Hardware Programming

Content

In this lab course, we will present hardware programming concepts. We will discuss the following topics amongst others:

- Linker/Loader
- Scheduler
- Interrupts/Polling
- Input and output connection
- Memory management
- Processor connection to peripheral components, e.g. connection to A/D converters for measured value acquisition and processing, power output activation via D/A converters, reports on display or control reaction (switching on a ventilator in the case of temperature threshold exceedance and similar)

Registration

- You must register in order to participate in this course!
- **Registration start: 2007-07-02, 12:00:00pm**
- **Registration end: 2007-08-31, 23:55:00pm**

Please specify the group you prefer when registering. You can also specify particular participants with whom you would like to be in one group. Do not forget to type in the respective matriculation numbers! We will do our best to take into account your preferences but cannot guarantee it.

Groups

The lab course will take place every two weeks. We offer the following groups:

- Mon, 08:15 am - 11:15 am fortnightly group 1
- Wed, 08:15 am - 11:15 am fortnightly group 2
- Wed, 08:15 am - 11:15 am fortnightly group 3
- Thu, 08:15 am - 11:15 am fortnightly group 4
- Thu, 08:15 am - 11:15 am fortnightly group 5
- Fri, 3:45 pm - 6:45 pm fortnightly group 6

Group Distribution

The distribution of groups will be announced when the registration period is over!

Lab Course Preparation

There will be an obligatory introduction to this lab course on October 18, 2007 at 10 am in room AH III. This introduction is adressed to all participants of the lab course.

The documents for each upcoming experiment session will be published in L²P prior to the respective experiment. Print out the documents and work through the respective tasks in order to prepare yourself for the experiment session.

If you have not prepared yourself, you MAY NOT participate due to safety reasons!

Location

- Room 4U18 in the "1. Erweiterungsgebäude" (E1).
- Floor plan: Computer Science Center

Boardlayout

- Here you can find the designfile and the components-list of the evaluation board used in the lab course. There is no need to get this bord if you just want to pass the course. The file was published since some students asked for this
- design file and list of components

Links

- CAMPUS LINK
- L²P

Tutors

- Dr.-Ing. André Stollenwerk
- Dr.-Ing. Falk Salewski
- Dr. rer. nat. Ralf Mitsching

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Last update: **2011/11/21 17:33**