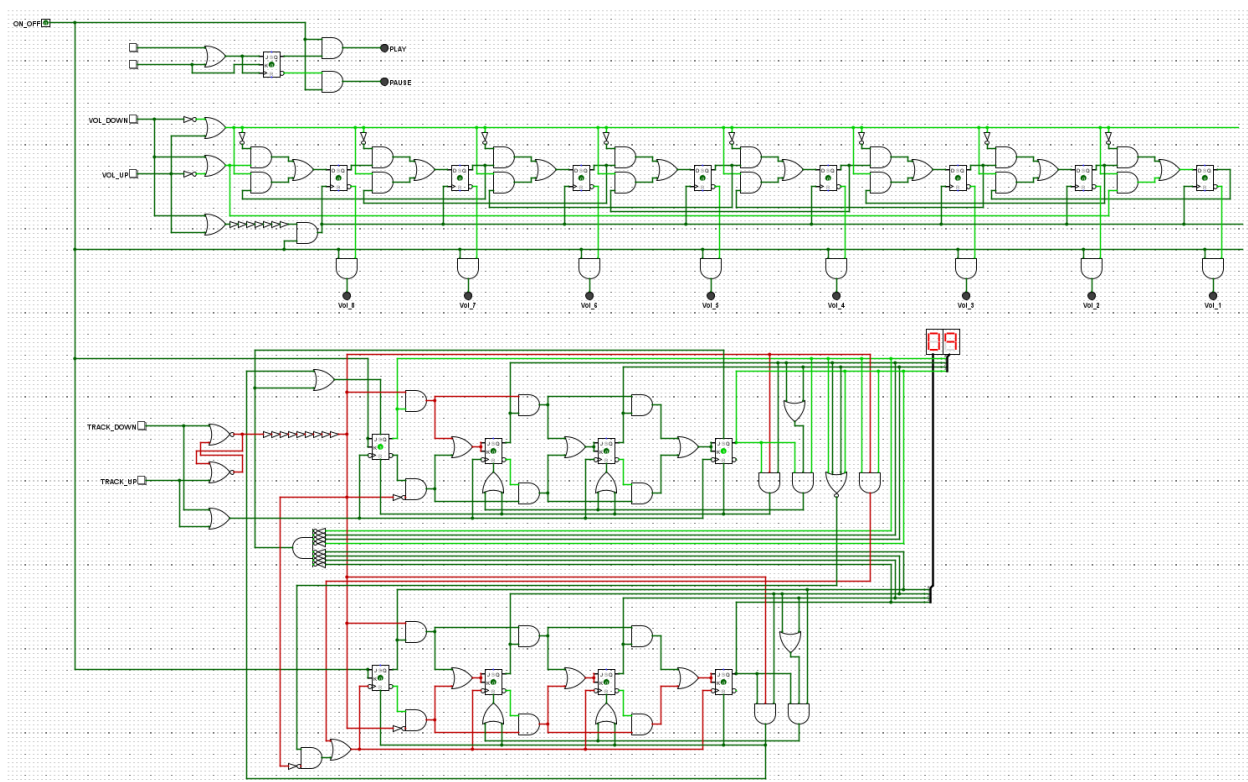


Lab 6

2. The most challenging component of the assignment is Stage 3: Implement track skipping and display. The task is difficult because for the track skipping to wrap around, not only do we need to reset two 4-bit bi-directional counters when it counts upward to A (=10) and backward to F (=15), but also do we have to catch the case when the track is at 00 to skip it so that incrementing the counter from 99 will bring the counter back to 01 and decrementing the counter from 01 will bring the counter to 99 (not 00).

4. Progress so far and plans

Progress so far



Plans

- Rework the track-skipping system so that it is at 00 when the entire program is reset and works as described in stage 3.
- Rework the ON/OFF state so that when the music player is in the PAUSED state if the PAUSE button is pressed it will return to the PLAY state if it was in a PLAY state prior, otherwise, it does not affect the PLAY state as described in stage 1B.
- Also, when the ON button is pressed, the system should enter the ON (PAUSED) state as described in stage 4.