Design of a full adder using eSim

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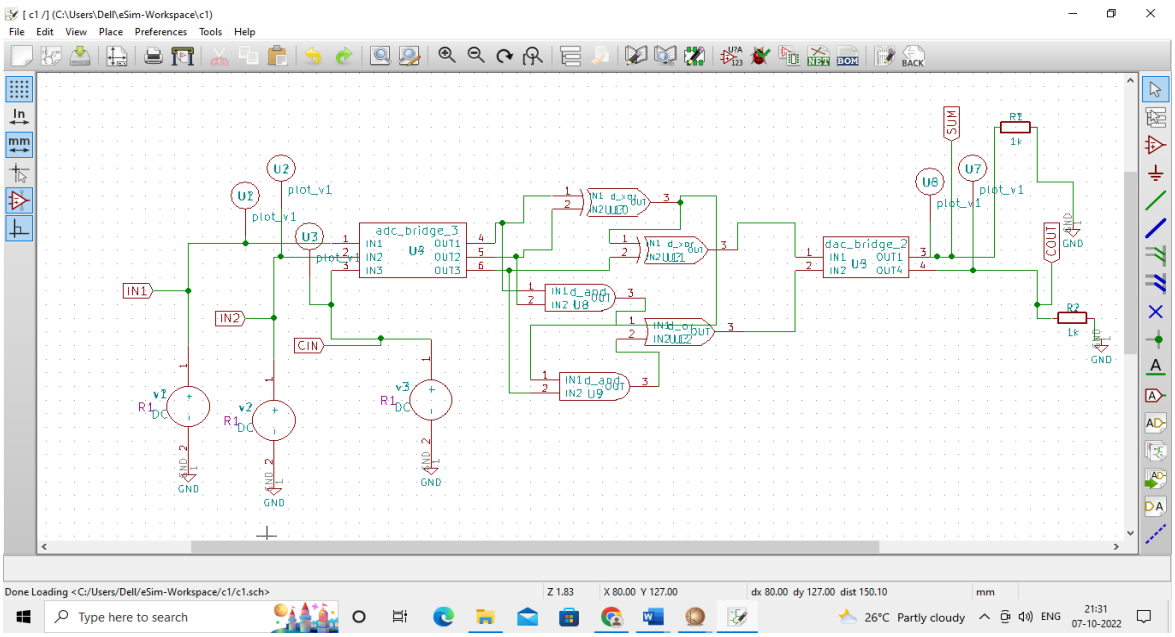
A Full Adder is a Combinational Logic Circuit. It has three inputs. Full adder consists of 3 inputs and 2 outputs. s. The first two inputs are A and B and the third input is an input carry as Cin. Sum and cout are outputs.

Three DC sources are used as input here. These input sources are passed to the Analog to digital converter. Full adder setup is made using the logic gates.2 Xor, 2 And and 1 Or gates are used.

