s_gate_pulses_1ph_1 (subcircuit)

Attributes

inputs: x1 x2
outputs: y1 y2
parameters:
 name: none
 delt_min: 1e-6
 delt_nrml: 10e-6
 t_delay: 1e-3
 y_high: 1

Description

 $s_gate_pulses_1ph_1$ is designed to generate signals required to drive a pair of switches in a "non-overlapping" manner. It compares inputs x1 and x2 and produces outputs y1 and y2. The value of y1 is y_high if x1 > x2; else, it is zero. For y2, the opposite is true; viz., y2 is equal to g_high if x1 < x2; else, it is zero. However, a delay is introduced between the transitions in y1 and y2 as depicted in Fig. 1.

The parameters delt_min, delt_nrml are used for controlling the simulator time steps (see documentation for cmpr_1_1).

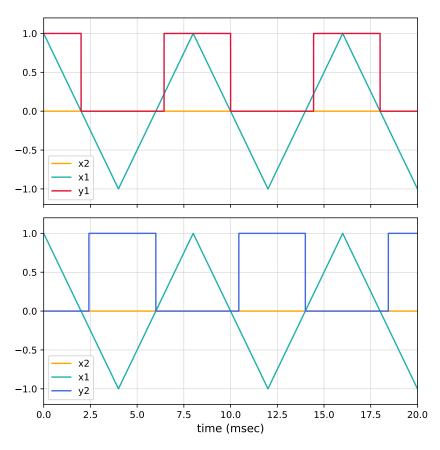


Figure 1: Sample waveforms obtained with $s_gate_pulses_1ph_1$. The parameter values are $delt_min = 0.02 \mu s$, $delt_nrml = 0.2 ms$, $y_high = 1$, $t_delay = 0.5 ms$.