

s_filter_lp_2 (subcircuit)

Attributes

```
inputs: x
outputs: y
e_left_nodes:
e_right_nodes:
e_top_nodes:
e_bottom_nodes:
b_left_nodes:
b_right_nodes:
b_top_nodes:
b_bottom_nodes:
parameters:
  a0: computed
  b0: computed
  b1: computed
  b2: computed
  fc: 1000
  k: 1
  xi: 0.7
```

Description

s_filter_lp_2 is a second-order low-pass filter with the transfer function given by

$$y(s) = k \frac{\omega_c^2}{s^2 + 2\xi\omega_c s + \omega_c^2} x(s), \quad (1)$$

where $\omega_c = 2\pi f_c$.