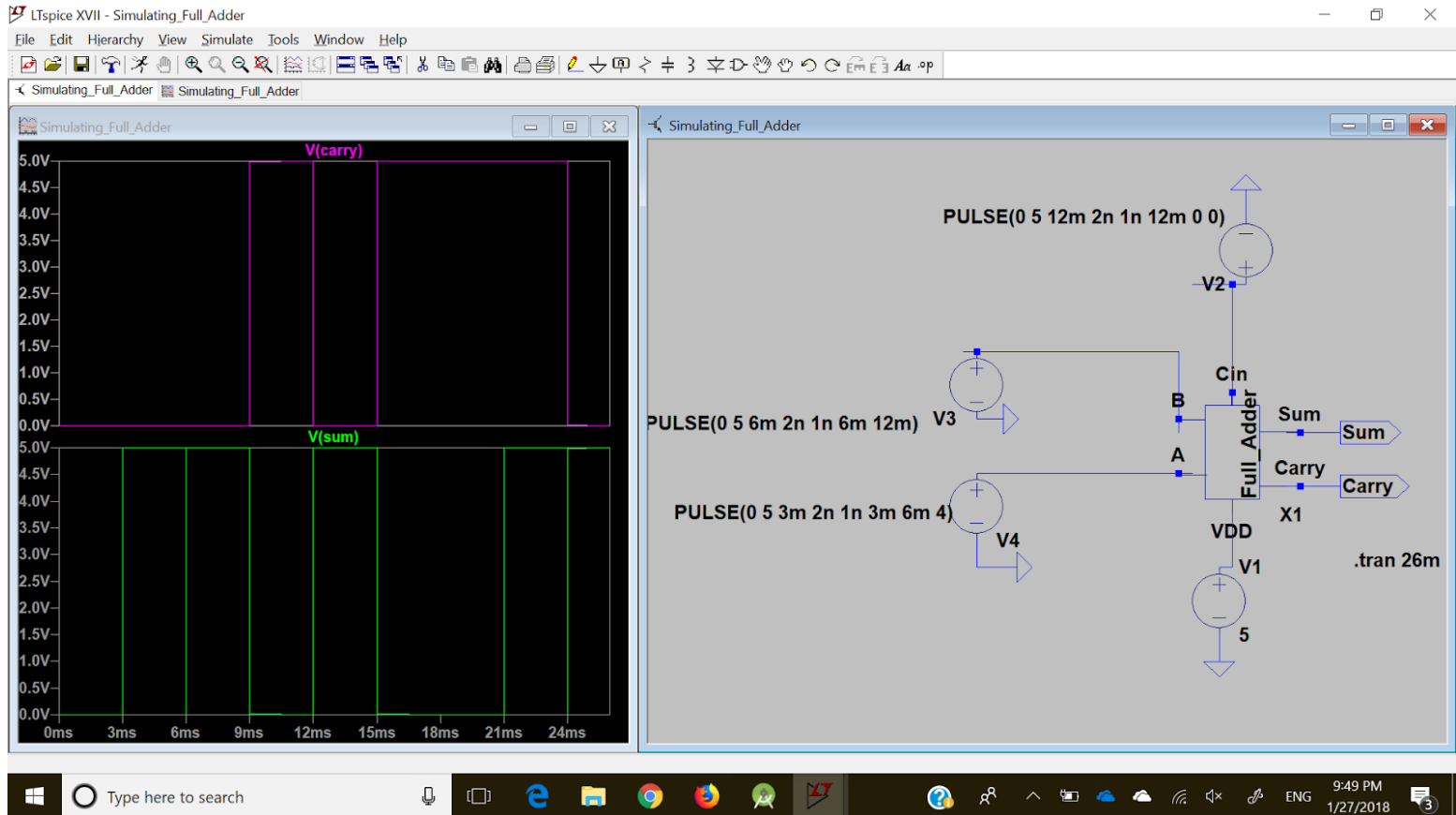


Hw3 Ripple Carry Adder, Multiplier, Metric measurements

