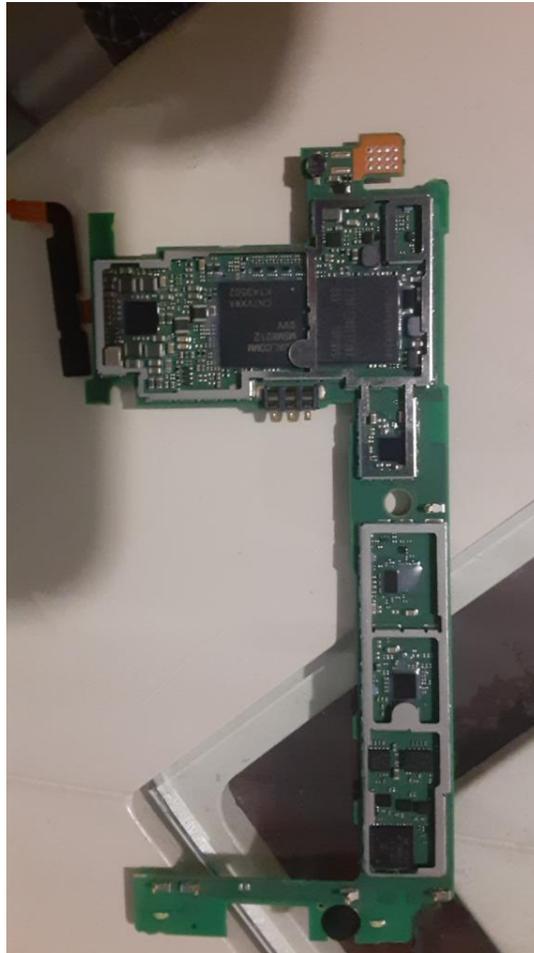


**Challenge: TEXAS ONLINE CHALLENGE 2929A Rockbots**

Device: Kyocera Hydro LIFE

Components: Charger, Battery, Motherboard, Phone frame, Screen, Cameras.



**MOTHERBOARD**

This component is the brain of the phone, without this the phone would not be able to function. The motherboard is the main processor of the phone that runs everything, think about it like this, it's the brain and the nerve system and connects with all the components. Holds the CPU (Central Processing Unit) that runs the whole phone.



## **CHARGER**

This piece is where the charger goes, it transfers the energy to the battery to give the phone energy. The blue part is a rubber band surrounding the charging port, this rubber band is most likely used as an insulator to minimize energy loss. The copper plate is next to the battery so the battery can absorb the electrical energy. The chip detects when it is charging and sends the signal to the mother board. That way the screen can show when the phone is charging or not. Without this the phone wouldn't be able to get the necessary energy to function.



## Phone Frame

This is the frame of the phone, it hides all the components inside, it has a wide space in the middle to fit all the components inside. The battery is the main piece that goes in the wide space, it's also a protective layer for the components to prevent damage and it holds the camera. It holds the speaker, flash, and small microphone that detects the noise of a video and your sound.



## CAMERA

The camera has a lens and a light sensing device which allows it to take the picture.



## SCREEN

The screen receives inputs from the motherboard. It renders the inputs from the motherboard and displays them in a visible and organized manner. All of the pixels can display 3 colors, green, blue, and red. They then display different amounts of these colors to show different shades and colors. It also senses when somebody is touching it.



## Battery

The battery is where all the energy from the charger goes, without this the phone wouldn't be able to be charged, when the phone dies that means the battery has run out of energy and needs recharging.



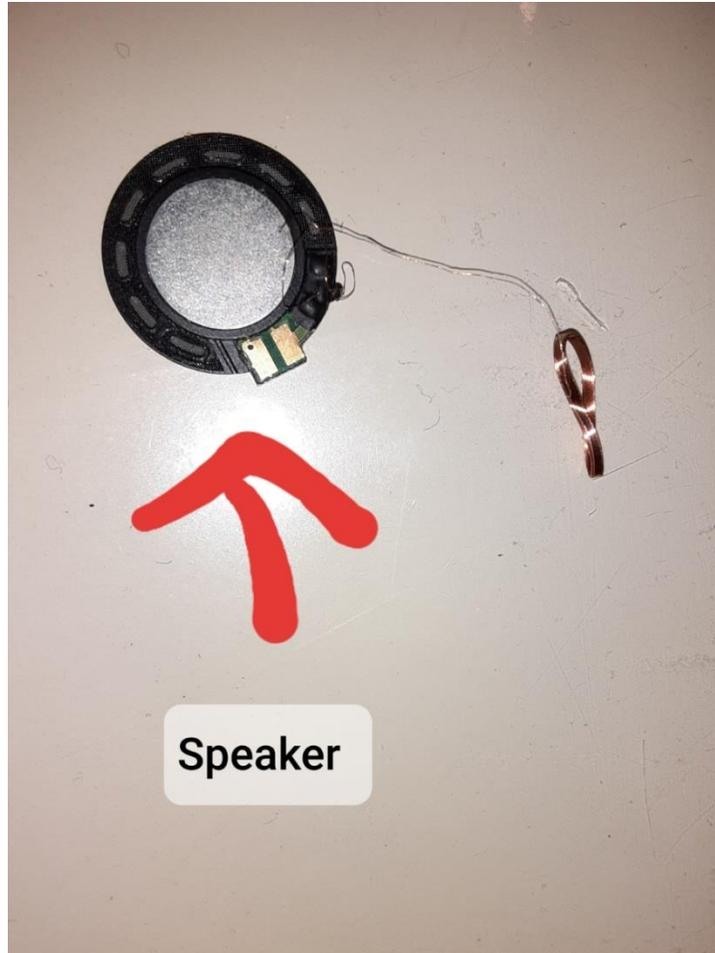
## Led flashlight

The LED flashlight is a small semiconductor that when a current flows through it, it emits photons.



## Microphone and headphone plug

The microphone records soundwaves so that they can be played by the speaker whenever necessary. The headphone plug is where the microphone gets plugged in and when that happens the phone's speakers stop playing noise and the headphone's speakers take over



## Speaker

The speaker vibrates and depending on the speed it vibrates as it will make a different noise