4-input multiplexer   X45339_en

Design a 4-input multiplexer. It has four input signals (*in0-in3*) and two selection signals (*sel* [1:0]). The output must be assigned the input signal corresponding to the selection.

Specification

module *mux4*(*in0*, *in1*, *in2*, *in3*, *sel*, *out*);
    input *in0*, *in1*, *in2*, *in3*;
    input [1:0] *sel*;
    output *out*;

Hint

Use 2-input multiplexers.

Input

- *in0*, *in1*, *in2* and *in3* are the inputs of the multiplexer.

- *sel* encodes the two selection signals.

Output

- *out* is the output of the multiplexer.

Problem information

Author: Jordi Cortadella

Generation: 2026-02-03T12:17:22.235Z