



*The Life and Times of a Cell Phone

Introduction

July 20, 2015

The Life and Times of a Cell Phone

Today's Schedule:

Introduction (Who are we? Who are you?)!

Introduction to the Basic functions and parts of a cell phone

Cell Phone Disassembly (Procedure #1)

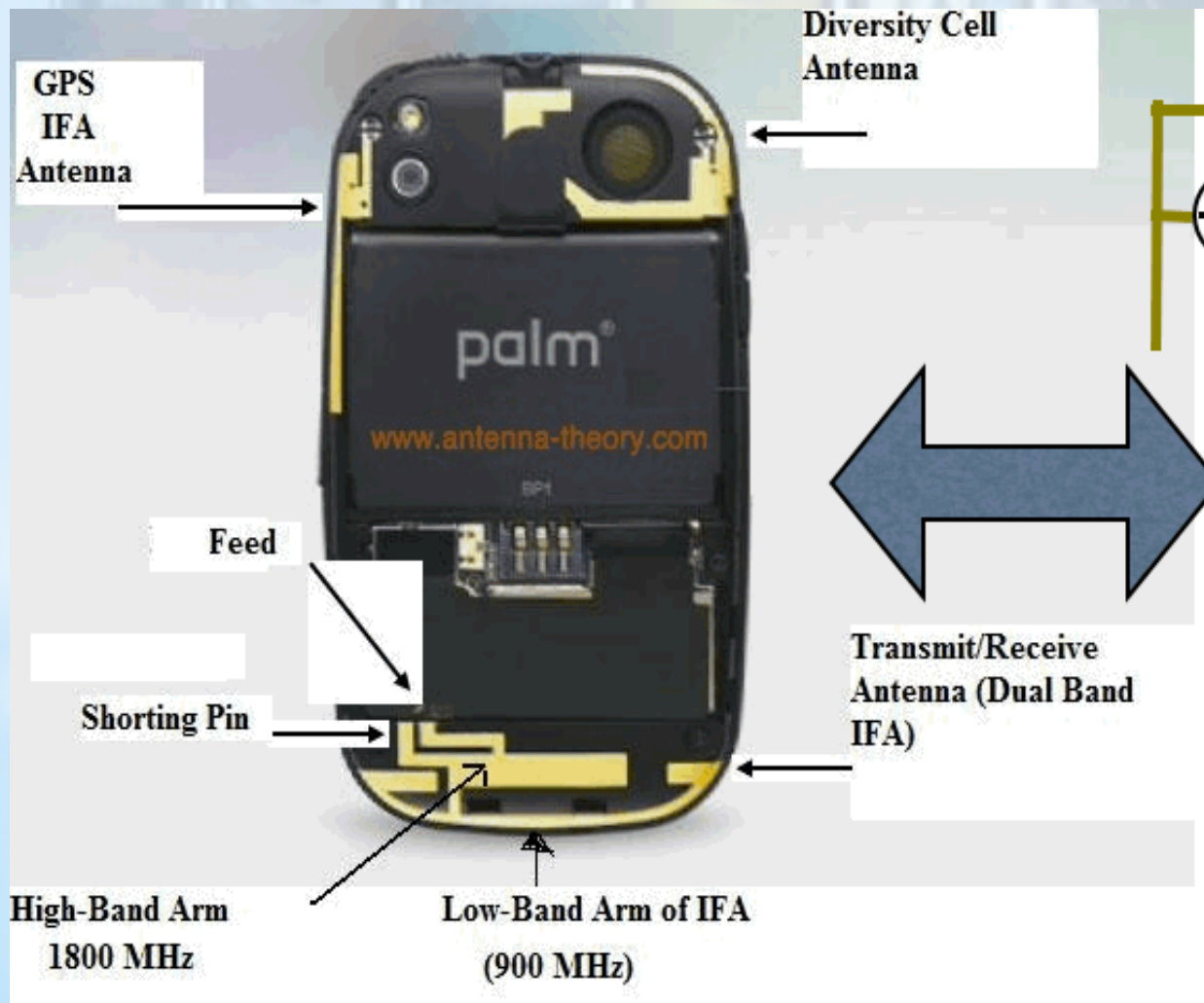
Lunch

Cell Phone Disassembly (Procedure #2)

Introduction to Photolithography:

Creating the Connections for complex electronics

The Life and Times of a Cell Phone The Touchscreen....

