

sop_3_6.xbe

Attributes

```
xbe name=sop_3_6 evaluate=yes
Jacobian: variable
input_vars: x1 x2 x3
output_vars: y
aux_vars:
iparms:
+ k11=0 k12=0 k13=0
+ k21=0 k22=0 k23=0
+ k31=0 k32=0 k33=0
+ k41=0 k42=0 k43=0
+ k51=0 k52=0 k53=0
+ k61=0 k62=0 k63=0
sparms:
rparms:
+ k1=0 k2=0 k3=0 k4=0 k5=0 k6=0
+ k0=0
stparms:
igparms:
outparms: x1 x2 x3 y
```

Description

sop_3_6.xbe is used to get a sum-of-products expression for output y in terms of inputs x1, x2, x3.

y is given by

$$y = k_0 + k_1 p_1 + k_2 p_2 + k_3 p_3 + k_4 p_4 + k_5 p_5 + k_6 p_6, \quad (1)$$

where p_j is x_1 , x_2 , x_3 , $x_1 x_2$, $x_1 x_3$, $x_2 x_3$, or $x_1 x_2 x_3$, depending on the integer parameters k_{j1} , k_{j2} , k_{j3} . For example, if $k_{11} = 0$, $k_{12} = 1$, $k_{13} = 1$, then $p_1 = x_2 x_3$.

x1, x2, x3, y are made available as output variables.