

iPhone 5s



Team: Centennial Robotics 7983Z

Location: Centennial High School, Bakersfield, CA

Students Participating:

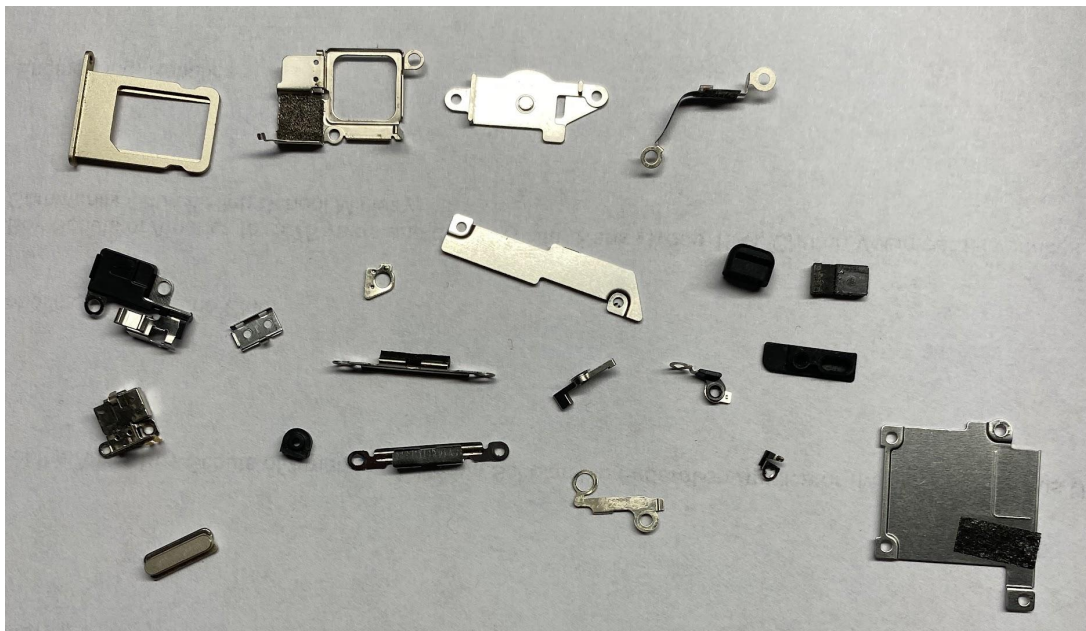
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The product that we decided to deconstruct and further investigate an old iPhone 5s, specifically marked Model A1533 with FCC ID of BCG-E2642A, IC of 579C-E2642B, and IMEI of 358813055741429.

To begin disassembly, we first removed the star screws located at the bottom of the phone using a small Phillips head screwdriver, as seen below. Using the same screwdriver head, we removed a majority of the other screws located inside the phone, with a total of forty screws removed. There were six screws left inside the device, as they were unsafe to remove.



When all components were removed, there was a small collection of pieces used to maintain internal order. Among them reside the the on/off switch, but not the volume and silence controls, as they were unsafe to remove from the device.



In the following image are the electrical components, excluding the battery.



The above electronic components will be numbered with a description as follows:

1. The screen of the iPhone, labeled CON4156B3WRFT5MS-A1BLDFV01ENFP2. This provides no results when searched. Two flat wires connect to the screen labeled 1784 A mk and 042 821-1580-A 1409, and a search of both provides no results. Considering their proximity to the screen it is likely that they were cables connecting close components.

2. A cable found along the top of the phone along the same area as the screen. It is labeled mk 821-1614-A 551414. A search using this code appears unhelpful, as it leads to a portable keyboard instrument. Based on the location, it likely shared a similar purpose as the above cables.
3. A large magnetic square coded CH41356KHPFD05AJ. A search using this code provides no results, but appears to have been in some way related to the front-facing camera or flashlight based on location.
4. A small magnetic square marked DTV41141149CFGWCAS, also provides no search results, but is likely similar in purpose to component number 3.
5. A strip containing the AUX and lightning cable inserts. The only text on the piece reads 821-1596-A. Results from a search of this code are parts that appear to be the same as this component.
6. The front-facing camera, with the code DN8420413RRF4W51G. The code produces no results when searched.
7. The back-facing camera, with the code mk8211314A55141. Similar to component six, a search provides no results.
8. The home button for the device, labeled mk 1414 821-2092-A. A search of 821-2092-A results in a touch ID sensor home button key.
9. A set of multiple components with different processes. One is the SIM card reader labeled F3Y42222HWEF7GRB, producing no results when searched. The other components on this strip are unknown in purpose, with one tagged F2M RCMB NJL and the other 339S0209 1883661278. Neither code provides any sources that clarify the purpose of the components.
10. The battery. With the most details upon the component, it is a Li-ion Polymer Battery, 3.8V — 5.92Whr, with an APN(Access Point Name) of 616-0728 and a VPN(Virtual Private Network) of 18S2001-AL.