Final Project Check Off Sheet

Project Title: FPGA Pattern Sequencer

Student Names: Shirley Fung, Hana Adaniya

TA Name: Jae Lee

TA Signature/Date:

Design

☐ State transition diagrams, Block Diagrams, Code

Interface

☐ Interface displays BPM, and reflects change based on user input (Shirley)

☐ Interface show programmed patterns on screen (16x16 grid) (Shirley)

☐ Beat indicator is shown on screen to indicate current column being played (Shirley)

☐ Screen displays name of each channel (Hana)

☐ Interface displays real-time FFT waveform (Shirley)

User Interface

☐ User can program/store a pattern for each of the 16 sound channels using a row of 16 channels (Shirley)

☐ When the user chooses to play and stop, the loop plays and stops (when play is pressed again, loop restarts and play, corresponding buttons will also be highlighted) (Shirley)

Audio

☐ AC97 interface loops back pre-recorded samples from memory (Hana)
16 audio channels are combined based on user selection using the audio mixer

Obtain frequency response of combined audio signal using FFT (Shirley)

Audio samples played at varying BPM (Shirley)