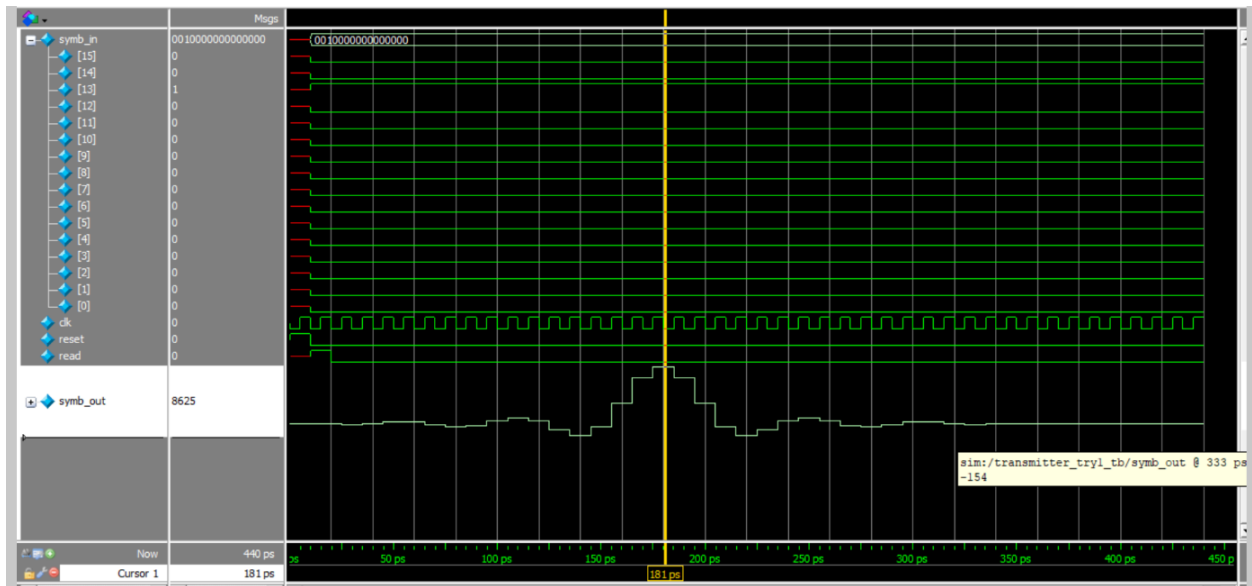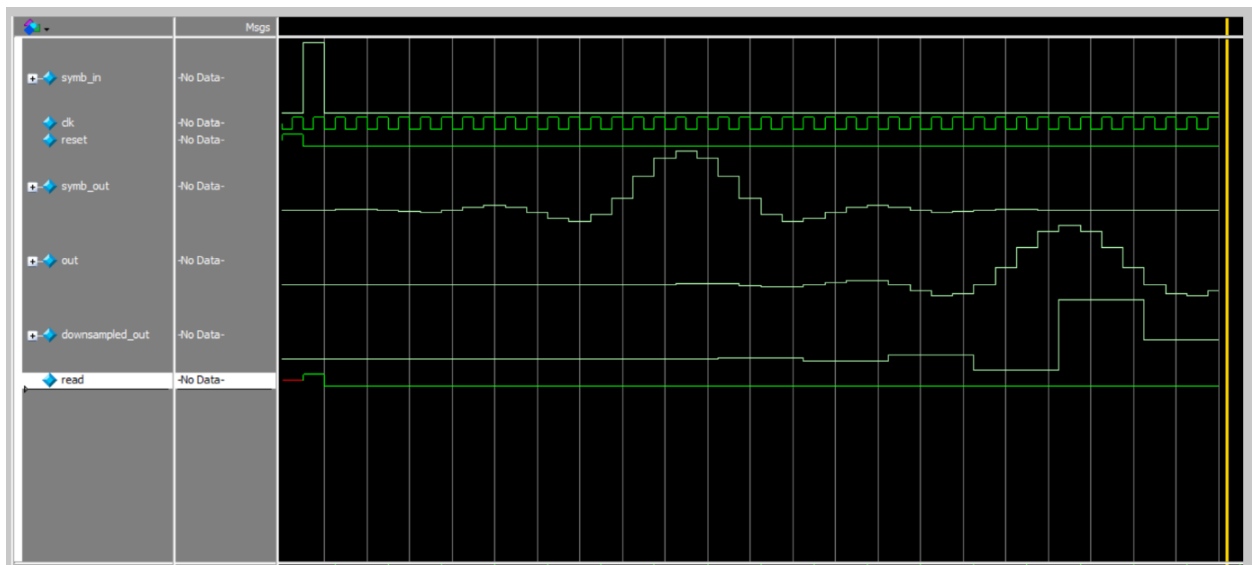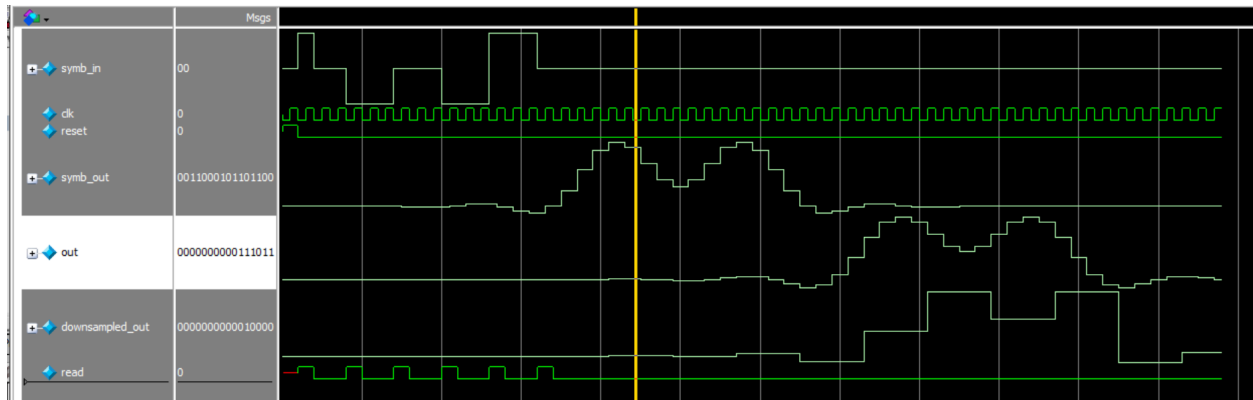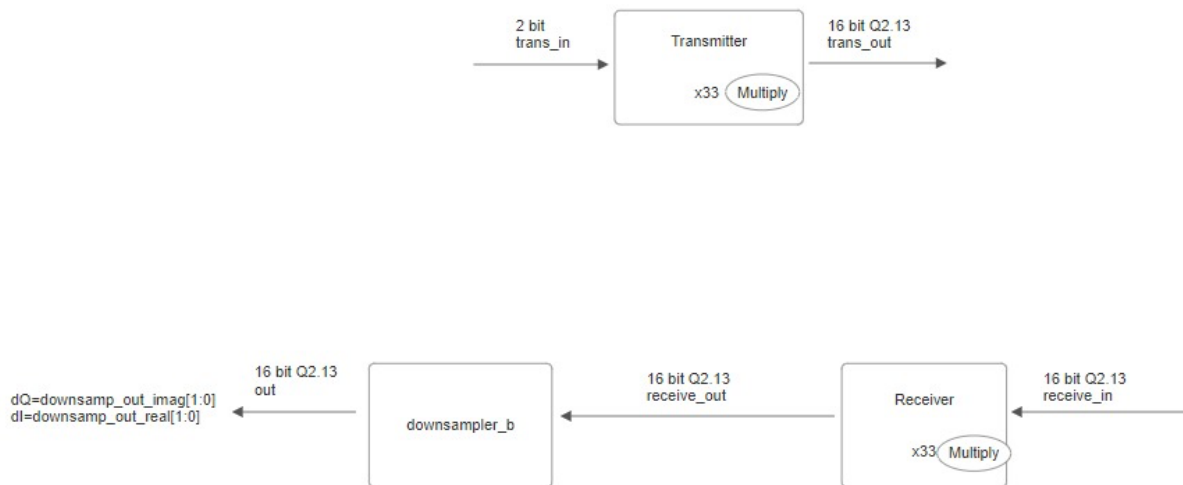## Transmitter testing (transmitter7_tb.v)

This was initial testing used to determine if the raised cosine FIR filter was working properly, testing strategy for this is to enter an impulse (a 1 followed by zeros) and see if the filter returns the coefficients that were exported from matlab to create the filter.

Transmitter, Receiver, Downsampler testing (transmitter_receiver_tb.v)

Used transmitter_receiver_tb.v for this. Performed a test using just one symbol followed by zeroes, then another with every possible symbol that could be sent from the QPSK modulation to check cases as well as intersymbol interference. Output is as expected with the wave shape resembling that of the raised cosine, some delay present, and returning to a value close to the original after downsampling.

Block Diagram for the Transmitter/Receiver