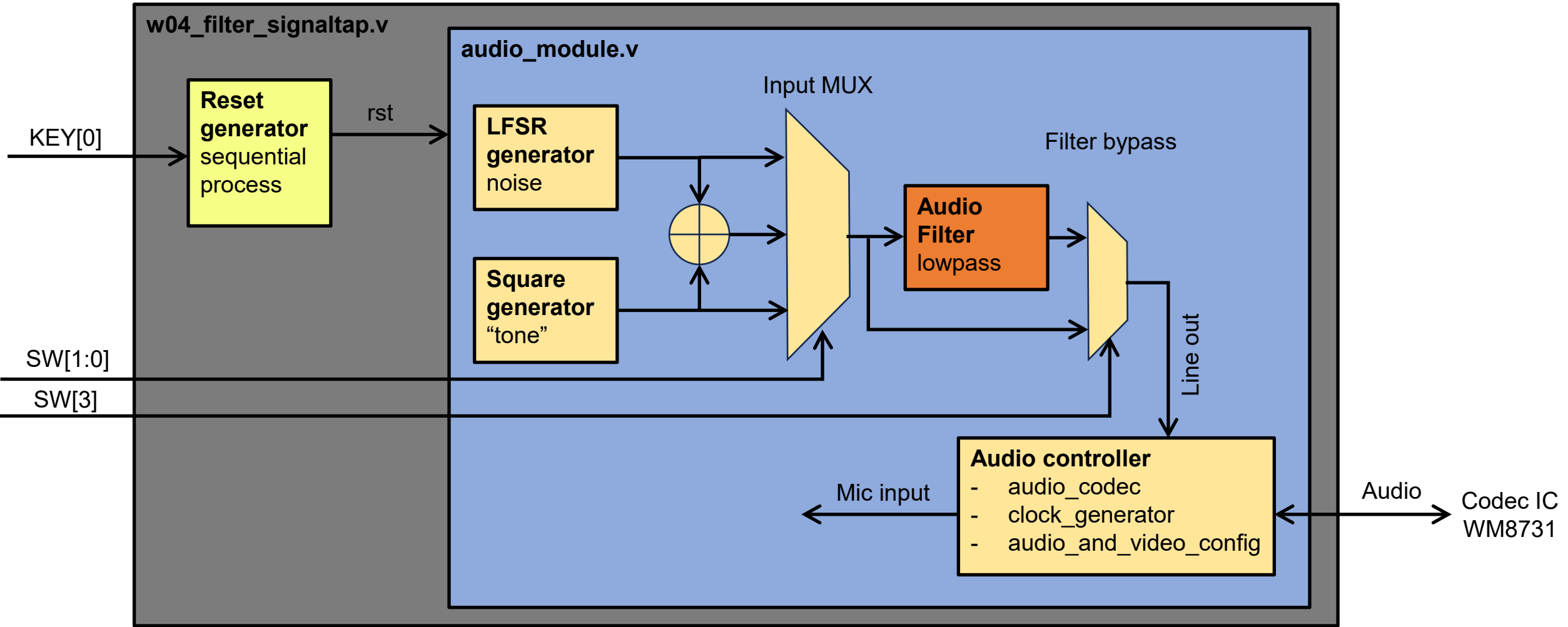


MUNI
FI

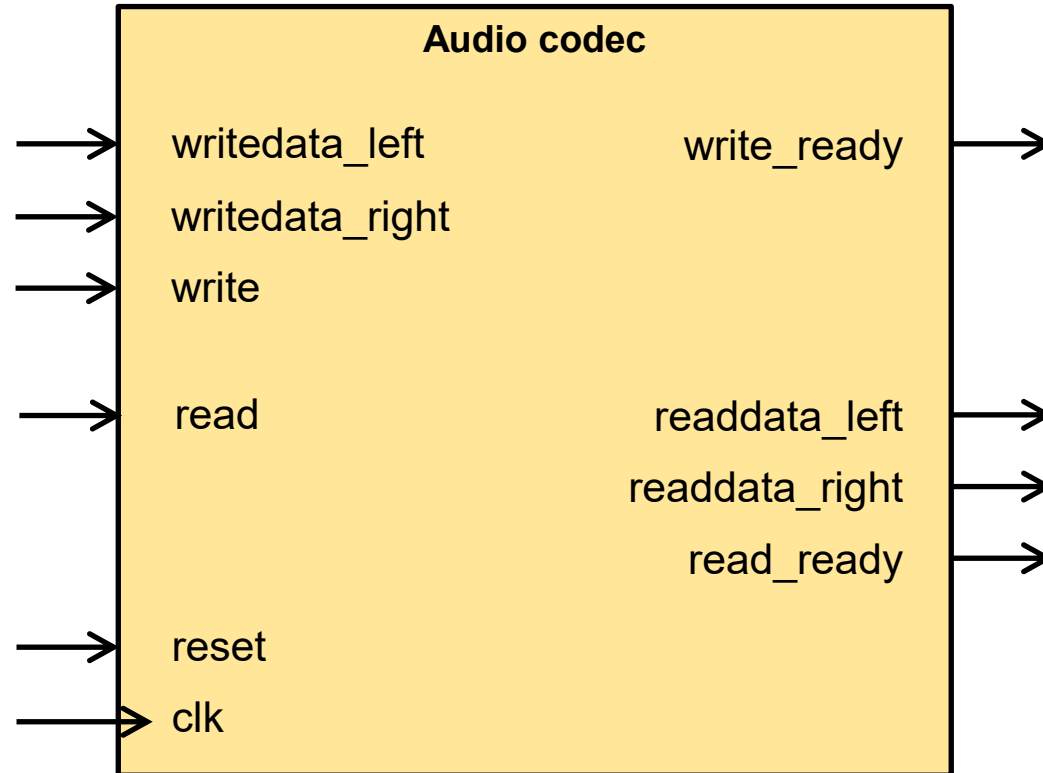
PA221: Filter and Signal Tap – Part 2

Template

Audio



Audio Codec



Assignment

Complete Signal Tap Tasks (previous week)

- Examine all internal signal (previous slide) of Audio Codec
