s_pwm_1 (subcircuit)

Attributes

```
inputs: va vb vc
outputs: g1 g2 g3 g4 g5 g6
e_left_nodes:
e_right_nodes:
e_top_nodes:
e_bottom_nodes:
parameters:
  T: 10u
  cmpr_high: 1
  delt_min: 0.1u
  delt_nrml: 10u
  flag_invert: 0
  flag_quad: 0
  tri_high: 1
  tri_low: -1
```

Description

s_pwm_1 is used to generate PWM pulses from a reference signal (a triangle wave) generated internally, and va, vb, vc (see Fig. 1). The parameters T, tri_high, tri_low are used to control the triangle wave (see the documentation for triangle_2.xbe). The parameters delt_min, delt_nrml are used for controlling the simulator time steps as explained in the documentation for cmpr_1_2.xbe. The parameter cmpr_high is used to determine the height of the output pulses (g1 to g6), the lower level is assumed to be zero.
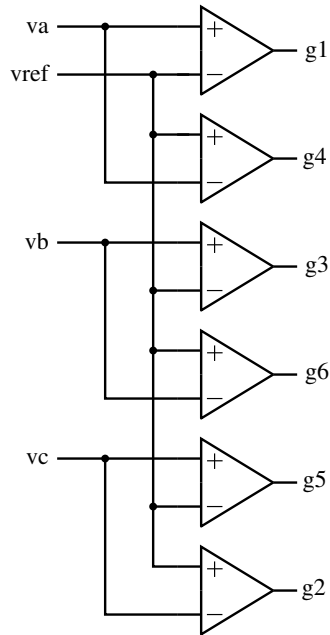

Figure 1: Conceptual block diagram of s_pwm_1.