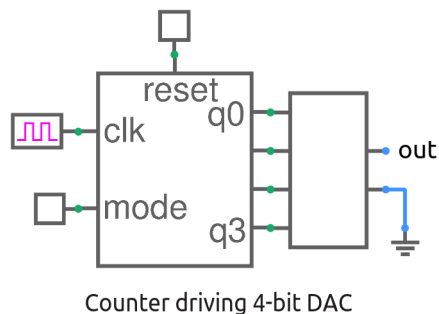


test\_dac4.sqproj



Shown in the figure is a 4-bit DAC driven by a binary counter. As the counter output changes from 0000 to 1111, we expect the DAC output to change in discrete steps.

### Exercise Set

1. With the given clock parameters and  $v_{ref}$  (the reference voltage for the DAC), work out the waveform for  $v_{out}$ . In particular, what is the maximum value of  $v_{out}$ ?
2. Compare your waveform with simulation results.