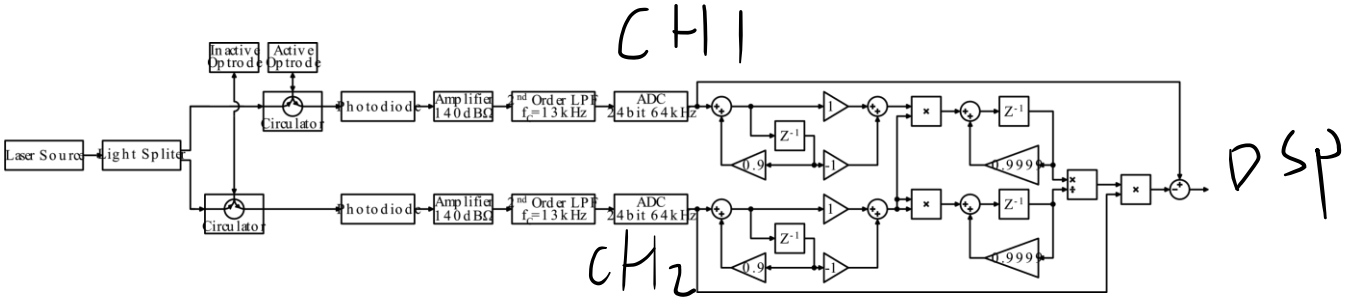
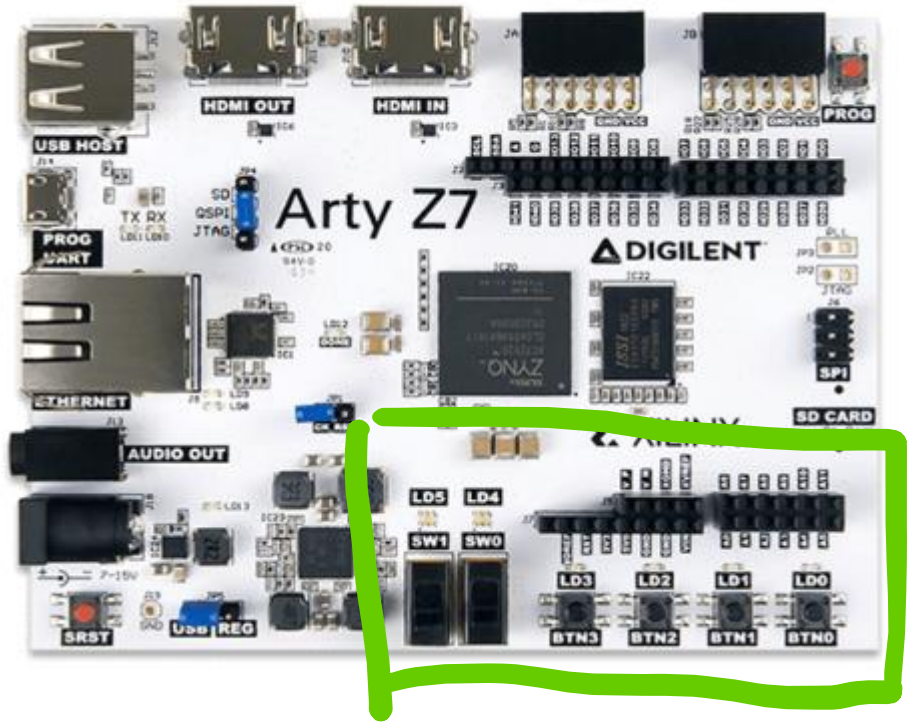


Channel 1: active optrode
Channel 2: inactive optrode
DSP: processed message

Boot image 1: two channel measurement direct output, no DSP
Boot image 2: Channel 1 and DSP output, noisy message channel and processed message
Boot image 3: Channel 2 and DSP output, noise only channel and processed message

Connect 12V battery to receiver board.
Drag the corresponding boot.bin file to the SD card, insert SD card to FPGA board and power on the FPGA board with USB (use laptop battery for low noise)



Use BTN1 and BTN0 to choose gain

	LD3	LD2	LD1	LD0
110dB	0	0	0	1
120dB	0	0	1	1
130dB	0	1	1	1
140dB	1	1	1	1

Then use SW0 to update gain to the receiver board, when the chosen gain is the same as current gain on the board, LD4 will be green; when the chosen gain hasn't been updated, LD4 is red.

When gain setting is over, flip SW1 to start recording, LD5 will be green when recording.

Switch off SW1 to finish the recording.

Recorded file will be in ADC.txt, only one recording at a time, copy file from SD card to computer and use the matlab file to read out.

To probe output of amplifier/input of ADC, use pin 6, 7 of U3 (two pins in the middle on the right hand side), or left pin of C23 as shown in the red box, same for CH2.