

Module 2 Glossary

New terms and their definitions: Course 1 Week 2

- Address bus:** Connects the CPU to the MCC and sends over the location of the data, but not the data itself
- ATA:** The most common interface that hard drives use to connect to our system
- ATX (Advanced Technology eXtended):** The most common form factor for motherboards
- Backward compatible:** It means older hardware works with newer hardware
- Bios (Basic Input Output Services):** The BIOS is software that helps initialize the hardware in our computer and gets our operating system up and running
- BYOD (Bring Your Own Device):** Refers to the practice of allowing people to use their own personal devices for work
- Cache:** The assigned stored location for recently or frequently accessed data; on a mobile app it is where anything that was changed or created with that app is stored
- Charge cycle:** One full charge and discharge of a battery
- Chipset:** it decides how components talk to each other on our machine
- Clock cycle:** When you send a voltage to the clock wire
- Clock speed:** The maximum number of clock cycles that it can handle in a set in a certain time period
- Clock wire:** When you send or receive data, it sends a voltage to that clock wire to let the CPU know it can start doing calculations
- CPU:** Central processing unit
- CPU sockets:** A CPU socket is a series of pins that connect a CPU's processor to the PC's motherboard
- Data sizes:** Metrics that refer to data sizes including bit, byte, kilobyte, kibibyte, and megabyte
- DDR SDRAM (Double Data Rate SDRAM):** A type of RAM that is faster, takes up less power, and has a larger capacity than earlier SDRAM versions
- Desktop:** The main screen where we can navigate our files, folders, and applications
- DIMM:** Dual Inline Memory Module
- Display port:** Port which also outputs audio and video
- DRAM:** Dynamic Random Access Memory
- Drivers:** The drivers contain the instructions our CPU needs to understand external devices like keyboards, webcams, printers
- DVI:** DVI cables generally just output video
- Electrostatic discharge:** Electrostatic discharge is a sudden and momentary flow of electric current between two electrically charged objects caused by contact, an electrical short or dielectric breakdown
- External Data Bus (EDB):** It's a row of wires that interconnect the parts of our computer
- Factory reset:** Resetting a device to the settings it came with from the factory
- Form factor:** A mathematical way to compensate for irregularities in the shape of an object by using a ratio between its volume and height
- Hard drive:** It is a long term memory component that holds all of our data, which can include music, pictures, applications
- Hardware:** External or internal devices and equipment that help you perform major functions
- HDD (Hard disk drive):** Hard disk drives, or HDDs, use a spinning platter and a mechanical arm to read and write information
- HDMI:** A type of cable that outputs both video and audio
- Heatsink:** It is used to dissipate heat from our CPU
- Instruction set:** A list of instructions that our CPU is able to run
- ITX (Information Technology eXtended):** A form factor for motherboards that is much smaller than ATX boards
- Land Grid Array (LGA):** It is a type of CPU socket that stick out of the motherboard
- Lightning adaptor:** One of the standard power, data and display connector types used in mobile devices
- Mb/s:** megabit per second, which is a unit of data transfer rate
- Memory controller chip (MCC):** A bridge between the CPU and the RAM
- Micro display port:** One of the standard power, data and display connector types used in mobile devices
- Micro HDMI:** One of the standard power, data and display connector types used in mobile devices
- Micro USB:** One of the standard power, data and display connector types used in mobile devices
- Mini HDMI:** One of the standard power, data and display connector types used in mobile devices
- Mini USB:** One of the standard power, data and display connector types used in mobile devices
- Motherboard:** The body or circulatory system of the computer that connects all the pieces together
- Northbridge:** interconnects stuff like RAM and video cards
- NVMe (NVM Express):** interface standard which allows greater throughput of data and increased efficiency
- Overclocking:** it increases the rate of your CPU clock cycles in order to perform more tasks
- PCI Express:** Peripheral Component Interconnect Express
- Peripherals:** the external devices which we connect to our computer that add functionality, like a mouse, a keyboard, and a monitor
- Pin Grid Array (PGA):** CPU socket where the pins are located on the processor itself
- Ports:** Connection points that we can connect devices to that extend the functionality of our computer
- POST (Power On Self Test):** it figures out what hardware is on the computer
- Power supply:** Converts electricity from our wall outlet onto a format that our computer can use
- Programs:** Basic instructions that tell the computer what to do
- RAM:** Random Access Memory
- Registers:** An accessible location for storing the data that our CPU works with
- Reimaging:** The process of reimaging involves wiping and reinstalling an operating system using a disk image which is a copy of an operating system
- Return merchandise authorization (RMA):** The process of receiving returned merchandise and authorizing a refund
- ROM chip (Read Only Memory):** A read-only memory chip where the BIOS is stored
- RPM:** Revolutions per minute
- Safe operating temperature:** The temperature range in which rechargeable batteries must be kept in order to avoid damage
- SATA:** The most popular serial ATA drive, which uses one cable for data transfers
- SDRAM:** It stands for Synchronous DRAM, this type of RAM is synchronized to our systems' clock speed allowing quicker processing of data
- SOC (System On a Chip):** Packs the CPU, Ram, and sometimes even the storage onto a single chip
- Southbridge:** It maintains our IO or input/output controllers, like hard drives and USB devices that input and output data
- SSD:** Solid State Drive
- Standoffs:** Used to raise and attach your motherboard to the case
- Thermal paste:** A substance used to better connect our CPU and heat sink, so the heat transfers from to the other better
- Type-C connector:** A type of USB connector meant to replace many peripheral connections
- UEFI:** Unified Extensible Firmware Interface
- USB (Universal Serial Bus):** A connection standard for connecting peripherals to devices such as computers
- USB-C adapter:** One of the standard power, data and display connector types used in mobile devices

Terms and their definitions from previous weeks

- A**
- Abstraction:** To take a relatively complex system and simplify it for our use
- Algorithm:** A series of steps that solves specific problems
- ASCII:** The oldest character encoding standard used is ASCII. It represents the English alphabet, digits, and punctuation marks
- B**
- Binary system:** The communication that a computer uses is referred to as binary system, also known as base-2 numeral system
- Byte:** A group of 8 bits
- C**
- Character encoding:** Is used to assign our binary values to characters so that we as humans can read them
- Computer:** A device that stores and processes data by performing calculations
- Cryptography:** The overarching discipline that covers the practice of coding and hiding messages from third parties
- D**
- Decimal form- base 10 system:** In the decimal system, there are 10 possible numbers you can use ranging from zero to nine
- Digital divide:** The growing skills gap between people with and without digital literacy skills
- I**
- Information technology:** The use of digital technology, like computers and the internet, to store and process data into useful information
- L**
- Linux OS:** Linux is one of the largest an open source operating systems used heavily in business infrastructure and in the consumer space
- Logic gates:** Allow transistors to do more complex tasks, like deciding where to send electrical signals depending on logical conditions
- O**
- Open source:** This means the developers will let other developers share, modify, and distribute their software for free
- P**
- PDA (Personal Digital Assistant):** Allows computing to go mobile
- Punch cards:** A sequence of cards with holes in them to automatically perform calculations instead of manually entering them by hand
- R**
- RGB model:** RGB or red, green, and blue model is the basic model of representing colors
- U**
- UTF-8:** The most prevalent encoding standard used today

Mark as completed