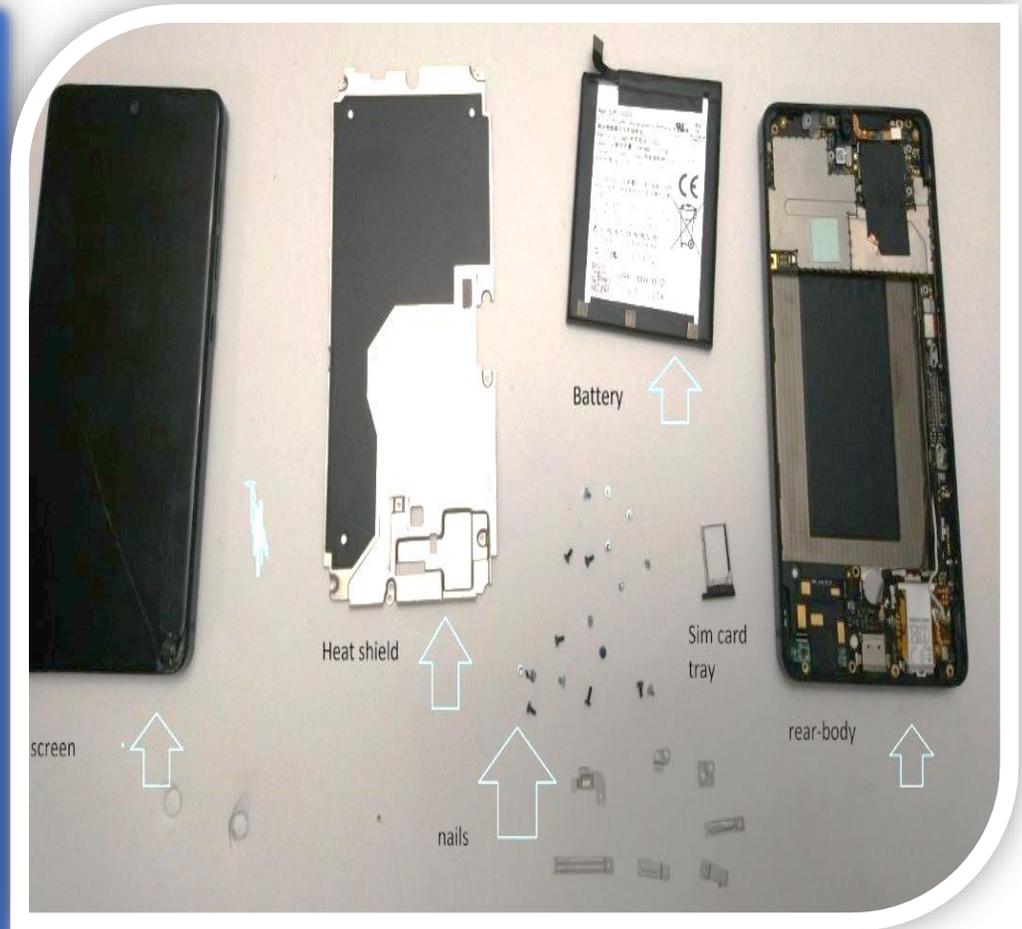
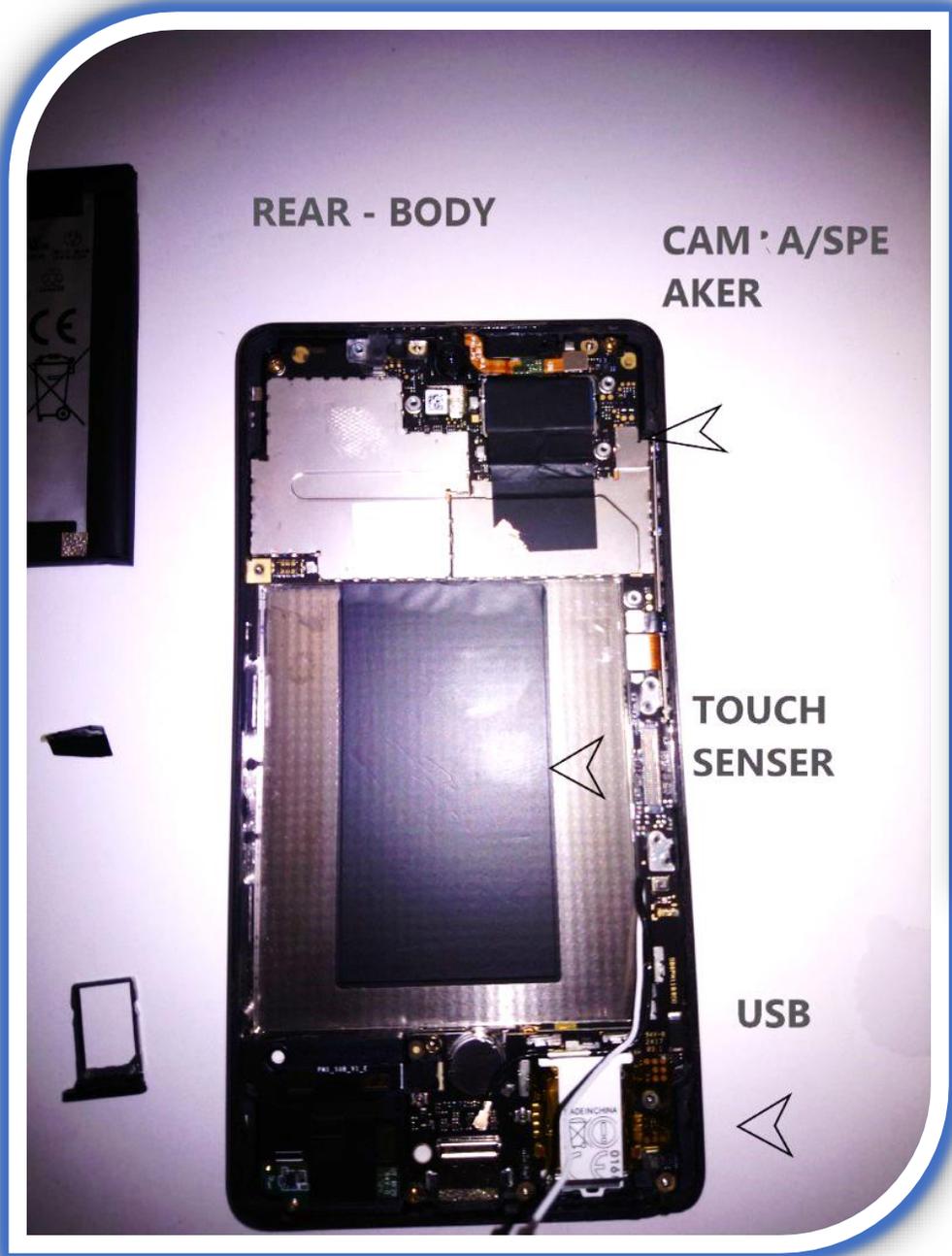