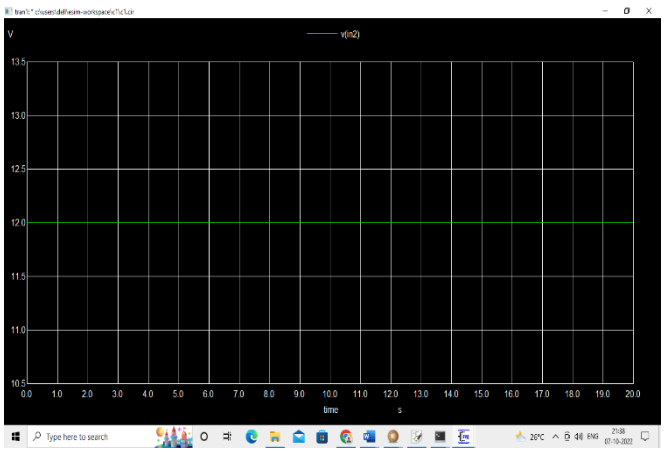
Sum = A^B^Cin

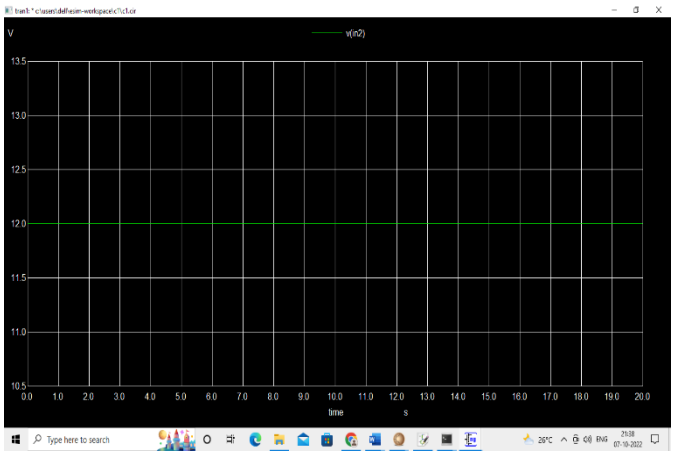
Carry =A&B|A&Cin|B&Cin

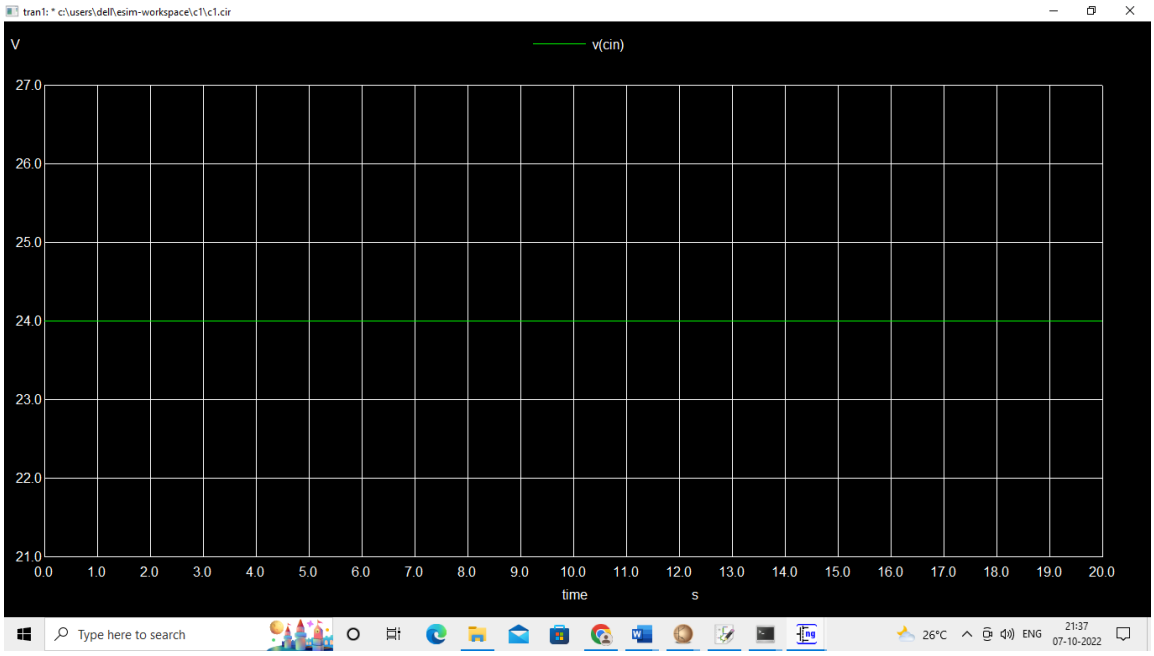
Schematic diagram:



WAVEFORMS:







References:

[1]. Design and Analysis of CMOS Full Adder Saurabh J Shewale1 and Sonal A Shirsath2-International Journal of Advanced Research in Science, Communication and Technology

[2]. Optimized CMOS Design of Full Adder using 45nm Technology, Sheenu Rana M.E.Scholar, Rajesh Mehra Associate Professor-International Journal of Computer applications