ALBERT-LUDWIGS-
UNIVERSITÄT FREIBURG

INSTITUT FÜR INFORMATIK

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Mobiles Hardware-Praktikum
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Lab 3
Microprocessor Programming

Exercise 1

Write a "Stop Watch" assembler program using MPLAB for the PICee. The up to date time is should be outputted on the LCD display in the form Minutes:Seconds (eg. 23:58). Use Pushbutton S5 to start and stop the watch. Do not worry about measuring the seconds accurately as long as the LCD screen is viewable and the programs functionality is correct. Once testing is complete program the PIC16F84 and insure that it works properly.

Exercise 2

Now modify the program from exercise 1 so that it measures the seconds as accurately as possible. Use the internal Timer0 interrupt (TMR0 interrupt) of the PIC16F84 to accomplish this. Make sure to test your program.

When you are finished with the lab, please compress all appropriate assembler files into one ZIP file and then submit it through the courses Web Site Portal.