

Introduction to Computing

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Computers' components

- A modern computer consists of three major components:
 1. Hardware
 - Physical thing that you can touch or hold in your hand
 2. Operating system
 - Controls the hardware and enables users to interact with the computer (interface)
 - Windows, macOS, and Linux
 3. Applications
 - Programs that allow you to do specialized tasks
 - Microsoft Office, Acrobat Reader, etc.

Computing Stages

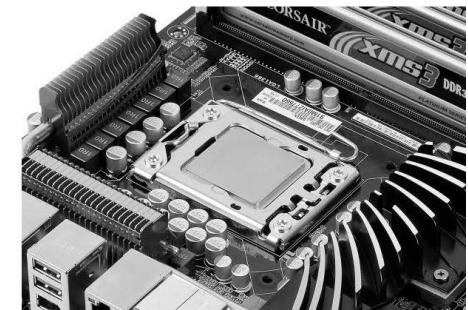
- Computers work through **three** stages:
 1. Input
 2. Processing
 3. Output

Input

- The user initiates the action by doing something:
 - Clicking the mouse
 - Typing on the key board
 - Touching the screen
 - Scanning a barcode
- This is **input**

Processing

- Components inside the system take over at that point
- The **operating system** instructs the hardware how to handle your request
- At the heart of every computer is a central processing unit (**CPU**), usually a single, thin wafer of silicon and millions of tiny transistors
- The **CPU** handles the majority of the processing tasks and is the "brain" of the computer



Output

- Once the computer has processed the request, it shows you the result by changing what you see on the monitor or playing a sound through the speakers or creating a file on the hard drive
- This is **output**