- Determine sampling frequency of **readdata_left** and **readdata_right** signals
- Set input mux to $SW[1:0] = 2'b01$ and capture at least one period of square wave signal in Signal Tap

Assignment

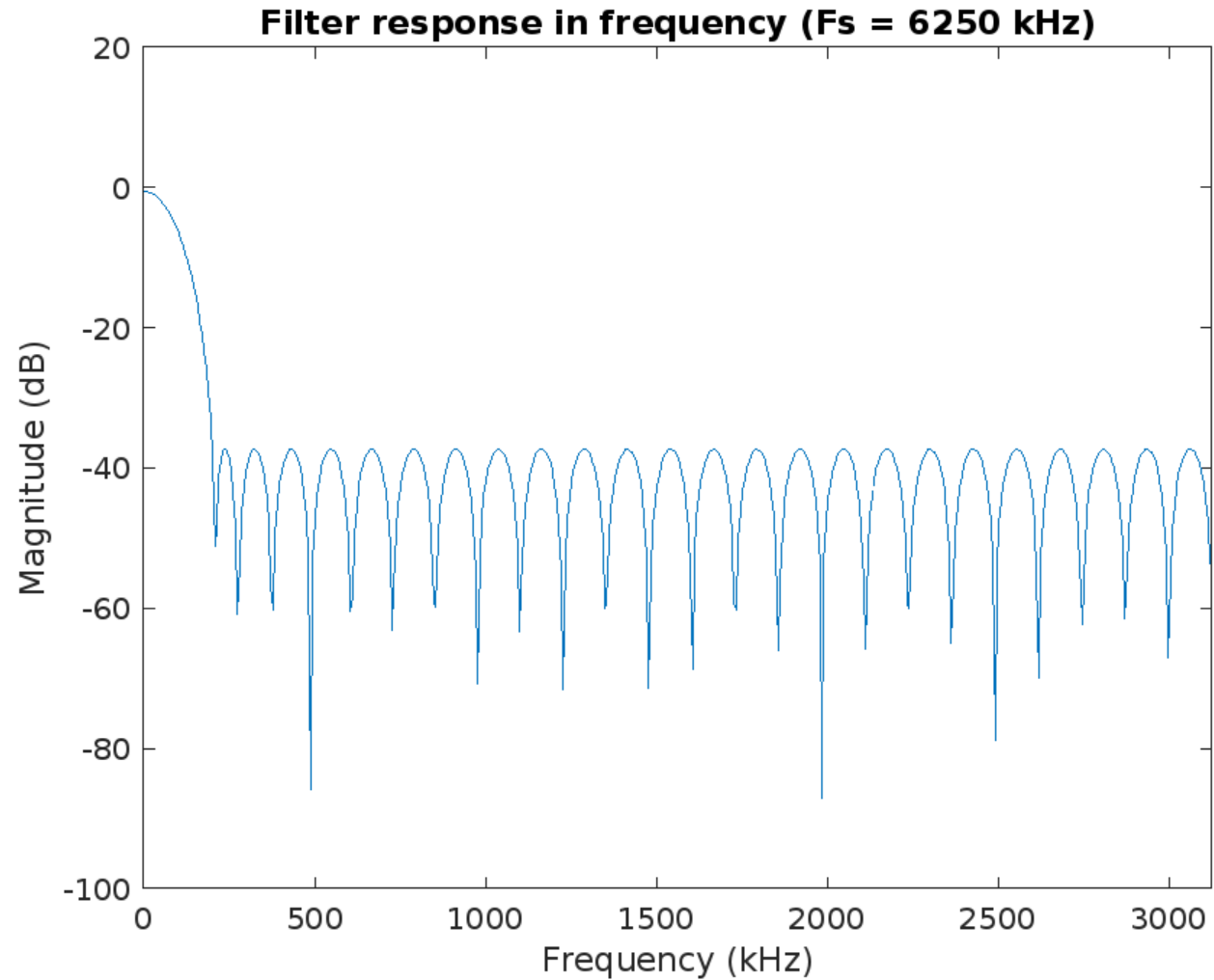
Instantiate your fir_50k into signal chain

