# Article information:

NDG Linux Essentials - Chapter 12 - Understanding Computer Hardware
<https://content.netdevgroup.com/contents/linux-essentials/u8L1Jd1hhV/>

# Article summary:

1. The central processing unit (CPU) is the brain of a computer and executes code and calculations.

2. RAM, or random-access memory, stores data for programs to access and swap space is used when RAM is low.

3. Hard drives can be partitioned using Master Boot Record (MBR) or GUID Partitioning Table (GPT), with tools such as fdisk for MBR and gdisk for GPT. Device files for hard drives are stored in the /dev directory.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article provides a comprehensive overview of computer hardware, specifically processors, RAM, buses, peripheral devices, and hard drives. However, there are some potential biases and missing points of consideration that should be noted.

Firstly, the article focuses primarily on x86 and x86\_64 processors used in desktop and server computers. While this is true for most systems, it fails to acknowledge the existence of other processor types such as ARM processors commonly used in mobile devices. This could be seen as a bias towards traditional desktop computing.

Additionally, the article mentions that Linux supports more types of processors than any other operating system without providing evidence to support this claim. It would have been beneficial to include data or sources to back up this statement.

Furthermore, while the article briefly touches on the use of USB devices as peripherals, it does not mention other common peripheral connections such as HDMI or DisplayPort for monitors. This omission could be seen as a bias towards USB technology.

Lastly, while the article notes the importance of correctly unmounting USB devices before disconnecting them to avoid data loss or corruption, it does not mention the potential risks associated with partitioning hard drives or using swap space. These risks include data loss or corruption if partitions are not properly configured or if swap space is overused.

Overall, while the article provides a good introduction to computer hardware components and their functions within a Linux system, there are some biases and missing points of consideration that should be taken into account when reading it.

# Topics for further research:

* ARM processors in mobile devices
* Operating system support for different processor types
* Peripheral connections beyond USB (e.g. HDMI
* DisplayPort)
* Risks associated with partitioning hard drives
* Risks associated with using swap space
* Best practices for configuring partitions and swap space

# Report location:

<https://www.fullpicture.app/item/5761b75475630e4a261bf2af220fd4fa>