

# Computer Terms



# Inside a Desktop Computer



# RAM (Random Access Memory)

- RAM is made up of small memory chips that are connected to the motherboard of your computer. Every time you open a program, it gets loaded from the hard drive into the RAM.  
(More RAM=More speed)







# BIOS (basic input/output system)

- Is the program a computer's microprocessor uses to get the computer system started after you turn it on.
- It manages data flow between the computer's operating system and attached devices.
- All modern computer motherboards contain BIOS software and Hardware.



# Cache

- A software component that stores data so future requests for that data can be served faster;
  - Software program cache (recent docs)
  - Internet cache (previously viewed/used files)



# Operating System

- the software that supports a computer's basic functions, such as scheduling tasks, executing applications, and controlling peripherals.
- Any digital device **MUST** have an OS.
  - Common
    - Windows
    - Linux
    - IOS
    - Ubuntu
    - Android



# Modem (modulator-demodulator)

- Communications device that can be either internal or external to your computer. It allows one computer to connect another computer and transfer data over telephone lines.





# Input Device

- Any device that provides input to a computer.



# Output Device

- Any device that outputs information from a computer.



# Motherboard

- This is the main circuit board of your computer.
  - You'll find the CPU, the ROM, memory expansion slots, PCI slots, serial ports, USB ports,
  - and the controllers for things like the hard drive, DVD drive, keyboard, and mouse.
  - Two most common are ATX and ITX



Standard-ATX



Micro-ATX



Mini-ITX



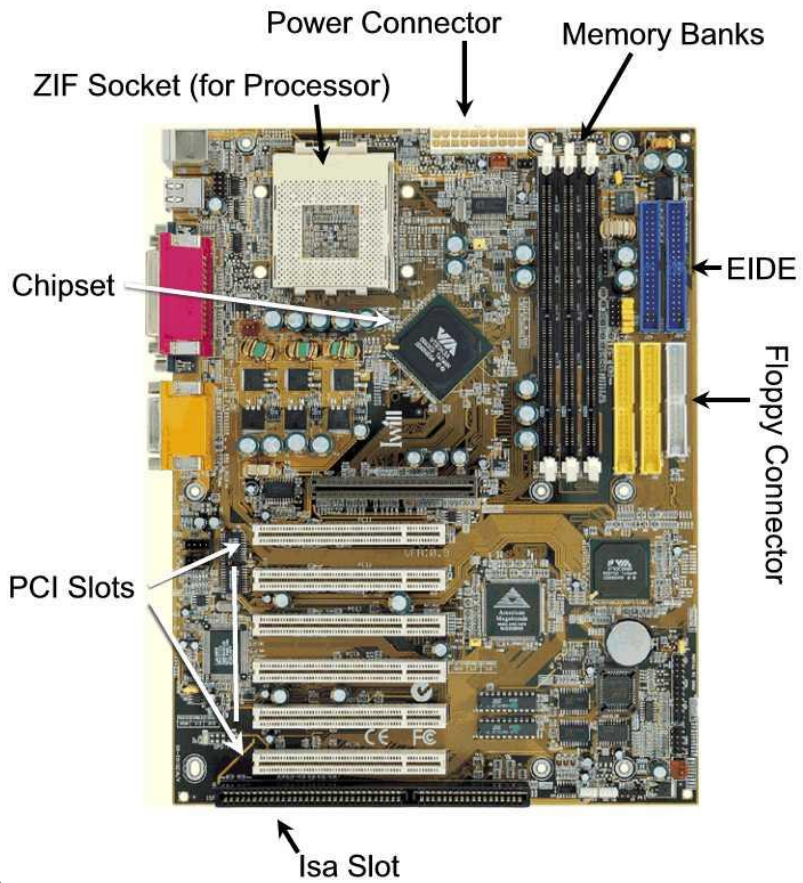
Nano-ITX



Pico-ITX







# CPU (Central Processing Unit)

- The brain of your computer. It processes everything from basic instructions to complex functions.