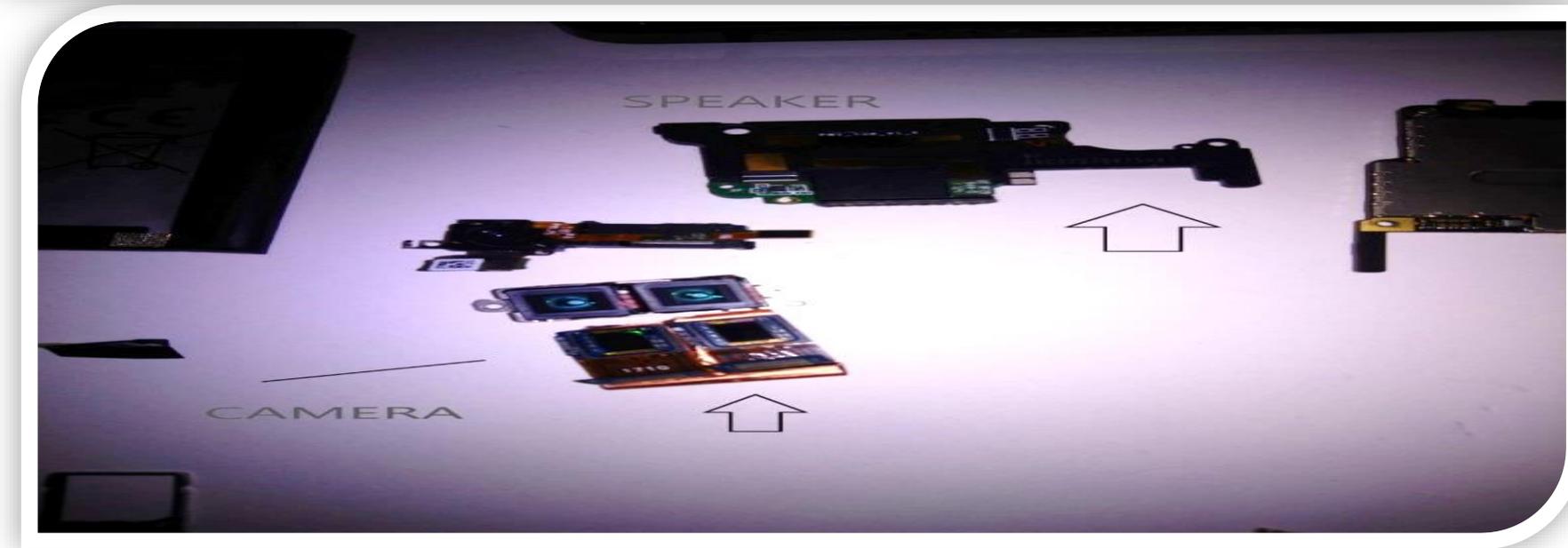
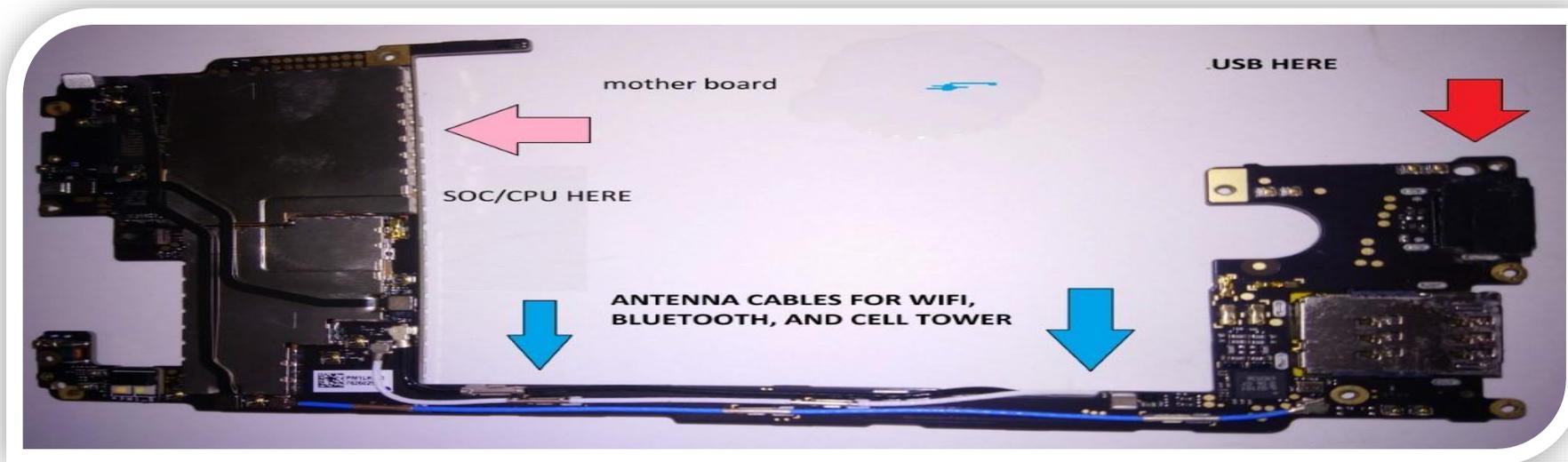


