## Приложение 1

## HARDWARE

What is hardware? Webster's dictionary gives us the following definition of the hardware — **the mechanical, magnetic, electronic, and electrical devices composing a computer system.**

Computer hardware can be divided into four catego­ries:

**1) input hardware**

**2) processing hardware**

**3) storage hardware**

**4) output hardware.**

**Input hardware**

The purpose of the input hardware is to collect data and convert it into a form suitable for computer process­ing. The most common input device is a **keyboard.** It looks very much like a typewriter. The **mouse** is a hand held device connected to the computer by small cable. As the mouse is rolled across the mouse pad, the cursor moves across the screen. When the cursor reaches the desired location, the user usually pushes a button on the mouse once or twice to signal a menu selection or a command to the computer.

The **light pen** uses a light sensitive photoelectric cell to signal screen position to the computer. Another type of input hardware is optic-electronic **scanner** that is used to input graphics as well as typeset characters. **Micro­phone** and **video camera** can be also used to input data into the computer. Electronic cameras are becoming very popular among the consumers for their relatively low price and convenience.

**Processing hardware**

The purpose of processing hardware is retrieve, inter­pret and direct the execution of software instructions provided to the computer. The most common components of processing hardware are the Central Processing Unit and main memory.

The Central Processing Unit (CPU) is the brain of the computer. It reads and interprets software instructions and coordinates the processing activities that must take place. The design of the CPU affects the processing power and the speed of the computer, as well as the amount of main memory it can use effectively. With a well-designed CPU in your computer, you can perform highly sophisti­cated tasks in a very short time.

**Memory** is the system of component of the computer in which information is stored. There are two types of computer memory: RAM and ROM.

**RAM** (random access memory) is the volatile compu­ter memory, used for creating loading, and running pro­grams and for manipulating and temporarily storing data;

**ROM** (read only memory) is nonvolatile, non-modifiable computer memory, used to hold programmed in­structions to the system.

The more memory you have in your computer, the more operations you can perform.

**Storage hardware**

The purpose of storage hardware is to store computer instructions and data in a form that is relatively permanent and retrieve when needed for processing. Storage hardware serves the same basic functions as do office fil­ing systems except that it stores data as electromagnetic signals. The most common ways of storing data are Hard disk, floppy disk and CD-ROM.

**Hard disk** is a rigid disk coated with magnetic mate­rial, for storing programs and relatively large amounts of data.

Floppy disk (diskette) - thin, usually flexible plas­tic disk coated with magnetic material, for storing com­puter data and programs. There are two formats for floppy disks: 5.25" and 3.5". 5.25" is not used in mod­ern computer systems because of it relatively large size flexibility and small capacity. 3.5" disks are formatted 1.4 megabytes and are widely used.

**CD-ROM** (compact disc read only memory) is a com­pact disc on which a large amount of digitized read-only data can be stored. CD-ROMs are very popular now be­cause of the growing speed which CD-ROM drives can provide nowadays.

**Output hardware**

The purpose of output hardware is to provide the user with the means to view information produced by the com­puter system. Information is output in either **hardcopy or softcopy** form. Hardcopy output can be held in your hand, such as paper with text (word or numbers) or graphics printed on it. Softcopy output is displayed on a monitor.

**Monitor** is **a** component with a display screen for view­ing computer data, television programs, etc.

**Printer** is **a** computer output device that produces a paper copy of data or graphics.

**Modem** is an example of **communication hardware** — an electronic device that makes possible the transmission of data to or from computer via telephone or other communication lines.

Hardware comes in many configurations, depending on what the computer system is designed to do. Hard­ware can fill several floors of a large office building or can fit on your lap.

**Vocabulary**

**amount** — количество

**capacity** — вместительность

**circuitry** — эл. цепи

**CPU, microprocessor** — микропроцессор

**hard disk** — жесткий диск, «винчестер»

**input hardware** — устройства ввода данных

**keyboard** — клавиатура

**lap** — колени

**modem** — модем

**mouse** — устройство для перемещения объектов на экране, «мышь»

**output hardware** — выходные устройства отображе­ния информации

**printer** — принтер

**processing hardware** — устройства обработки данных

**RAM** — ОЗУ (оперативное запоминающее устройство)

**ROM** — ПЗУ (постоянное запоминающее устройство)

**CD-ROM** — накопитель на компакт-дисках (CD)

**scanner** — сканер

**sensitive —** чувствительный

**sophisticated** — сложный

storage **hardware** — устройства хранения данных

**temporarily** — временно

**temporary** — временный

**the purpose** — цель

**tier** — ярус

**to affect** — влиять

**to connect** — соединять

**to convert** — преобразовывать

**to direct** — управлять

**to execute** — выполнять

**to interpret** — переводить

**to provide** — обеспечивать

**to reach** — достигать

**to retrieve** — извлекать

**to roll** — катать, перекатывать

**volatile** — летучий, нестойкий,

Приложение 2

**Task**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Выберите правильный вариант ответа на вопрос и запишите его:

*Which of the following is Hardware*?

Hardware is .... a) program b) mouse c) CPU d) printer e) modem f) command

g) port h) keyboard i) character j) cursor of the pointer

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2. Соотнесите термины в левой колонке с их интерпретацией, предложенной справа:

1. Hardware a) a rigid disk coated with magnetic material, used for storing

programs and relatively large amounts of data.

2. Software b) the term used to describe the instructions that tell the

hardware how to perform a task.

3. Memory c) the most common input device looks like a typewriter.

4. Keyboard d) the mechanical, magnetic, electronic and electrical devices

composing a computer system.

5. Hard disk e) the system of computer’s component in which information is

stored.

6. ROM f) nonvolatile, non-modifiable computer memory used to hold

programmed in­structions to the system.

7. Mouse g) volatile compu­ter memory, used for creating loading, and

running pro­grams and for manipulating and temporarily

storing data.

8. Floppy disk h) a computer output device that produces a paper copy of data

or graphics.

9. RAM i) an electronic device that makes possible the transmission of

data to or from computer via telephone or other

communication lines.

10. Printer j) a hand held device connected to the computer by small cable.

11. Modem k) thin, usually flexible plas­tic disk coated with magnetic

material, for storing com­puter data and programs.

Приложение 3

Questions for Discussion

What other modern hardware devices do you know?

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What are they for?

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Do you know how to use them?

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What is the most important part of the hardware?

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What is the most expensive part of the hardware?

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Without what parts computer is unable to work?

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