

SESSION 5

THE CONTROL UNIT

OBJETIVES

- To know what a Control Unit is.
- To know how a Control Unit Works.
- To understand different instructions execution phases.
- To understand different elemental operation types.
- To be able of drawing instructions execution chronograms on elemental computers.
- To apply session knowledge to solve exercises.

PREVIOUS KNOWLEDGE

Deep knowledge of digital electronic.

BIBLIOGRAPHY

- Fundamentos de los Computadores. Pedro de Miguel Anasagasti. Thomson-Paraninfo, 9^o ed. 2004.
- Organización y arquitectura de computadores. (William Stallings) Ed. Pearson-Prentice Hall, 2006.
- ARQUITECTURA DE COMPUTADORES. Un enfoque cuantitativo. (John L. Hennessy and David A. Patterson) Ed. Mc Graw Hill. 1993

TASKS

READINGS

FUNDAMENTOS DE LOS COMPUTADORES (Pedro de Miguel Anasagasti. Thomson-Paraninfo. 2004)

1. Chapter 7. Control Unit
 - a. Elemental operations (7.2)
 - b. Structure of an elemental computer (7.3)
 - c. Controls signals timing (7.4)
 - d. Instructions executions. Chronograms (7.5)

EXERCISES

Download http://atc2.aut.uah.es/~avicente/asignaturas/eoc/pdf/enunciados_t3.pdf some of them will be solved during the classes. Remaining non-solved exercises must be homework considered.