

Full Adder

A full adder adds binary numbers and accounts for values carried in as well as out. A one-bit full adder adds three one-bit numbers, often written as A, B, and Cin. A and B are the operands and Cin is a bit carried in from the previous less-significant stage.

A full adder can be constructed from two half adders by connecting A and B to the input of one half adder, connecting the sum from that to an input to the second adder and then connecting Cin to the other input and OR the two carry outputs.

