



Texas Instruments TI-82 Teardown

Written By: bushing



INTRODUCTION

This is a basic teardown of the venerable TI-82 calculator.

TOOLS:

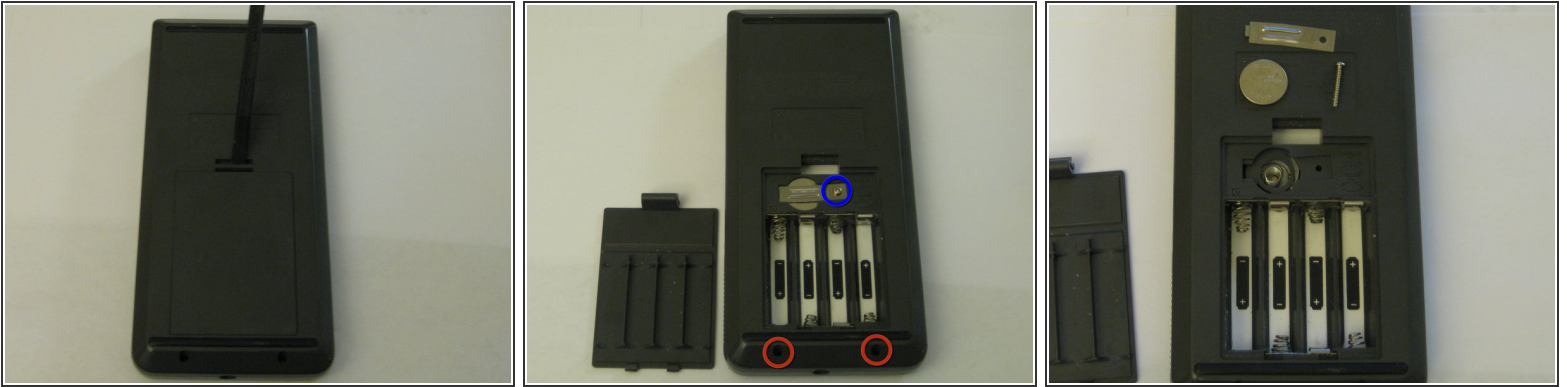
- [Phillips #00 Screwdriver](#) (1)
 - [Spudger](#) (1)
-

Step 1 — Texas Instruments TI-82 Teardown



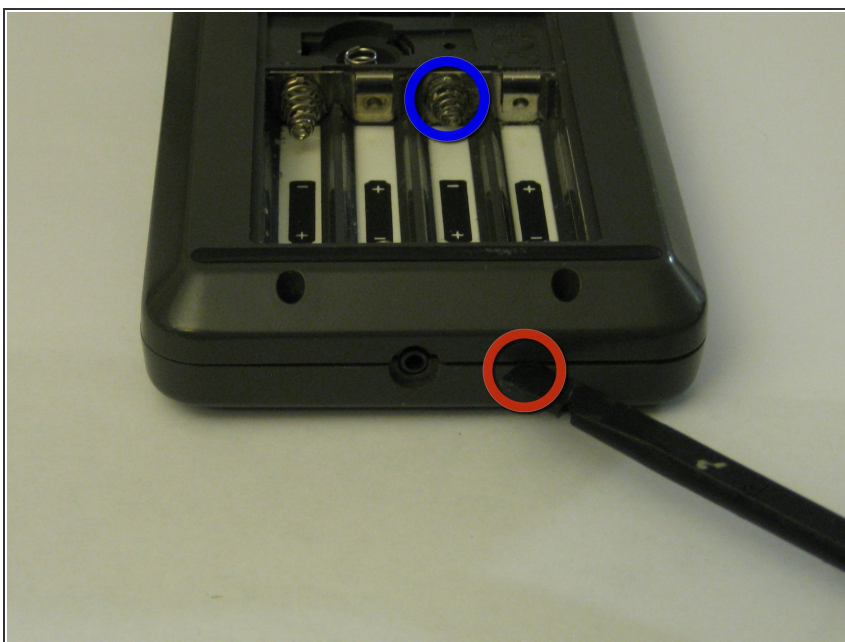
- The calculator comes with a matching protective shield which slides down over the front; when the calculator is in use, you can slide it over the back. This is a nice touch, as it makes the cover much more difficult to lose.

