**LAB # 01**

**COMPUTER FOUNDAMENTAL LAB**

Processor history & Storage devices



**Batch # 23**

**CSE102L Computer fundamental Lab**

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“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”

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**(1) Computer Hardware:**

The physical parts of a computer such as central processing unit (CPU), monitor, mouse, keyboard and data storage etc are called computer hardware.

**Processor:**

A processor is the logic circuitry that responds to and processes the basic instructions that drive a computer.

**(a)Old Use processors:**

* **1999 – Athlon:**

AMD launched Athlon on June 23. It was built using 37 million transistors and achieved a clock speed of about 800 MHz. It was the first processor to reach the speed of 1 GHz.

* **2003 Pentium M:**

 This processor was a mobile single-core processor from Intel. It was designed with a clock speed of 2.26 GHz. Two processors were developed under this family, namely **Baines, Dothan***.*

* **2006 – Core 2:**

Intel Core 2 brand, launched on July 27, 2006, was also known as E6320.The clock speed was achieved up to 3.5 GHz. The processors launched under this family were single-core, dual-core and quad-core.

**(b)New Use Processors:**

* **2011- Sandy Bridge:**

This Intel microarchitecture-based products were launched in 2011. It has achieved a 32-nanometer die manufacturing. It includes Intel Quick sync that is a hardware support for video encoding and decoding.

* **2013-Core i-Series – Haswell:**

Intel updated its Core i-Series of processors in 2013 with the debut of the 22 nm Haswell micro-architecture, which replaced the 2011 Sandy Bridge. Haswell scaled up to 18 cores with the Haswell-EP line of Xeon processors, up to 5.69 billion transistors and clock speeds of up to 4.4 GHz.

* **Intel Core i5 and i7:**

Intel launches 8th generation of Intel Core i5 and i7 processors with Radeon RX Vega M graphics at CES 2018.

* **2021- Apple A14 Bionic:**

The Apple A14 Bionic is a System on a Chip. It was announced late 2020 and offers 6 cores divided in 2 performance cores (Firestorm) and four power efficiency cores.

**(2)Storage Devices:**

 A storage device is any hardware capable of holding information either temporarily or permanently.

* **Floppy Disk:**

The floppy disk drive is a removable magnetic storage medium that allows recording of data.



* **SD Cards:**

SD card isa type of memory card typically used in digital cameras and other portable devices.



* **USB Disk:**

A USB flash drive is a data storage device that includes flash memory with an integrated USB interface.



* **Magnetic Storage :**

Magnetic storage is the storage of data on a magnetized medium. Magnetic storage uses different patterns of magnetization to store data and is a form of non-volatile memory.



* **Hard Disk:**

Hard disks are flat circular plates made of aluminum or glass and coated with a magnetic material. Hard disks for personal computers can store terabytes (trillions of bytes) of information. Data are stored on their surfaces in concentric tracks.