## PH-1 Cell Phone Texas Instrument Challenge

I have disassembled an Essential Phone made by PH-1 with an Android operating system (it did not have any TI contents inside). I selected this device because I wanted to see the hardware behind the screen of the phone. . Also, how hard it is to make a cell phone and how cell phones work and the components inside where the motherboard SOC, the battery, the heat shield, the font, and 2 back cameras, speaker, screen connector, USB-c, sim card, cell tower antenna capsules, Bluetooth antenna colonials, board connectors tray, 2H GHz antenna,5G Hz antenna, fingerprint reader, cell antenna. These are my research findings on each part of the system and what they do. The battery gives power to the phone. To replace the battery, you have to take off the screen and there is a large chance that it might break beyond repair. The heat shields It's there to protect the battery from too much heat to make sure the phone won't go on fire and if you don't put enough power. The front camera takes pictures of you it is also its own component and the 2 back cameras that take pictures in front of you the rear body also has a magnetic part for a camera add on and the front camera hadn't been there in the older version. Also the cameras have lenses that are made by Sony., the speaker plays sounds, the screen connector connects all of the layers of hardware to the screen such as the motherboard the various antennas such as the Bluetooth antennas, The USB-c can carry more power and gives an easier plugin for your phone than the Micro-USB port and cable (this is an improved charger), the cell tower antenna capsules let you connect to the nearest cell tower, Bluetooth antenna cables let you connect to Bluetooth services. Screws and boards connectors keep the phone together, the sim tray holds the sim card that holds information and allows you to connect with your network. The 2H GHz antenna and the 5G Hz antenna let you connect to the internet (this allows you to play online games on your phone and use social media), the fingerprint reader renders your touch on the phone and where it is, all of these following parts were made by QUALCOMM Wi-Fi module, QUALCOMM LTE transceiver, Qualcomm Memory (RAM) on Apps processor, Samsung/QUALCOMM Audio Codec, Qualcomm, in conclusion, In conclusion. I learned that QUALCOMM makes many cell phone components and the many parts of a smartphone and what they do. I have learned, how hard it is to make a cell phone and how cell phones work. I have also learned the ways they are put together and how to do a takedown.



Robo Royals 67671C  
Malik C.



## LINKS /CITE /PICTURES

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