cmpr_simple_2_2.xbe

Attributes

```
xbe name=cmpr_simple_2_2 evaluate=yes
# if x1 > x2, y1 = high, else low
# (reverse if flag_inverting=1)
# y2 = not(y1)
Jacobian: variable
input_vars: x1 x2
output_vars: y1 y2
aux_vars:
iparms: flag_invert=0
sparms:
rparms:
+  y_low=0
+  y_high=1
stparms:
igparms:
outparms: x1 x2 y1 y2
```

Description

cmpr_simple_2_2.xbe is a comparator with the following behaviour.

(a) flag_invert = 0:

$\quad$ y1 = y_high $\quad$ if x1 > x2,

$\quad\quad\;$ = y_low $\quad\;\;$ if x1 < x2.

(b) flag_invert = 1:

$\quad$ y1 = y_high $\quad$ if x1 < x2,

$\quad\quad\;$ = y_low $\quad\;\;$ if x1 > x2.

The other output y2 is the complement of y1.

$\quad$ This element should be used only when the simulation time step is small enough to capture the output transitions with good resolution.