

decoder_2_4.xbe

Attributes

```
xbe name=decoder_2_4 evaluate=yes
Jacobian: variable
input_vars: x0 x1
output_vars: y0 y1 y2 y3
aux_vars:
iparms:
sparms:
rparms:
+ y00=0
+ y01=0
+ y02=0
+ y03=0
+ y10=0
+ y11=0
+ y12=0
+ y13=0
+ y20=0
+ y21=0
+ y22=0
+ y23=0
+ y30=0
+ y31=0
+ y32=0
+ y33=0
+ x_high=1
+ hb2=0
stparms:
igparms:
outparms: x0 x1 y0 y1 y2 y3
```

Description

decoder_2_4.xbe is a 2-to-4 decoder. The parameter `x_high` specifies the high logic level, the low logic level being zero.

The truth table is given below. Note that y_{ij} are real numbers, not restricted to 0 and 1.

x1	x0	y0	y1	y2	y3
0	0	y00	y01	y02	y03
0	1	y10	y11	y12	y13
1	0	y20	y21	y22	y23
1	1	y30	y31	y32	y33

`x0`, `x1`, `y0`, `y1`, `y2`, `y3` are made available as output variables.