Texas Instruments Online Challenge Summary Report
Team 99040C

For this year's TI online challenge, we chose to deconstruct an iPhone series 6S. We chose this iPhone mainly because it is no longer is use, and its small size make it easier to deconstruct and document the small amount of components compared to newer generation iPhones. Using screwdrivers, and our hands, we took apart the iPhone and documented some of its most important parts. The first of these we found was the 3.82V Lithium Ion Battery (see picture A). This is the power supply for the iPhone. It is rechargeable and long-lasting and one of the larger components of the iPhone. The next part that we found was the Primary Camera (see picture B). This is the camera facing the back of the iPhone, and takes pictures and videos. This camera is much smaller than most traditional cameras and the camera of newer generation smartphones. Then, we found the Home Button/Fingerprint Sensor (see picture C). This component has 2 features- unlocking the iPhone with a fingerprint scan, and navigating to the the iPhone itself. Next, we found the Taptic Engine (see picture D). The primary function of this part is making the iPhone vibrate whenever you receive a text message, call, or any other notification. The last part we found was the Touchscreen Backplate (see picture E). This was the largest of the 5 parts that we found. This metal backing supports the touchscreen. Of these 5 parts, none of them were made by TI.

A:

B:

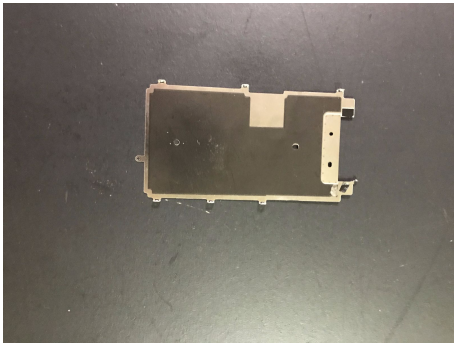This is the LI-ION battery, the power supply of the iPhone.

This is the Primary Camera, the device that takes pictures and videos.

C:

This is the Home Button/FIngerprint sensor.
Although there is a QR code, we were unable to scan it.

D:

This is the Taptic Engine, which vibrates your phone when you
 receive notifications

E:

This is the touchscreen backplate, which supports
the touchscreen.

Overall Component List:
-LI-ION battery
-Primary Camera
-Home Button/Fingerprint Sensor
-Taptic Engine
-Touchscreen Backplate