# Hard Drive

- The hard drive is what stores all your data. It houses the hard disk, where all your files and folders are physically located.



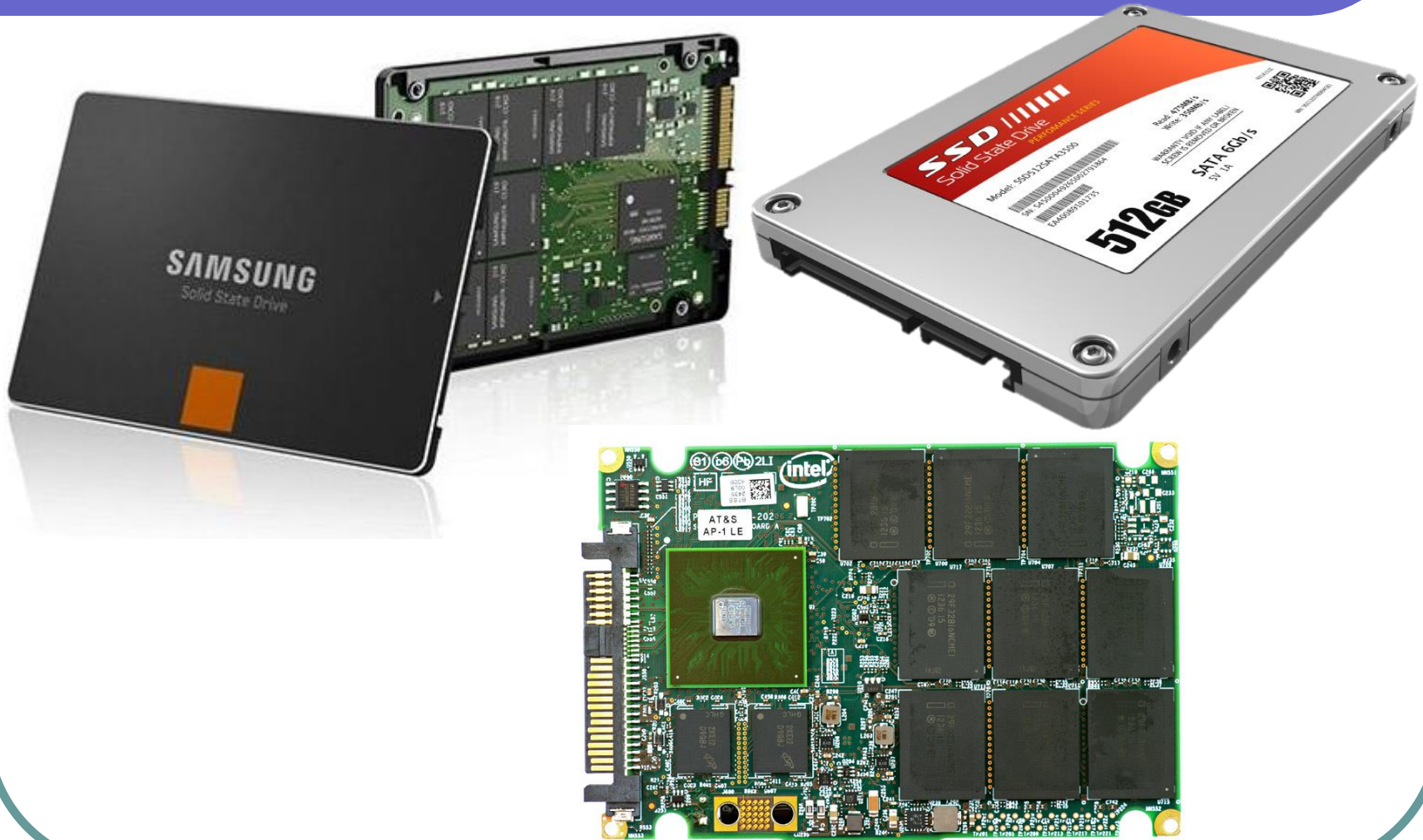
# Solid State Drive (SSD)

[HDD vs SSD video explained](#)

