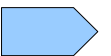


*Wow... that's a lot of dust!\*\**

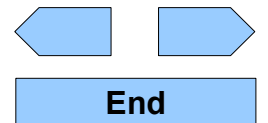
## Introducing Modern Computer Hardware



\*\* The title of this presentation comes from the common response when someone first sees the inside of a computer.

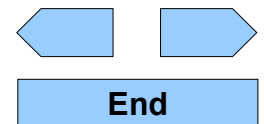
## Outline

- *External Anatomy*
- *Processor*
- *Random Access Memory*
- *Read Only Memory*
- *Peripherals*
- *Networking*



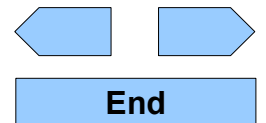
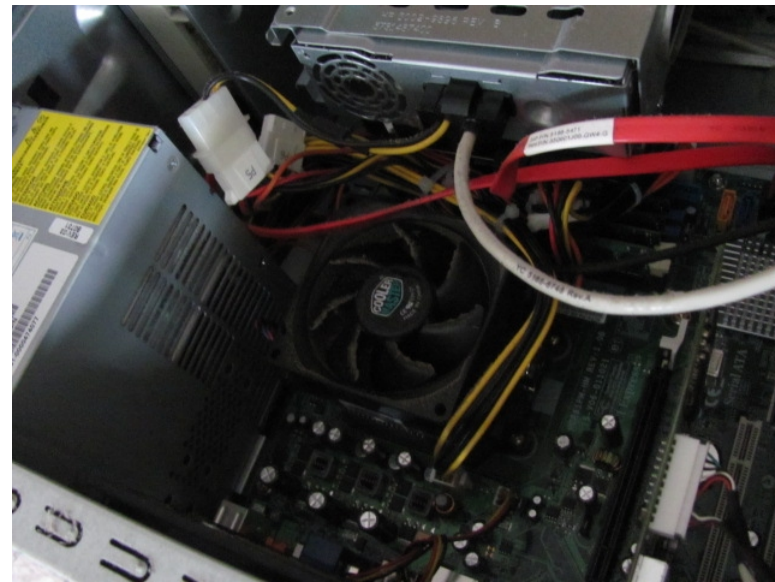
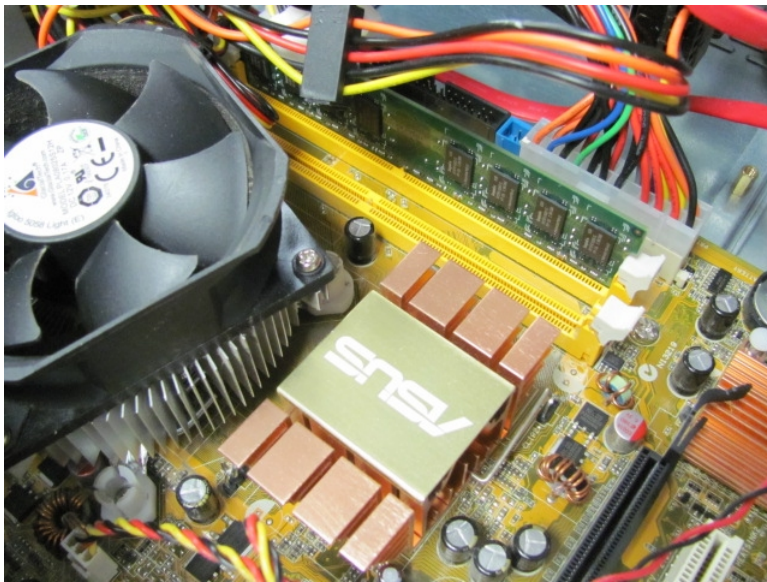
## External Anatomy

Modern computers are general purpose devices. Modern computers are mass produced. Bits and pieces of modern computer systems made by one manufacturer are compatible with the bits and pieces made by other manufacturers. All of this is related to the observation that there are common elements on both the inside and the outside of computer.



# Processor

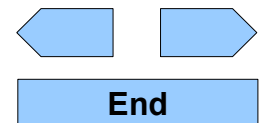
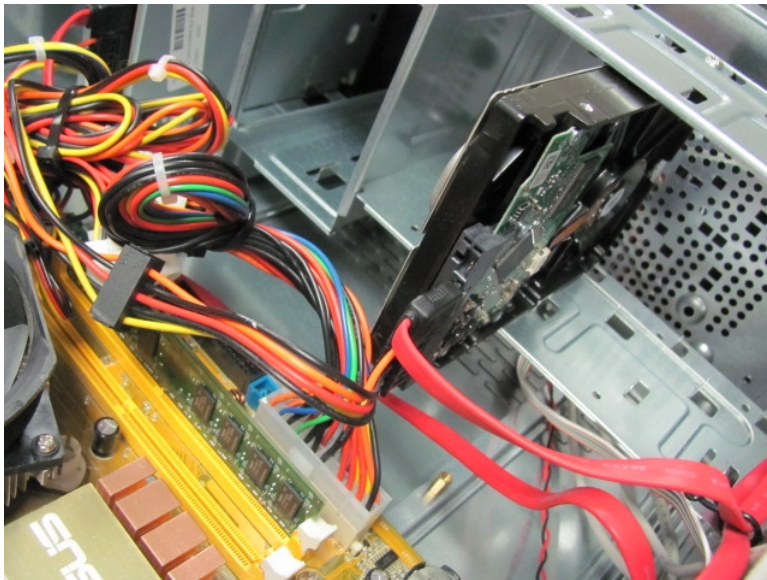
All of the circuitry, in a computer is designed to direct electrical signals to and from the processor. It is in this silicon chip that numbers are added, characters are added to words, the pixels that comprise computer images originate, and the vibrations that becomes the music from your speakers originates. All of this occurs, of course, in digital code.





