

6.111 Final Project Checklist, Ben Bloomberg

- ✓ Working USB reader, using 4 channels of audio input to audio output
 - Using direct output mode, will be able to stream 4 channel wave file to lab kit and hear all channels output on AC97 interface via selection switch (to select 1st or 2nd pair of channels).
- ✓ Working ambisonic encoder with static encodings
 - Using ambisonic encoder mode, will be able to hear ambisonic channels from one encoder
 - Will run across AC97 output
- ✓ Working ambisonic summing device
 - Using encoder-summing mode, will be able to hear each channel of an encoded, summed stream, using 4 virtual sources.
- ✓ Working static ambisonic decoder with one virtual source
 - Will be able to hear one source moving across stereo output (two physical sources)
 - Will be able to switch to 4 channel output (4 decoders, 4 physical sources)
- ✓ Working static ambisonic decoder with 4 virtual sources
 - Will be able to hear four virtual sources moving across stereo output (two physical sources)
 - Will be able to switch to 4 channel output (4 decoders, 4 physical sources)
- ✓ Working UI to view virtual source locations
 - See locations of each virtual source on the display
- ✓ Working PCM-1681 device with four channels of streaming input from USB device
 - Will be able to hear 4 channels of simultaneously playing audio across 4 outputs of PCM-1681
- ✓ Working PCM-1681 output device with 4 channels of ambisonic audio output
 - Will be able to hear 4 output channels of encoded and decoded sources.
- ✓ Working interpolation for moving virtual sources (if time permits)
 - Will be able to hear sources move from location to location