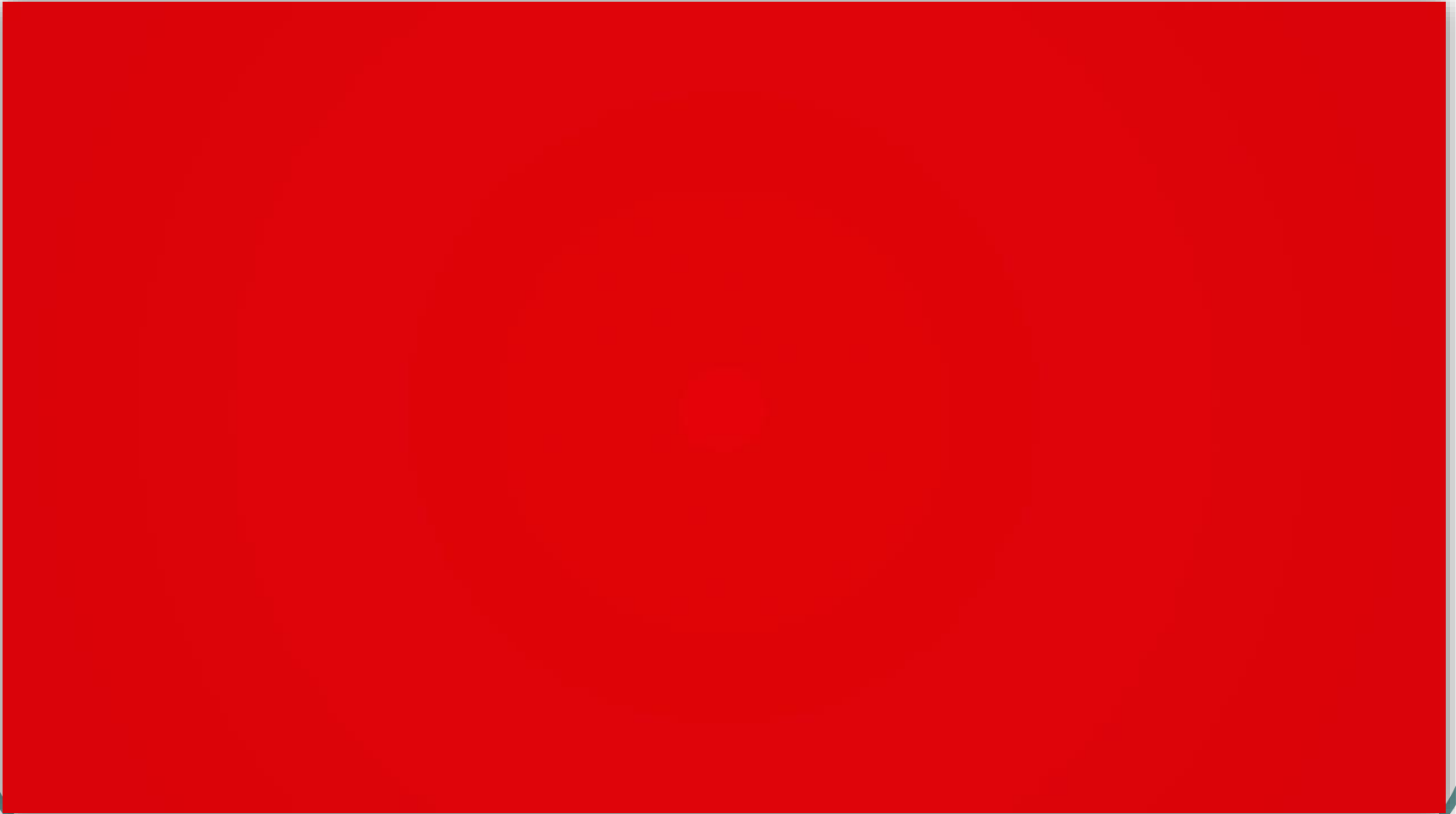
- a type of mass storage device similar to a hard disk **drive** (HDD). ...
- SSDs do not have any moving parts
- Instead of storing data on magnetic platters, SSDs store data using flash memory

# Solid State Drive (SSD)

HDD vs SSD video explained



# SSD vs HDD – What's the Difference



# Directory

- A directory is another name for a folder. Files on your hard disk are organized into various directories, so that it is easier to keep track of them.



