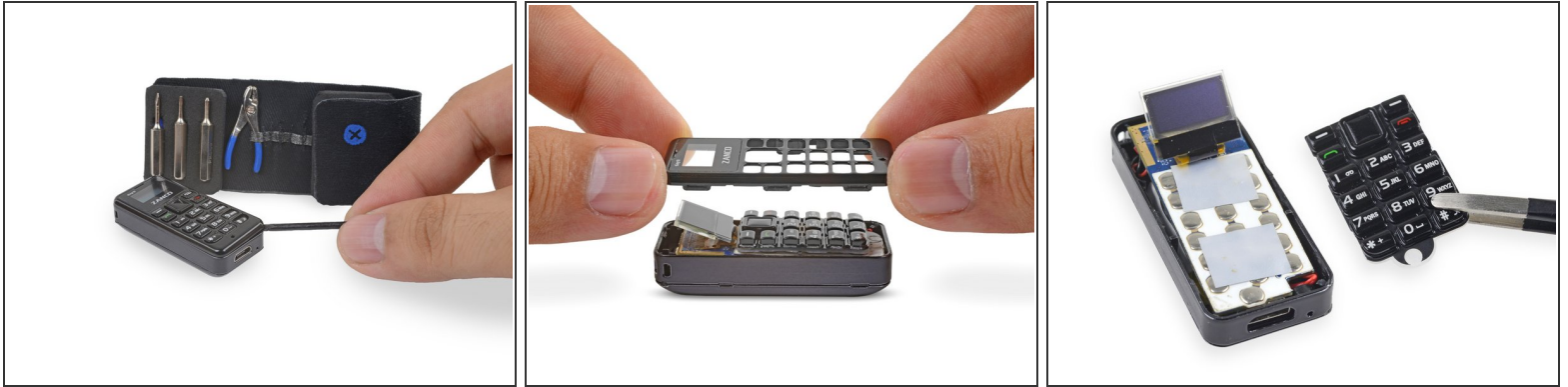
-  For size reference, we've enlisted the help of a certain furry rebel. Don't worry—we'll [transport him back](#) to the Rebellion when we're done with him.
- While it's not the most popular [tiny phone form factor](#), the T1's chocolate bar layout makes dialing *and* texting with human-sized fingers a breeze.
 - The *metal* back case is smooth except for a regulatory sticker and speaker grille. No fragile glass panel to shatter. No unsightly rear camera bump.

Step 3



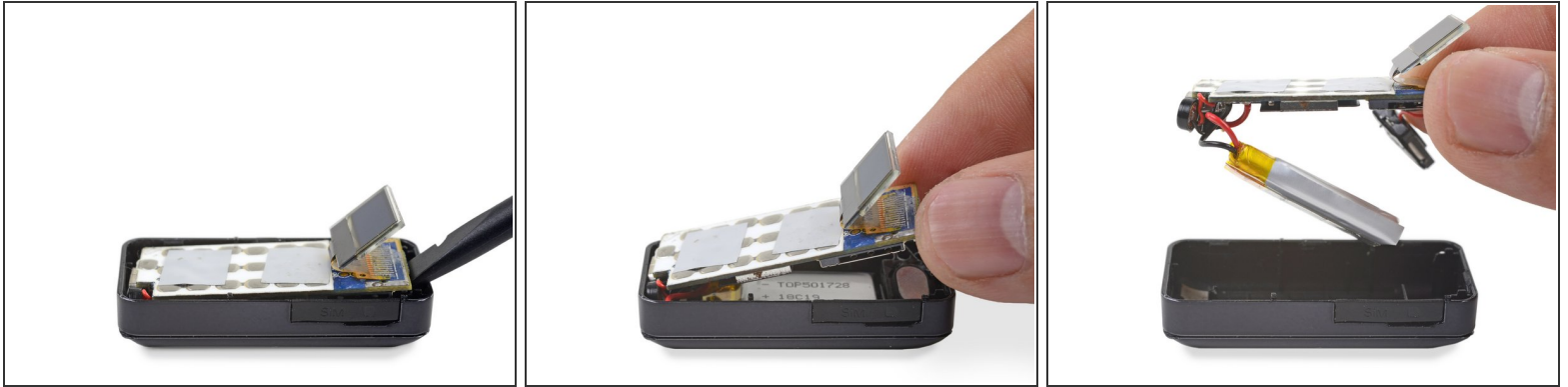
- A "micro"-USB port occupies the bottom of the phone—and Zanco has managed to squeeze in a pinhole microphone alongside it.
- Nano is such a relative word, as the "nano" SIM slot dominates the right edge of the phone.
 If you're prone to butt-dialing people, the Tiny T1 is not for you.
- Does size matter? We compare the Tiny T1 to its modern compatriots: a tech writer's LG ENV3 and a [Samsung Galaxy S9+](#).