- Examine the filter effect on audio signal
 - Noise only
 - Square wave only
 - Noise + square wave

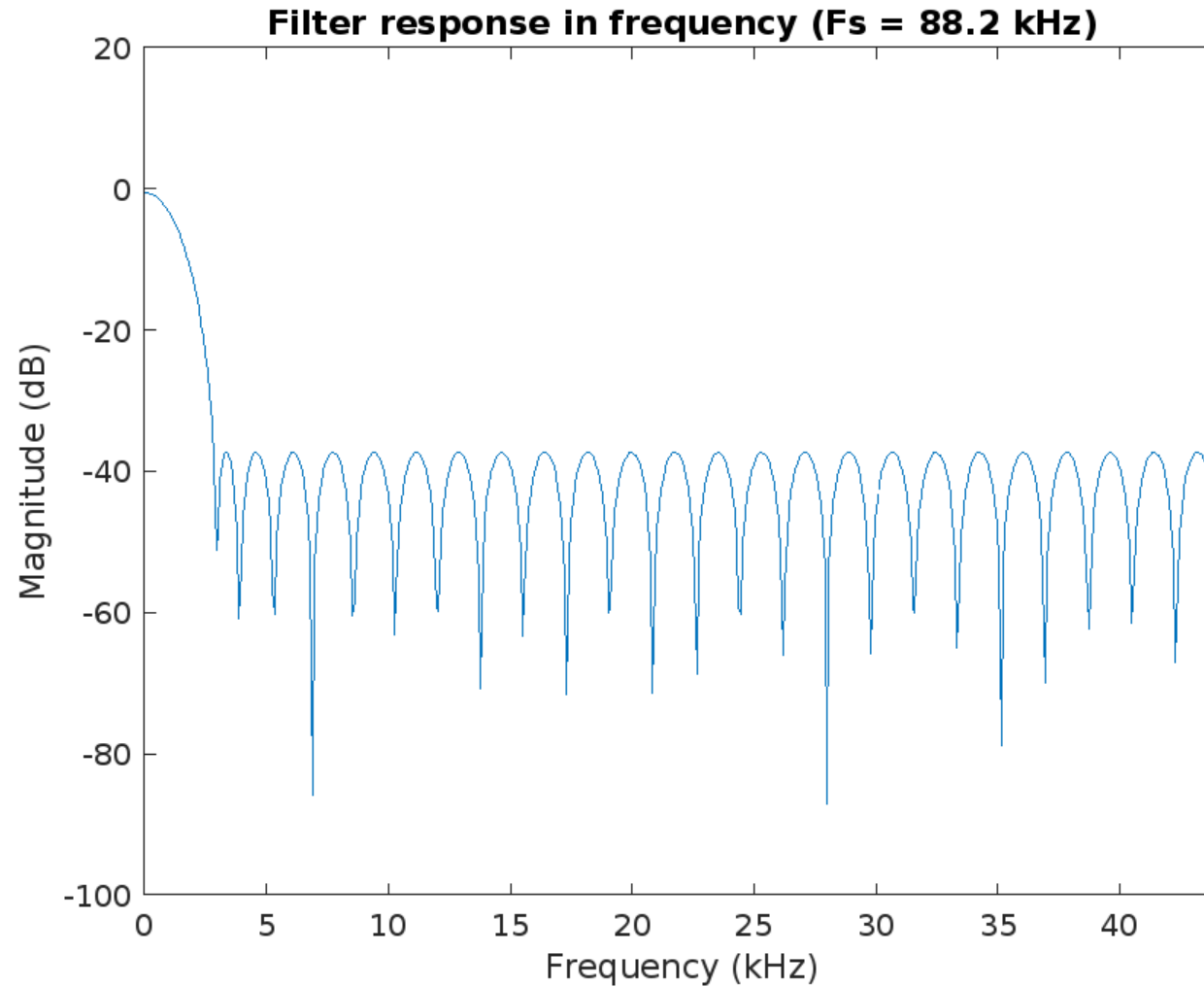
Optional: Observe the audio input in Signal Tap

- Connect the mic
- Set storage qualifier to read = 1'b1
- Observe the audio input as an analog waveform

Filter Characteristics



Filter Characteristics



Filter Characteristics