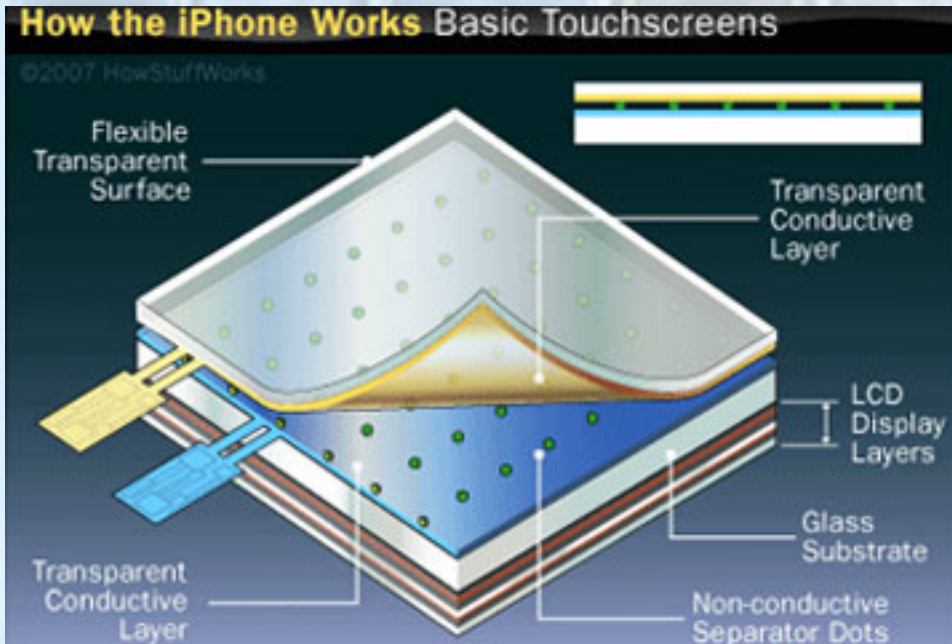


Converts the electrical energy in the cell phone (and all the information in data and voice) into an electromagnetic or a radio wave.

Or vice versa!

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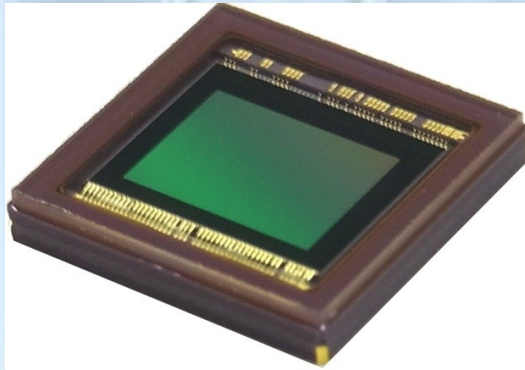
The Touchscreen....



Most modern touchscreens use capacitive rather than resistive information to interpret “Touch” or “No Touch”.

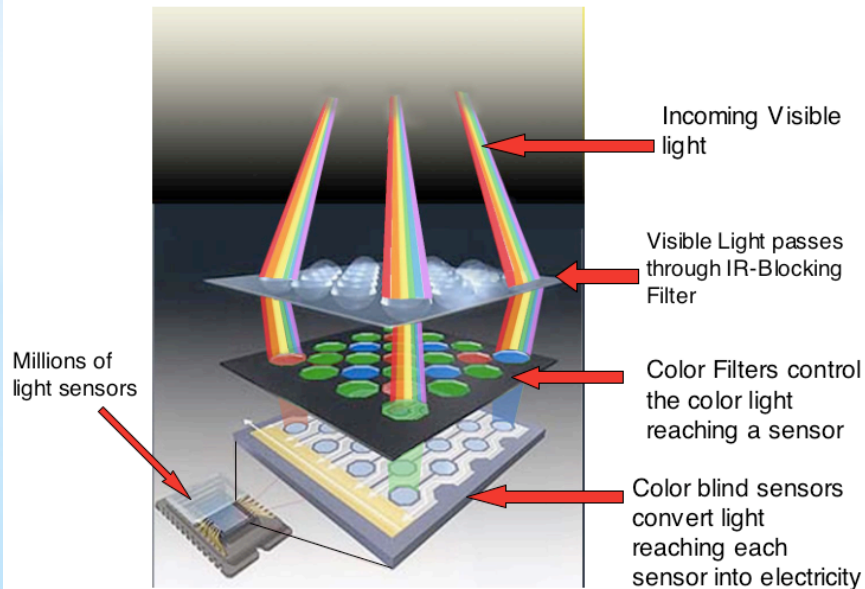
This means anything that holds an electrical charge that “touches” the screen can be detected.

The Life and Times of a Cell Phone The Camera....



Cell phone cameras are made up of pixels that detect all colors of light... but filters placed on top make sure only Red, Green, or Blue light reaches each pixel.

RGB Inside the Camera



In combination, Red, Green, and Blue or RGB are used to create “color” in the photograph.

