

s_pwm_4 (subcircuit)

Attributes

```
inputs: D
outputs: g1a g1b g2a g2b
e_left_nodes:
e_right_nodes:
e_top_nodes:
e_bottom_nodes:
b_left_nodes:
b_right_nodes:
b_top_nodes:
b_bottom_nodes:
parameters:
  delt_min: 1e-6
  delt_nrml: 10e-6
  fc: 1e3
  t_offset: computed
```

Description

s_pwm_4 is used to generate gate pulses by comparing the input D with two triangle waves differing in phase by 180° . The frequency of the triangle waves is given by the parameter `fc`. The schematic diagram of s_pwm_4 is shown in Fig. 1, and sample waveforms are shown in Fig. 2. Note that `g1b` is inverse (not) of `g1a`; similarly `g2b` is inverse of `g2a`.

The parameters `delt_min`, `delt_nrml` are used for controlling the simulator time steps (see documentation for `cmpr_2_2`).

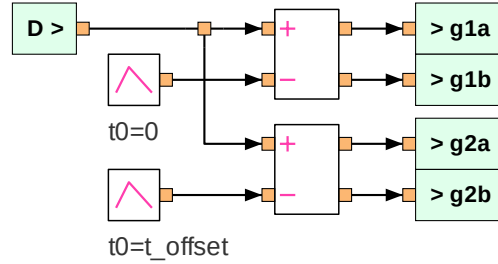


Figure 1: Schematic diagram of s_pwm_4.

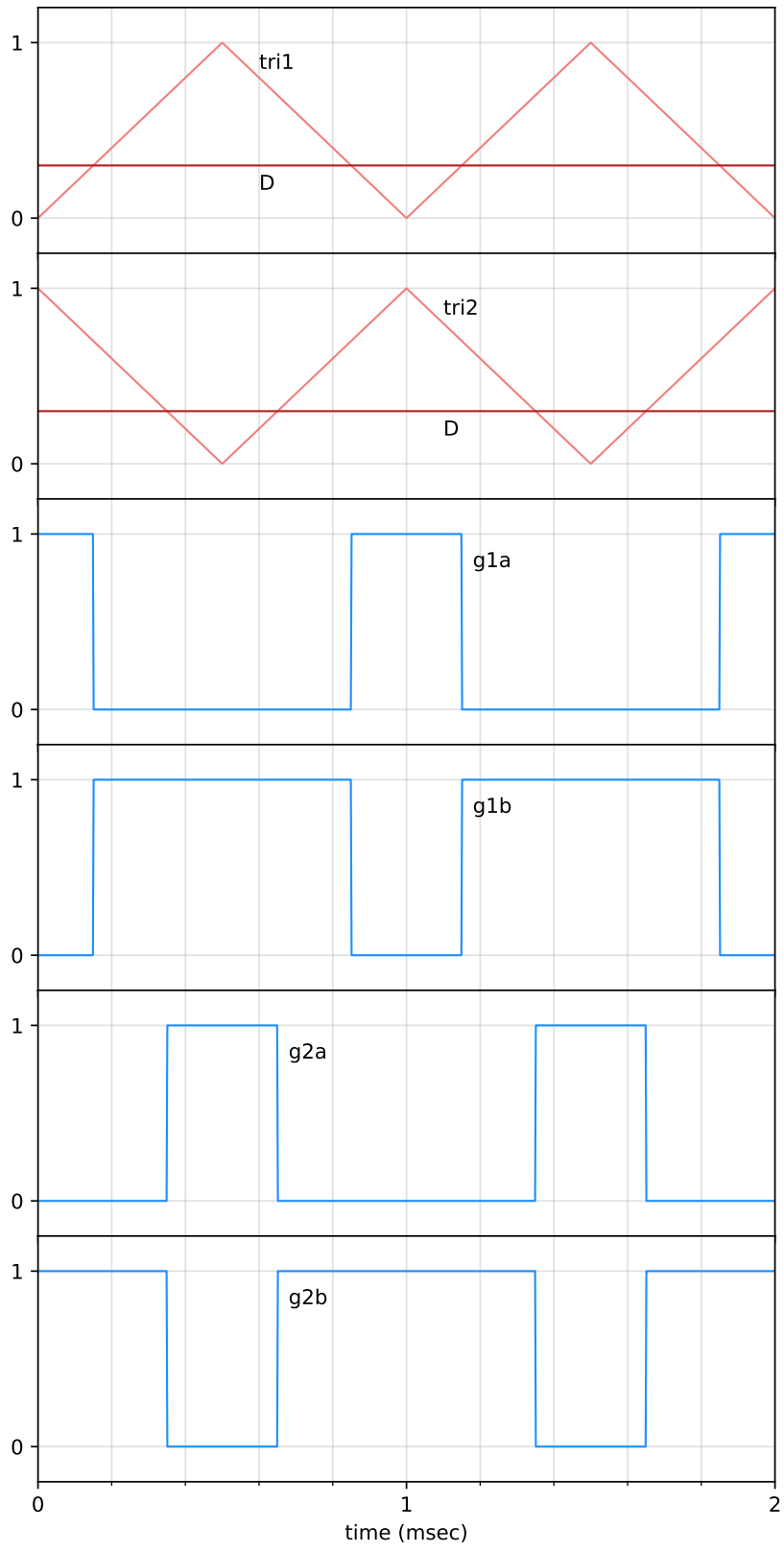


Figure 2: Sample waveforms obtained with s_pwm_4.