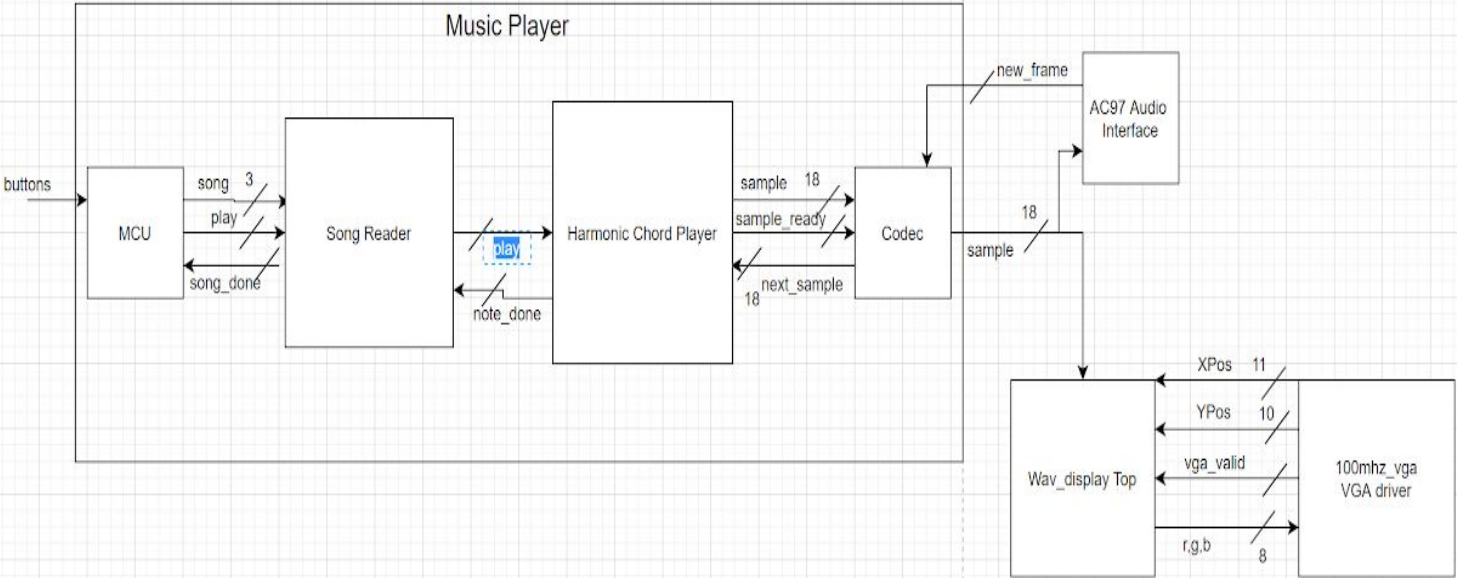
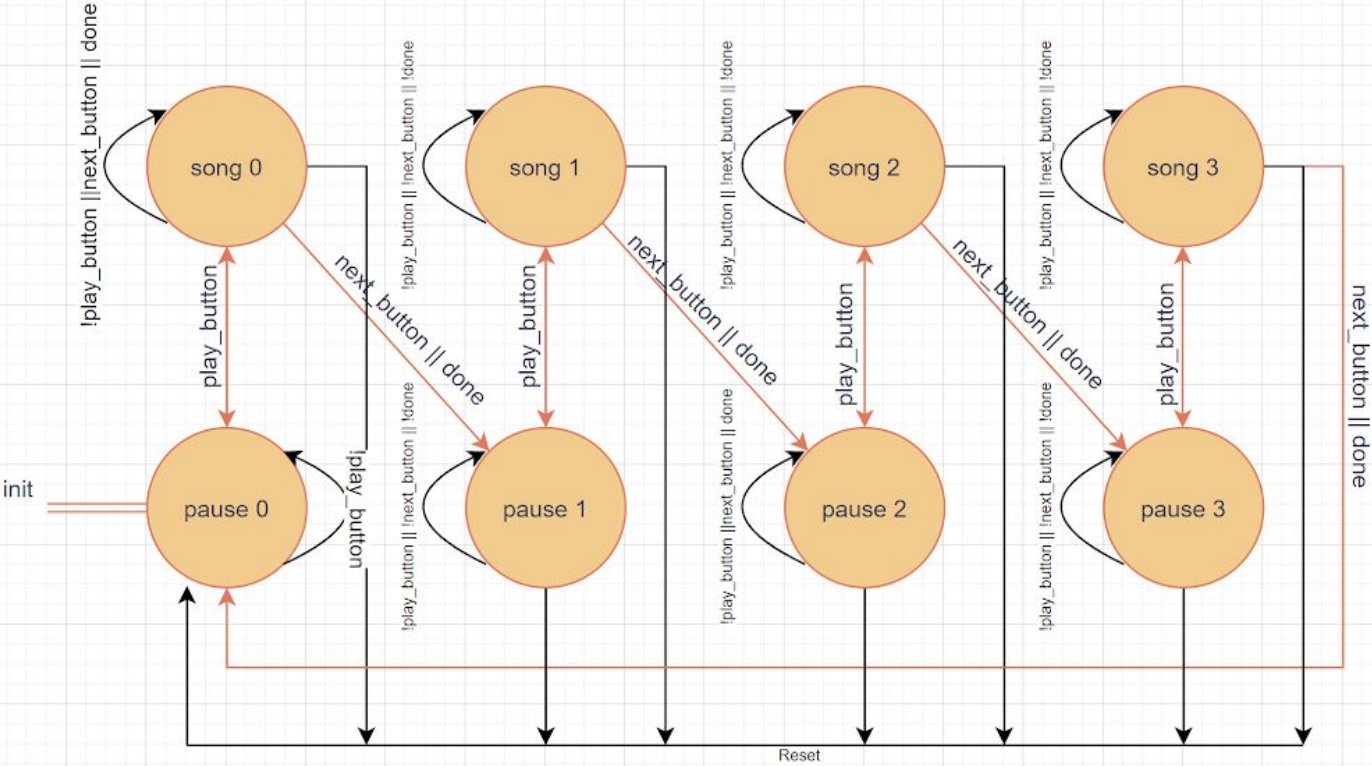


