

Carry Select Adder (1A)

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Angle

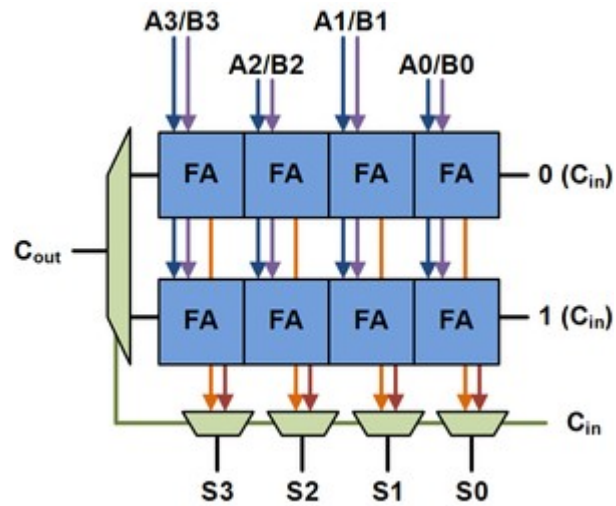
The carry-select adder generally consists of two ripple carry adder and a multiplexer.

Adding two n-bit numbers with a carry-select adder is done with two adders (therefore two ripple carry adders),

in order to perform the calculation twice, one time with the assumption of the carry-in being zero and the other assuming it will be one.

After the two results are calculated, the correct sum, as well as the correct carry-out, is then selected with the multiplexer once the correct carry-in is known.

Carry Select Adder



https://en.wikipedia.org/wiki/Carry-select_adder

References

[1] <http://en.wikipedia.org/>

[2] J-P Deschamps, et. al., "Sunthesis of Arithmetic Circuits", 2006