

Team 4073B presents to you,

Vex robotics reverse engineering

We are taking a
Samsung
Express 3 apart





Introduction:

The phone, an electronic device that many people know and use. It is a device of many functions, including sound production, GPS systems, entertainment, and even long distance communication. But what makes this amazing device work? Today, we will share with you the many intricate parts and pieces that make up this renowned device.

Layer 1

For the first layer, we took off the back shell and it revealed the battery, memory chip, and the battery. The shell is used for protecting both the battery and the chip.

The memory chip is used for storing data.



The battery is used to power the motherboard, the screen and every other function of the phone.





Layer 2

In layer 2 we took off the screen and the lcd screen. The LCD screen is made for displaying light and images. This screen is usually made with indium tin oxide.

The screen is made for conducting the electricity for the LCD screen, and protecting the LCD screen underneath.



Layer 3

Layer 3 was composed of the motherboard, camera, speaker, and all of the circuits that made the phone operate.





Layer 4

Last, but not least, is layer four. This layer was composed of the back of the main shell of the phone. It was what held and protected the screen, battery, sim card, motherboard, and every other part of the phone.





The main parts of a phone are:

- A circuit board containing the brains of the phone.
- An antenna to help connect to cellular towers, cellular devices, bluetooth devices, and Wi-Fi.
- A liquid crystal display, or LCD, that displays everything that one would see on their phone.
- A keyboard, similar to keyboards found inside TV remotes
- A microphone that records sound.
- A speaker that generates sound.
- A camera that takes images that are then stored on a sim card.
- A battery that stores all of the electricity needed to operate a phone.
- And a sim card that stores phone data.

All of the layers of the phone





The Lesson

The lesson that we learned from this project was that it could be challenging, yet enriching to work as an engineer. The time, effort and skill used to build and design a phone was what made this project as fun as it was.