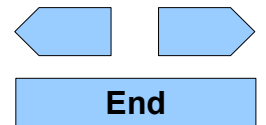
## Read Only Memory

Information stored in read only memory is stored in a non-electrical form (magnetic or optical records for example). To be manipulated by the processor, information is read into the RAM, and then saved back to the ROM. ROM is permanent Even when there is no power supply, but it is slow to access.



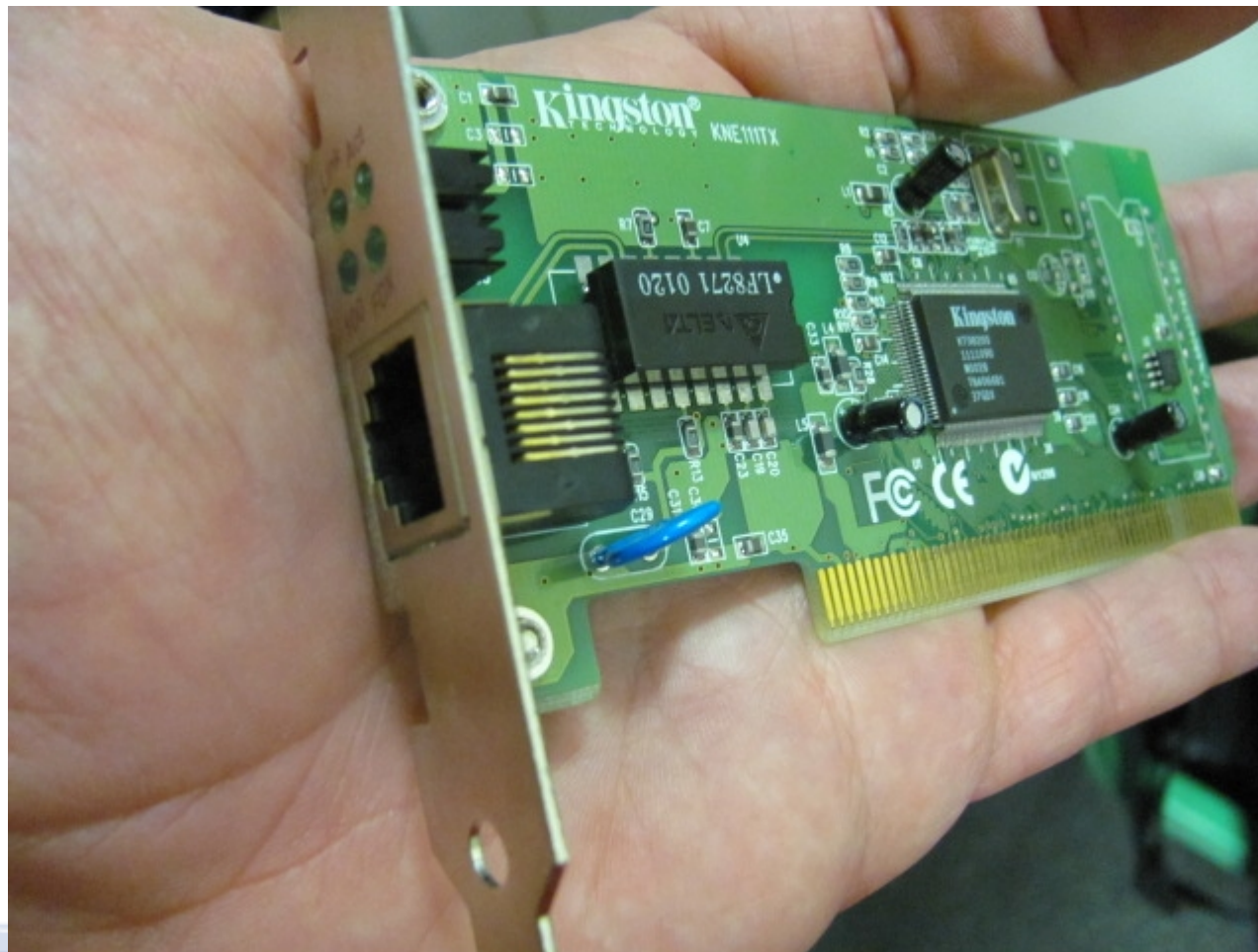
## Peripherals

All of the devices that you plug into a computer (that attaches to the motherboard) is a peripheral. This includes all of the keyboards, monitor, mice, cameras, and similar things that come packaged with your computer. Also, this includes the audio and video cards that are inside your computer, but that are separate from your processor



## Networking

Since the mid-1990's, most users have wanted to connect their computers to the Internet. Today, that is mainly accomplished through Ethernet connections through modems to the existing telecommunications networks via cable television systems or specialized telephone lines.



End