

## Aufgabe 2: Makefile (8 pts, submission deadline Wed, 11/19/08 8:00 pm)

Create a simple Makefile, that compiles the first assignment's program **timing**. The Makefile should provide the following functionality:

- The program **timing.c** should be compiled and linked to a binary image **timing.elf**. Compiling and linking can be decoupled if desired (two different targets).
- All of the compiler flags required for the SPiC assignments shall be supplied to the compiler. In addition, add the necessary flags to instruct the compiler to look for headers and the library **libspicboard.a** in the directory */proj/i4spic/pub/i4* and to link the program against that library.
- Invocation of “make“ or “make all“ should initiate the generation of the readily linked binary image.
- Invocation of “make clean“ shall delete all files generated by **make** processing rules of your Makefile. No errors should occur, if these files do not exist on invocation of “make clean“, and also these files should not first be generated only to enable their immediate deletion.
- Include the file **debug.mk** in the directory */proj/i4spic/pub/i4*, which provides rules for invoking the debugger and flashing images to the microcontroller. With correct inclusion of this file, the flag “-f /proj/i4spic/pub/i4/debug.mk“ is no longer needed for flashing images to the controller.