Hierarchy



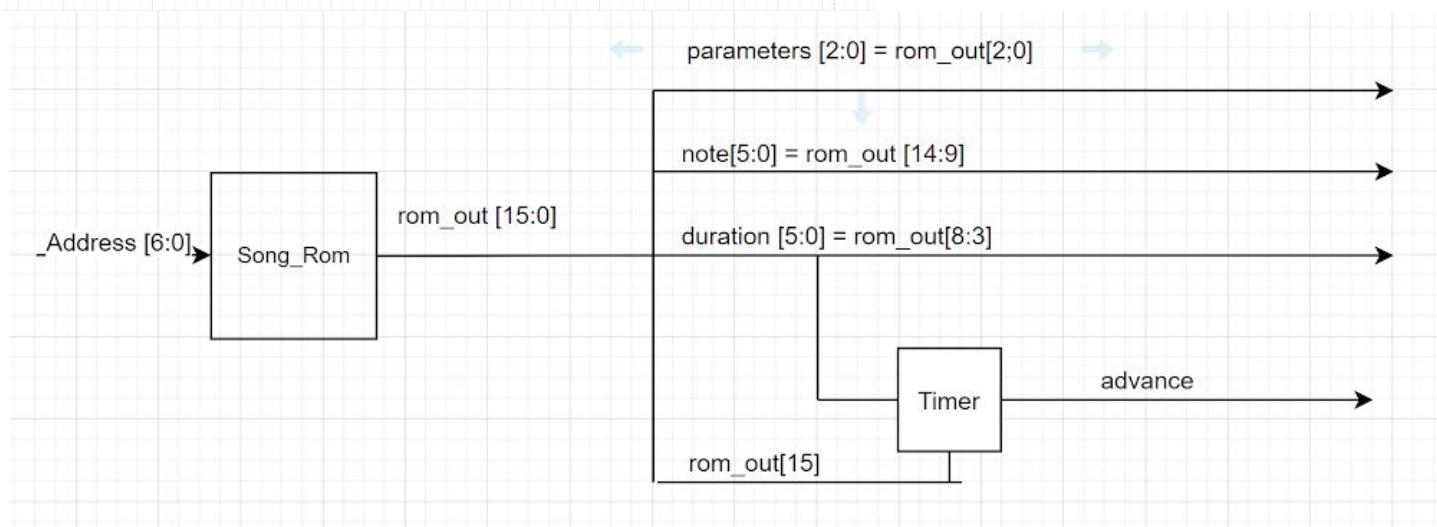
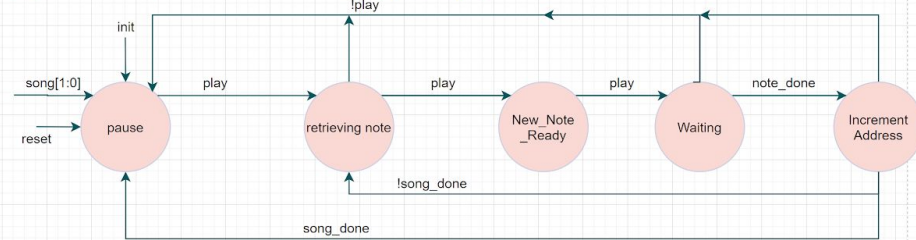
MCU

inputs clk, reset, play_button, next_button, song_done
output play, reset_player, song[1:0]

