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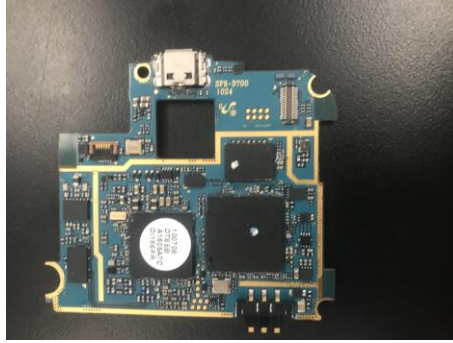
## Texas Instruments Online Challenge

For this Online challenge I have chosen a Samsung Galaxy S. I choose this because it was not in use and it was the easiest device to get my hands on. Plus, it was an old phone from around 2009 or 2010. Another reason I chose this device is because unlike the iPhone it has a removable back panel which allows easy access to the internal components of the phone. From there you can just take off a few screws and you're in. Most of the parts were held in with screws and some were glued on.



All the main components of the phone

Inside the phone I found multiple parts including the motherboard, battery, screen, the microphone, the speaker, the keyboard, and thermal paste that make my hands itchy. The mother board was the main. The motherboard also had all the electronics wired to it. The battery powered everything. There was a main speaker and a small speaker, the small one for putting up to your ear and the main one for listening out loud. Since it was an old phone it had a physical keyboard built into it that made a nice clicking noise. However, there were not any TI components.



The motherboard

All the parts have a different function like the motherboard controls everything and makes the device functions. The screen displays what is going on in the phone by using only the three colors blue, red, and green. The keyboard was just a sheet with letters on it. Under the sheet was a bunch of unlabeled buttons the are digital buttons that send 1's and 0's. Of course, that is linked to the motherboard too.



The Keyboard

In conclusion I learned that there are a lot of small parts in a phone. This makes sense because for something that fits in your pocket everything inside has to be small. But you would think that with rapidly advancing technology we would be able to make phones smaller but they seem to be getting bigger. Since the Samsung galaxy s is such an old phone the parts inside are not the most up to date. I also learned that a smartphone has a lot of hard to identify parts. I think that it was good for me to take apart this phone because in the modern world technology is rapidly advancing and it is hard to keep up if you don't know how any of it works.



The screen