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The Microphone and Speaker....



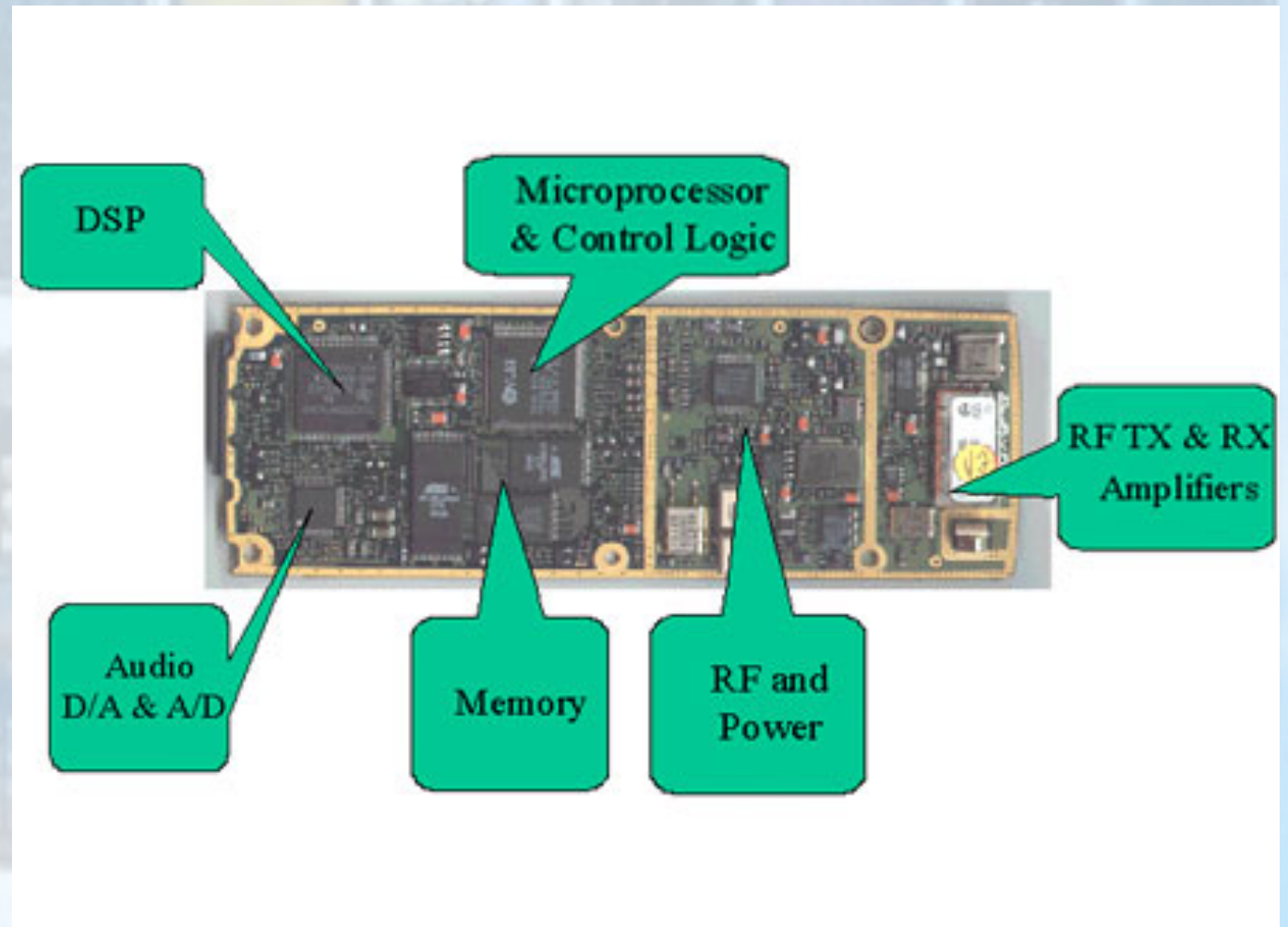
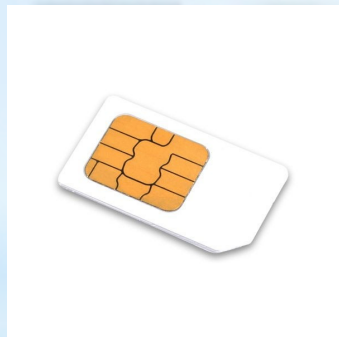
A microphone in a cell phone is the first step in transforming a human voice into a radio wave. The microphone converts sound into electrical voltage.



The speaker is the last step in connecting the voice spoken into one phone to the voice heard by the person on the other phone.

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What else lies inside its bowels?



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What lies inside its bowels?

Let's Find Out!

