

University of Massachusetts Lowell
Department of Electrical and Computer Engineering
16.5200
Problem Set 6

There are three sub-directories

- a. noblk_kbd.d: demonstrates the use of non-blocking character input from the keyboard for event tracking in a while/do-loop. The code is based on the ncurses lib. and getch(). If we used getchar() in a loop the loop-execution will pause till a nl/cr is entered.
- b. openal_filt_play.d: the non-blocking feature is used for play and pause event handling in the playback of a wave file. The *IdleFiltering* function in the while-loop is used to filter the stereo signal $X[2][N]$ and is a global variable in the program.
- c. You are to complete sfastfilter.cpp using the fft code given in the openal_filt_play.d/FILTER.D directory. The filtering currently commented in *IdleFiltering.cpp* and *Prebuffer.cpp*.
- d. In the next problem set you are to modify the program such that stereo signal X is displayed graphically while playing the wave-file. The callback event handlers of the graphics-loop should be used in place of the non-blocking kbd code supplied. The *IdleFiltering* function should remain in the graphics-loop.