AF_IC05_ Motherboards
Unit 3

Contents

Introduction

In this Unit you will learn how to find in a motherboard **manual** the most important **features**, related to CPU, memory DIMMs, disk drives and other devices that you can connect to a motherboard. If you do not choose them with care, they may be incompatible.

So, before purchasing a motherboard you must know they specifications:

- Compatible CPUs
- Compatible RAM DIMMs
- Number of SATA devices admitted
- Number and version of USB ports
- …

You can find this information by reading the motherboard manual. You can also usually find it on the brand's website.

These are some motherboard **manufacturers**:

Asrock: http://www.asrock.com/index.asp

Asus: http://www.asus.com/uk/

Gigabyte: http://www.gigabyte.eu

MSI: http://eu.msi.com/

In order to do this Unit **Internet access** is a requirement.

Glossary

Visit these webpages one more time. You will learn and listen to some words related to this activity:

@   [Quizlet activity about motherboard components and form factors](#)

@   [Quizlet activity about motherboard components and other computer parts](#)

Activities

1. Make your own quizlet following the Glossary's example, do not use the same words and images. Then share your quizlet link in the moodle forum and check other students quizlets.
2. **Gigabyte GA-X79-UP4**. Motherboard technical specs. Visit this webpage

> @   http://www.gigabyte.eu/products/product-page.aspx?pid=4766#ov

Read the information about the motherboard. Then, using the manual that you can find on the same website, answer the following questions:

> @   http://download.gigabyte.eu/FileList/Manual/mb_manual_ga-x79-up4_e.pdf

1. What is the chipset of this motherboard?
2. What is the CPU socket?
3. What kind of RAM memory is compatible with this motherboard?
4. Search in an online store a processor compatible with this motherboard (link)
5. Search in an online store the fastest RAM memory for this motherboard (link)
6. If you want to install only two memory DIMM, where will you install them?
7. How many SATA internal devices can you connect?
8. How many eSATA devices can you connect?
9. How many USB ports does it have? Where are they located? What version are they?
10. What RAID methods does it support? For each method describe it and tell how many disks are needed.
11. Describe the process of installing the CPU and its cooler on the motherboard.
12. How many graphics cards working in parallel can be installed on this motherboard?
13. What are the brands of the graphics cards that can work in parallel on this motherboard?

Bibliography and Webgraphy

@ http://en.wikipedia.org

@ https://dl.dropboxusercontent.com/u/1159579/SMX-M01.zip

Authors: Joan Coll and Marc Nicolau