

Laboratorio 6a

Nombre del archivo fuente: ALU1 .hdl

Tiempo limite: 1

Implement in HDL a simple ALU with four basic operations -AND, OR, NOT and addition-carried out on two machine words of 2 bits each. The control lines, f0 and f1, determine which operation is to be performed by the ALU. The signal 00 (f0=0, f1=0) is used for addition ($A + B$); 01 for NOT A; 10 for A OR B, and 11 for A AND B. The input lines A0 and A1 indicate two bits of one word, and B0 and B1 indicate the second word. C0 and C1 represent the output word and C represents the carry if addition is performed. The circuit file must be named ALU1.hdl

Laboratorio 7a

Nombre del archivo fuente: ALU2 .hdl

Tiempo limite: 1

Using digital circuit composition, implement in HDL a simple ALU with four basic operations -AND, OR, NOT and addition-carried out on two machine words of 2 bits each. The control lines, f0 and f1, determine which operation is to be performed by the ALU. The signal 00 (f0=0, f1=0) is used for addition ($A + B$); 01 for NOT A; 10 for A OR B, and 11 for A AND B. The input lines A0 and A1 indicate two bits of one word, and B0 and B1 indicate the second word. C0 and C1 represent the output word and C represents the carry if addition is performed. The circuit file must be named ALU2.hdl