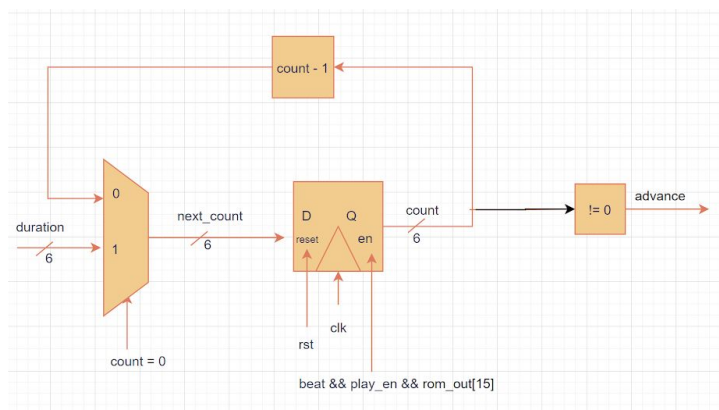


song_reader

input: clk, reset, play, song[1:0], note_done
output: song_done, note[5:0], duration[5:0], new_note, advance, parameter[2:0]

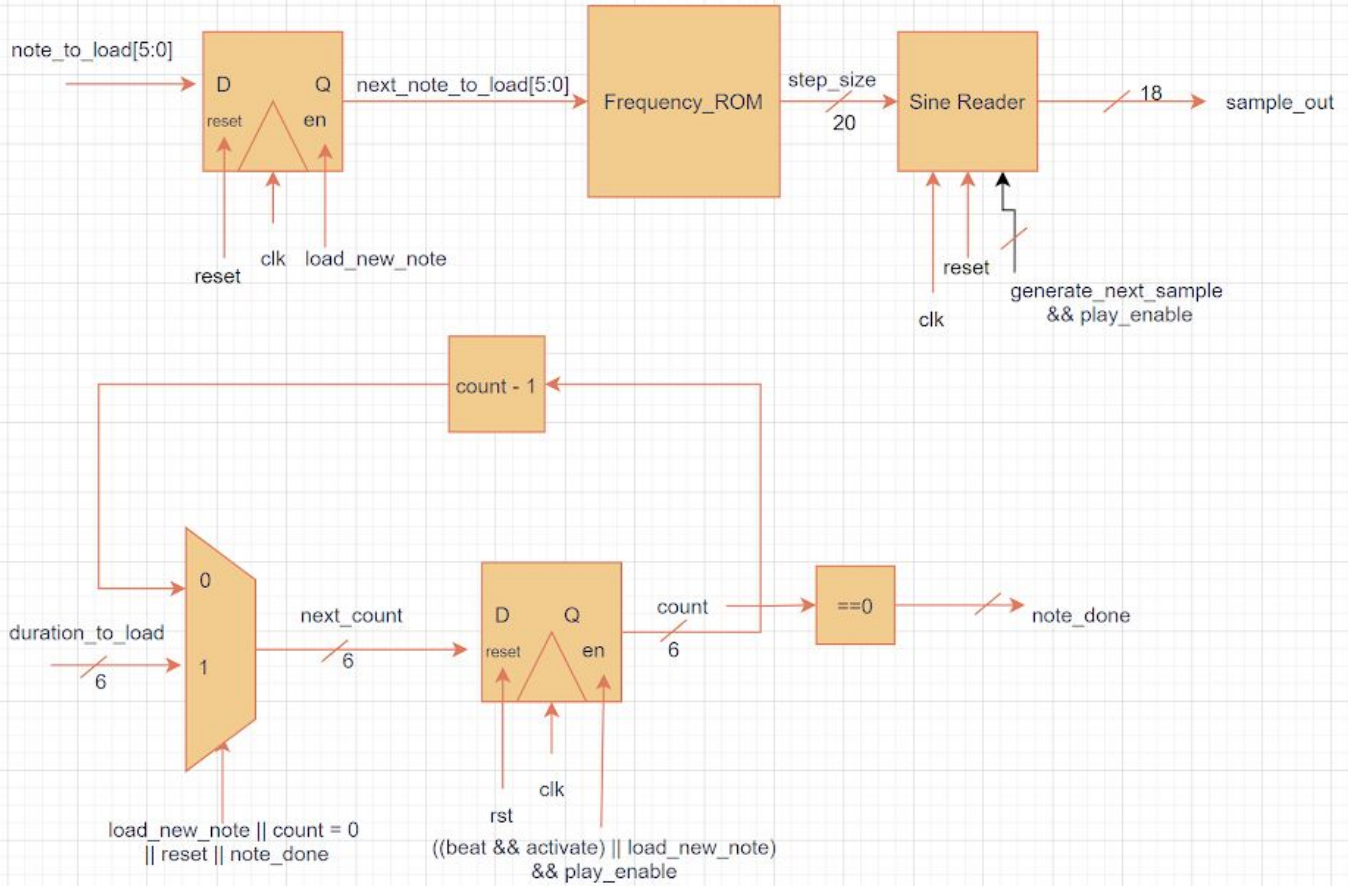


Timer



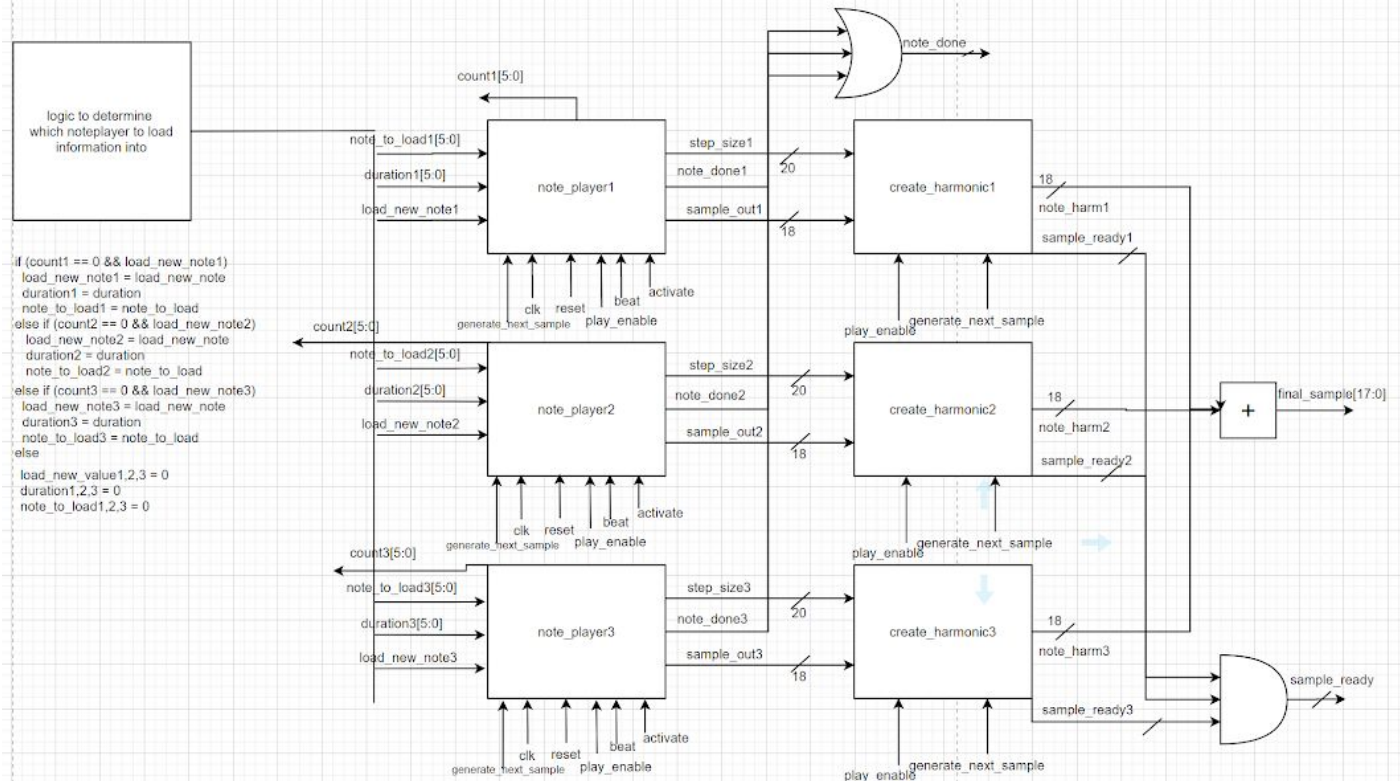
Note Player

input: clk, reset, play_enable, note_to_load[5:0], duration_to_load[5:0], parameters[2:0],
advance, load_new_note, beat, generate_next_sample, new_sample_ready
output: note_done, step_size[19:0], count[5:0], sample_ready



