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**Terms and Definitions**

Chapter 5 Microcomputers

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# Chapter 5 Microcomputers

| **Term** | **Definition** |
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| Bit | A binary digit and a unit of computer information; a bit takes a value of either a 1 or a 0 |
| Bluetooth | A technology designed for exchanging data wirelessly between electronic devices over short distances |
| Bus | In a computer a bus is a communication system that transfers data between a set of components |
| Byte | A byte consists of eight binary digits and is commonly used to store various types of data, such as text, images, audio files, and program code |
| Central Processing Unit (CPU) | An electronic circuitry component of a personal computer that is designed to interpret, process, and execute instructions from hardware or software programs |
| Computer Architecture | The way a computer is designed, including its various hardware components and how they work together to perform tasks; it determines the overall functionality and performance of the computer system |
| Crypto Mining | Using computational power of a computer to solve complex problems that produces money in the form cryptocurrency such as bitcoin |
| Gigabyte | A unit of digital information that represents one billion bytes; it is commonly used to measure the storage capacity of computer memory and storage devices, such as hard disk drives, solid-state drives, and memory cards |
| Graphical Processing Unit (GPU) | Electronic circuit technology designed to speed up the creation of images displayed on a device such as computer monitor |
| Hard Disk Drive (HDD) | A type of computer storage device that uses rotating disks coated with magnetic material to store data permanently |
| High Definition Multimedia Interface (HDMI) | A hardware connection technology designed to transmit digital audio and video signals through a cable between HDMI compatible devices |
| Input Device | A device such as a computer mouse or keyboard that delivers data and is able to manipulate components of the computer |
| Keyboard | In relation to computer peripherals, a physical or digital device capable of communicating with a connected computer system through assigned key inputs |
| Machine Learning (ML) | Programmed parameters where data is passed through statistical models in which the model increases accuracy with more data; this presents itself in the form of intelligence that is artificial |
| Moore’s Law | A “law” proposed by Gordon Moore, Intel co-founder, stating that the number of transistors in microchips would double every two years due to advancing computing performance |
| Motherboard | Computer component that acts as a dock, is responsible for controlling core computer processor, and connecting various other pieces of computer hardware |
| Mouse | In relation to computer peripherals, a hand-held input device capable of detecting user manipulation through motion to facilitate interactions with computer systems |
| Optical Drive | A type of computer hardware that uses lasers to read data from or write data to optical discs, such as CDs, DVDs, and Blu-ray discs |
| Output Device | Computer hardware such as a computer monitor or mobile device screen that is designed to convert information into a visual display easily understood by humans |
| Personal Computer (PC) | Also referred to as a microcomputer; a device that processes computing functions that serve one or multiple personal or business purposes |
| Portable Flash Drives | Small, portable devices, easily connected to a computer via USB ports, that store digital data using flash memory |
| Random-Access Memory (RAM) | Sometimes called the memory of a computing device such as a smart phone or PC; a component within a computing device capable of temporarily storing data that can be accessed by the CPU whenever processing is required |
| Smartphone | A portable computer that can connect to the Internet through cellular networks and offers a range of features such as web browsing, email access, social media apps, multimedia playback, and various downloadable applications |
| Smartwatch | A microcomputer that you can wear on your wrist |
| Solid-State Drive (SSD) | A type of computer storage device that has no moving parts and uses flash memory to store data permanently |
| Transistor | A basic electronic component used in computer architecture to amplify and switch electronic signals; it acts as a tiny switch that controls the flow of electrical current by using a small voltage input to control a larger current output |
| Universal Serial Bus (USB) | A standard used by the computing industry to specify how hardware in devices can connect, communicate, and supply power across personal computers |
| Wi-Fi | Wi-Fi is a wireless networking technology that enables electronic devices, such as computers, smartphones, and tablets, to connect and communicate with each other via a wireless medium |