edge_delay_1.xbe

Attributes

```
xbe name=edge_delay_1 evaluate=yes limit_tstep=yes save_history=yes allow_ssw=no
#
# When a positive edge at x is detected, y is made to change
# from low to high after the specified delay (t_delay).
#
Jacobian: variable
input_vars: x
output_vars: y
aux_vars:
iparms:
sparms:
rparms:
+   x_high=1
+   t_delay=10u
+   t_rise=0.01m
+   x_prev=0
+   x_cross=0
+   t2=0
+   epsl1=0
stparms:
igparms:
outparms: x y
```

Description

    edge_delay_1.xbe is used for shifting a clock-type signal by a delay interval. The parameters have the following meaning.

t_delay: delay interval.

t_rise: rise time (i.e., time for the low-to-high transition at the output).

x_high: high level (in both input and output waveforms).

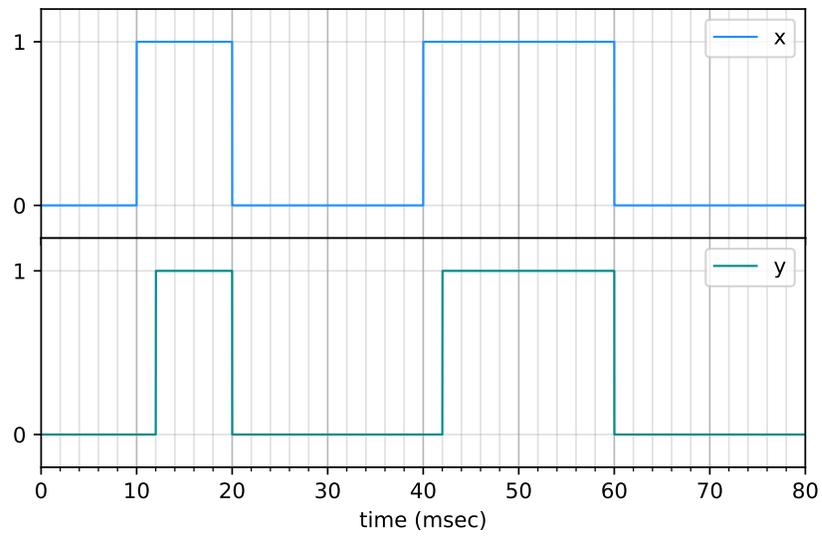   x and y are made available as output variables. Fig. 1 illustrates the working of this element.

Figure 1: Input $x(t)$ and output $y(t)$ for `edge_delay_1.xbe`. The parameter values are `t_delay` = 2m, `t_rise` = 0.01m, `x_high` = 1.