**Glossaries**

**New terms and their definitions: Course 1 Module 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:** Itdecides 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 modules**

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