

Test protocol

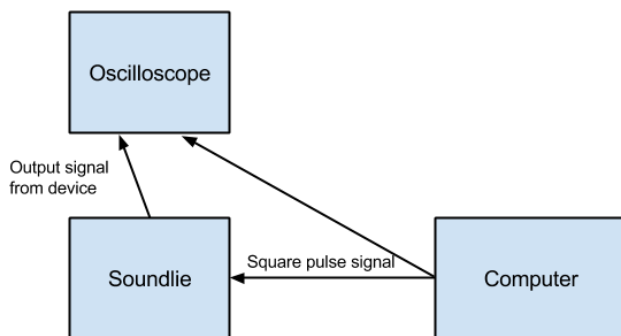
Echo sound effect measurements

Description: The result of the echo effect is measured by letting a single square pulse signal run through the system. The output signal is then examined to make sure that the echo function is operating as it should.

Equipment:

- Nexys 4 board with implemented design and power supplies
- Digital oscilloscope
- Computer

Setup: The computer was configured to play a signal consisting of a single 22 ms long square shaped pulse. This signal was connected to the input of the Soundlie and to one of the inputs of the oscilloscope. The output signal of the Soundlie device was connected to another channel on the oscilloscope. The settings of the echo sound effects was; amplitude=90% and delay=230 ms.



Results:

The result from the test shows that the echo function is working as intended. An “echoed” pulse with an amplitude of 90% of the preceding one is visible 230 ms after each pulse. The effect of the echo can also be heard when listening to the audio output.

