**Bus**

* Generally all computers consist of components connected together with a bus
* Bus consists of many parallel wires, usually printed (in copper) on the main circuit board of the computer.
* Data signals, clock signals, and control signals are sent on the bus back and forth between components

**Input/Output Controllers**

* Receive input and output requests form the central processor, and then send device-specific control signals to the device they control.
* Also mange the data flow to and from the device
* Sometime called **device controller**
* Software which directly interacts with device controllers are called **device driver**

**Kilobyte: 210 = 1024 bytes**

**megabyte: 210 = 1024 kilobytes**

**gigabyte: 210 = 1024 megabytes**

**terabyte: 210 = 1024 gigabytes**

**Address**:

* Place in memory or main storage

**Virtual Memory**

* Providing the full address space by using a combination of RAM and the hard disk

**Cache Memory**

* Cache memory is very fast RAM that is inside (or close to) the processor. It duplicates section so of main storage that are heavily used by the currently running programs.
* Processor does not have to use the system bus to get or store data in cache memory