Step 4



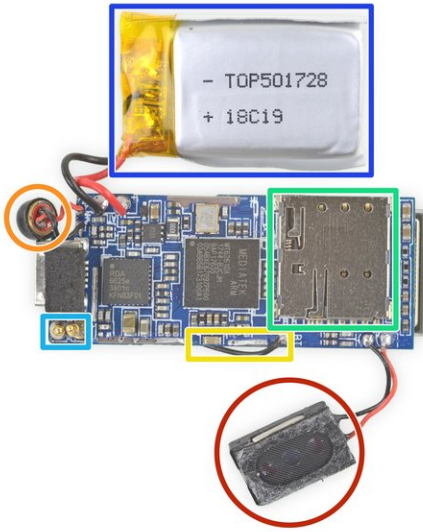
- Opening a phone of this scale requires specialty tools. Fortunately, iFixit has got it covered.
- Despite its retro aesthetic, this opening procedure is far from obsolete. Some micro spudger action frees up the front clips, and the top plastic plate is free!
- ⓘ Unlike with some phones, we encounter no [proprietary screws](#) here.
- We move the keypad aside and find the button pad soldered to the board beneath.
- To supply backlight to the keypad, two white adhesive pads diffuse light from four surface-mounted LEDs underneath.

Step 5



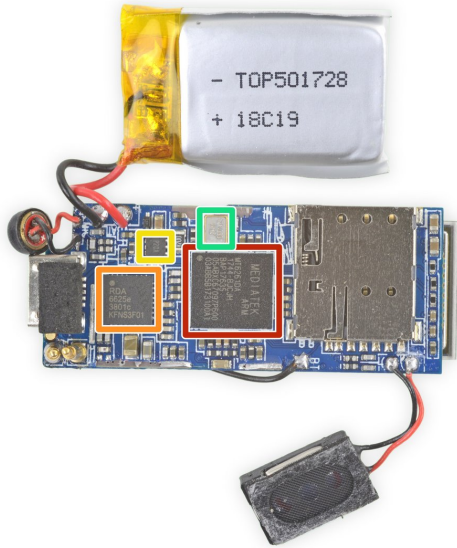
- While most modern phones are held together by an [army of screws](#) and [nasty adhesives](#), the Tiny T1 has none of that. Zero screws! Zero adhesives!
 - The entire innards pop out with a single pry with a (normal) sized [spudger](#).
- ⓘ The likely lesson here: to easily open *normal*-sized phones, we need a *giant* spudger.
- ⓘ Who says small can't be repairable? (Looking at you, [AirPods](#).)

Step 6



- Here we have the inner workings of the Tiny T1—all of them. It's just one board, with (nearly) everything soldered to it:
 - Speaker
 - Microphone capsule
 - High tech Bluetooth antenna (it's a wire)
 - "Nano" SIM slot, ironically hogging nearly half the board
 - Two mysterious pogo pins, which are accessible from outside—possibly for charging? Accessory port? A tiny taser?
 - 200 mAh 0.74 Wh battery (for comparison, the ENV3 has 3.5 Wh, while the Galaxy S9+ weighs in at 13.48 Wh)
 - i While the S9+ battery packs over *eighteen times* the capacity, we doubt that its standby scales linearly to the Tiny T1's three-day rating.

Step 7



- What's the bare minimum amount of silicon needed for a functioning mobile phone? We're not sure, but this can't be far off:
 - Mediatek MT6261DA SoC
 - RDA Microelectronics [RDA6625](#) Front-end module
 - Likely li-ion battery charger ic
 - 26 MHz oscillator

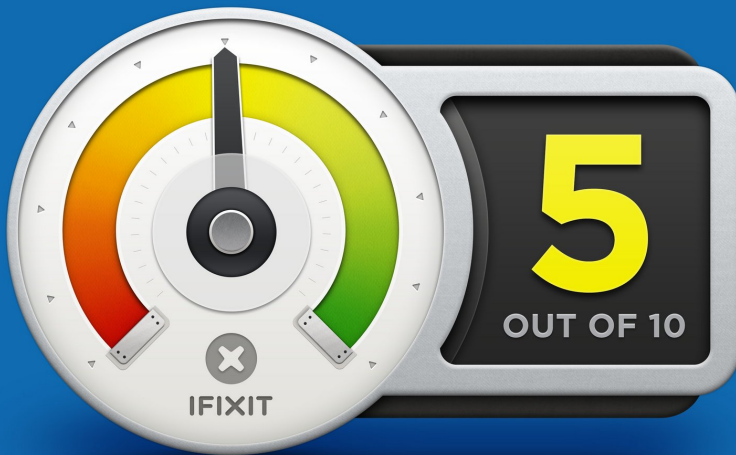
Step 8



- That's a wrap to this Tiny Teardown!
- The T1 shows you can make a working phone with just a little hardware—and with technological advancements, you can make it that much little-er.
- We've come a long way from the [first mobile phones](#) of over forty years ago, even surpassing the wildest concepts from [spy films](#) and [science fiction](#).
 - ① ... Which just means that modern designers of fictional gadgets have to [keep upping their game](#).

Step 9 — Final Thoughts

REPAIRABILITY SCORE:



- The Tiny T1 earns a **5 out of 10** on our repairability scale (10 is the easiest to repair):
 - The phone is held together by clips alone, making the opening procedure easy and painless.
 - The front plastic plate, which is prone to cracking, is easily replaceable.
 - Most components, including the battery, are soldered to the motherboard, making repairs difficult.