

Aufgabe 1: **timing** (12 pts, submission deadline Wed, 11/12/08 8:00 pm)

Develop a C-program **timing** in a file **timing.c** that measures the duration of a button press and displays the time passed during the measurement and the final result on the two 7-segment displays. The time measurement is to be performed for button 0 with the accuracy of 100ms. The duration is measured for an interval of 0s - 9.9s, durations beyond will not be further measured.

During a running measurement, the 7-segment displays will be continuously updated to show the time passed so far. Upon completion of the measurement (release of the button), the final result is displayed till the start of the next measurement.

Use the SPiCboard library *libspicboard.a* for your implementation, which is provided in the directory

`/proj/i4spic/pub/i4`

along with the required header files. Please use the library and headers directly from this directory by supplying the compiler with the necessary options and do not create local copies of the library. This way, you will automatically use updated revisions of the library as they might become available.

API documentation for the library is available in the documentation area of the website. The library is new and only little tested, wherefore there may be bugs in the current implementation. If you happen to find a bug or an unclear description in the online documentation, please report the issue to

`i4spic@informatik.uni-erlangen.de`

We will try to fix the problem as fast as possible.