# IP Address

- A code made up of numbers separated by three dots that identifies a particular computer on the Internet.
- Every computer requires a unique IP address to connect to the Internet.
- They consist of four sets of numbers from 0 to 255, separated by three dots. For example "66.72.98.236"
- **IPv6** is the Internet's next-generation protocol, designed to replace the current Internet Protocol, IP Version 4.
  - There are  **$3.4 \times 10^{38}$**  or 340 undecillion IPv6 addresses.
  - (It would take three times the age of the universe to actually scan all the IPv6 addresses on a **48** bit IPv6 subnet if you were scanning at a million addresses per second.)

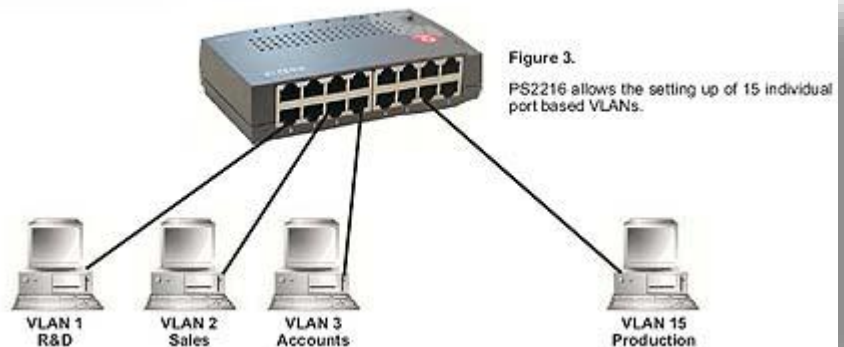
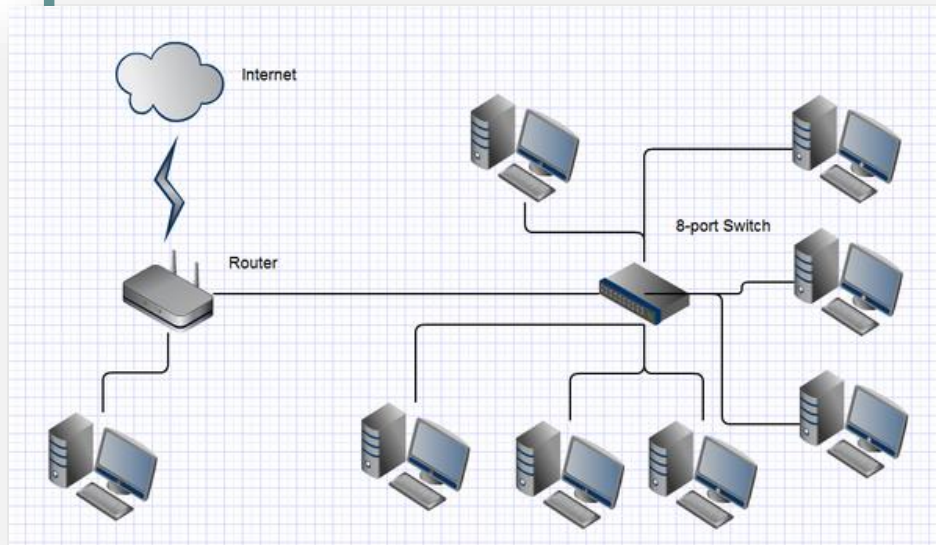


# LAN (Local Area Network)

- Multiple computers connected together in



# LAN Setup



# USB (Universal Serial Bus)

- Most popular type of connection for many different kinds of devices.
- Transfers information at a very fast rate.
- Is a plug-and-play interface that allows a computer to communicate with peripheral and other devices.
- USB-connected devices cover a broad range; anything from keyboards and mice, to music players and flash drives.