Step 2



- Flip the device over to access the battery cover.
- Using a spudger, pry the release tab down and then pull the battery door up and off the calculator.
- Remove:
 - 2 7.2mm Phillips #0 screws
 - 1 15.3mm Phillips #0 screw, and a battery retaining clip.
- ⓘ The CR1616 coin cell battery preserves settings and programs in memory while the main batteries are being changed.

Step 3



- Insert a spudger into the seam between the two halves of the case, and pry it apart.
- Watch out for corrosion in older calculators around the battery terminals -- this is why you should never leave batteries in electronics for extended periods of time.

Step 4



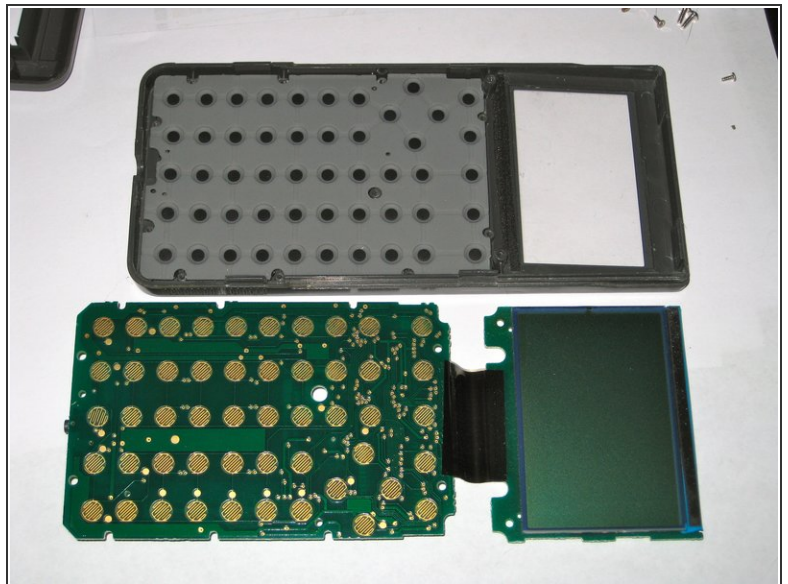
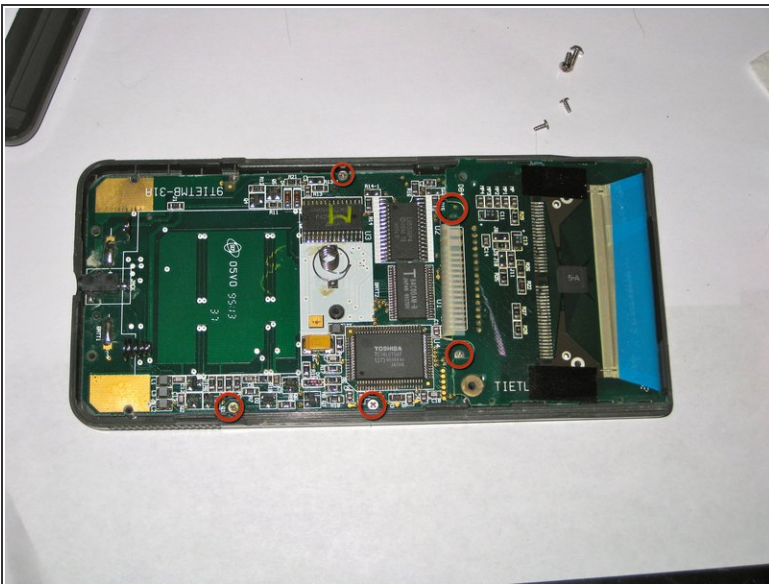
- Opening the two halves of the calculator reveals a foil shield over the rest of the electronics.
- Remove four Phillips screws to access the electronics underneath, then pull the shield away.

Step 5



- ... And, here's the guts of the thing.
- SRM20255LLM10 / F4ZM1938 (32Kbyte SRAM)
- [LH531GP4](#) (Mask ROM)
- T 84C00AM-8 (Z80 CPU)
- Toshiba / TC14L010AF / 1273 9506EAI (ASIC)

Step 6



- Remove the remaining Phillips screws.
- The screen and main board will lift out, leaving the membrane keypad in the front case.

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