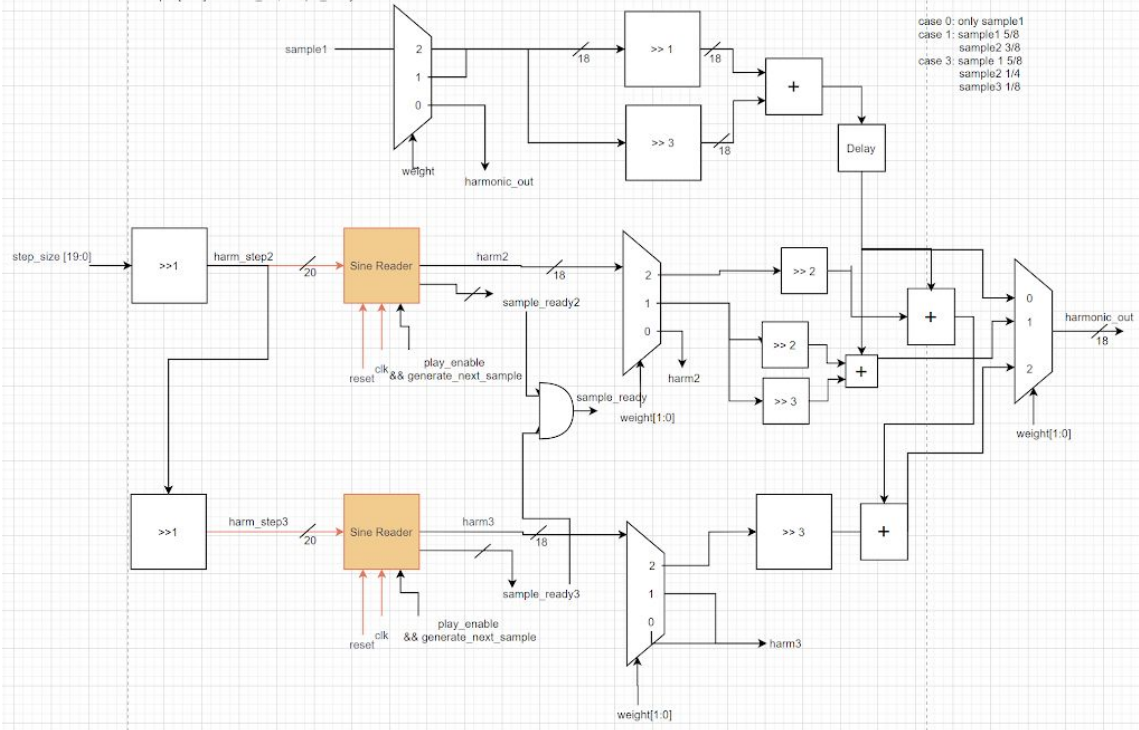
harm_chord_player

input clk, rst, play_enable, [5:0] note_to_load, [5:0] duration, load_new_note, activate, beat, generate_next_sample
output note_done, sample_ready, [17:0] final_sample

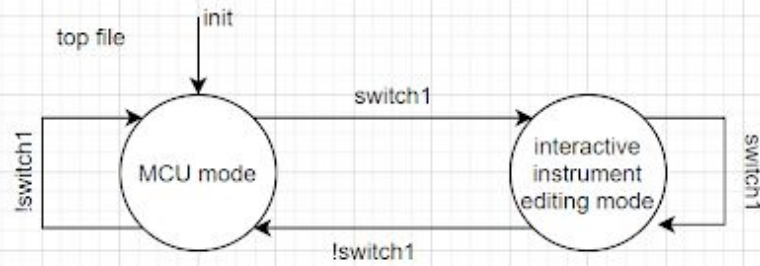


create_harmonic

input clk, rst, [19:0] step_size, [17:0] sample_in, play_enable, generate_sample, weight[1:0]
output [17:0] harmonic_out, sample_ready



interactive instrument editing



Interactive Instrument Editing Mode