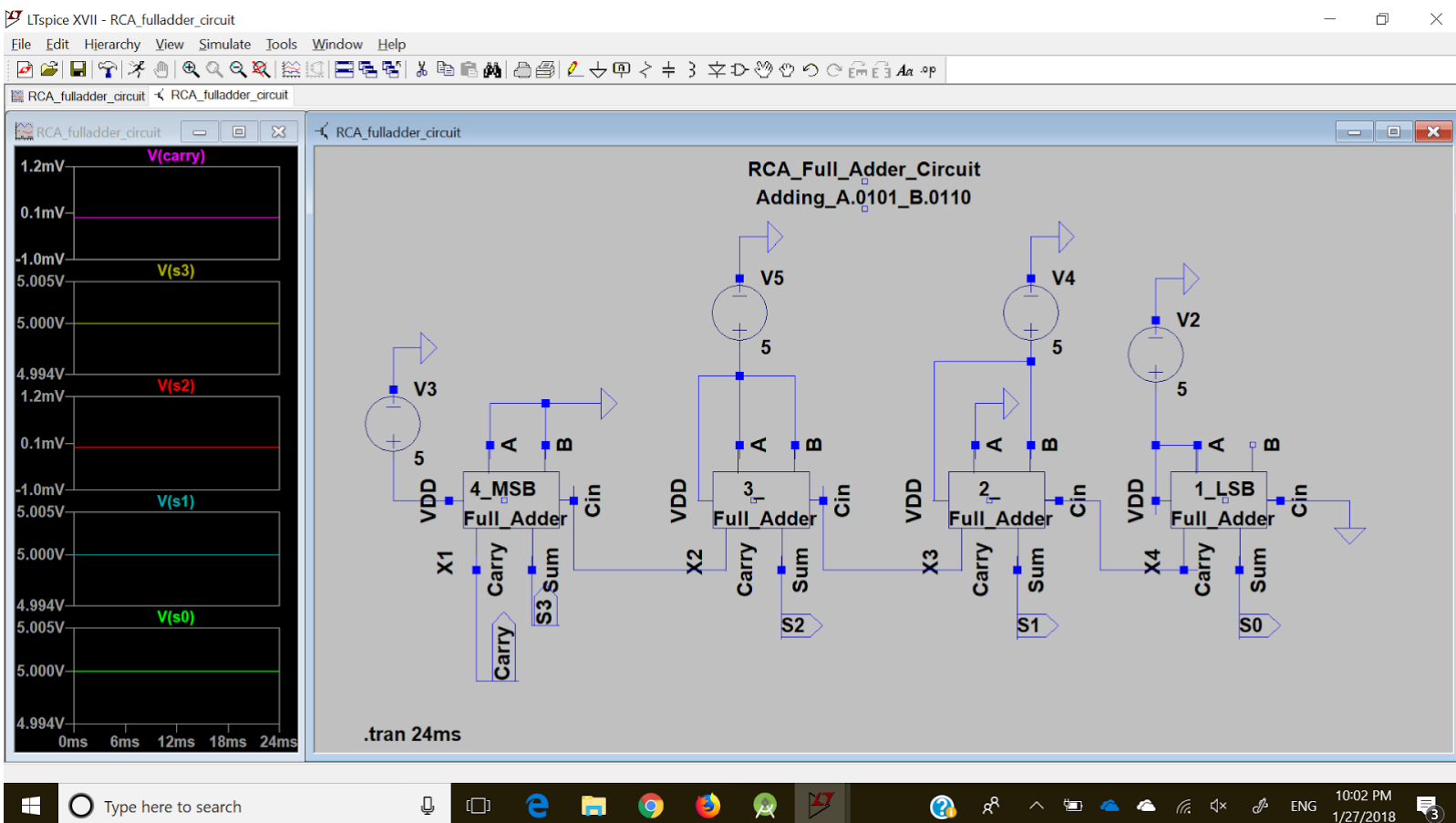
1. OK!!!
2. 4 bit Ripple Carry Adder built with Full Adder
 - a. Below: Full Adder



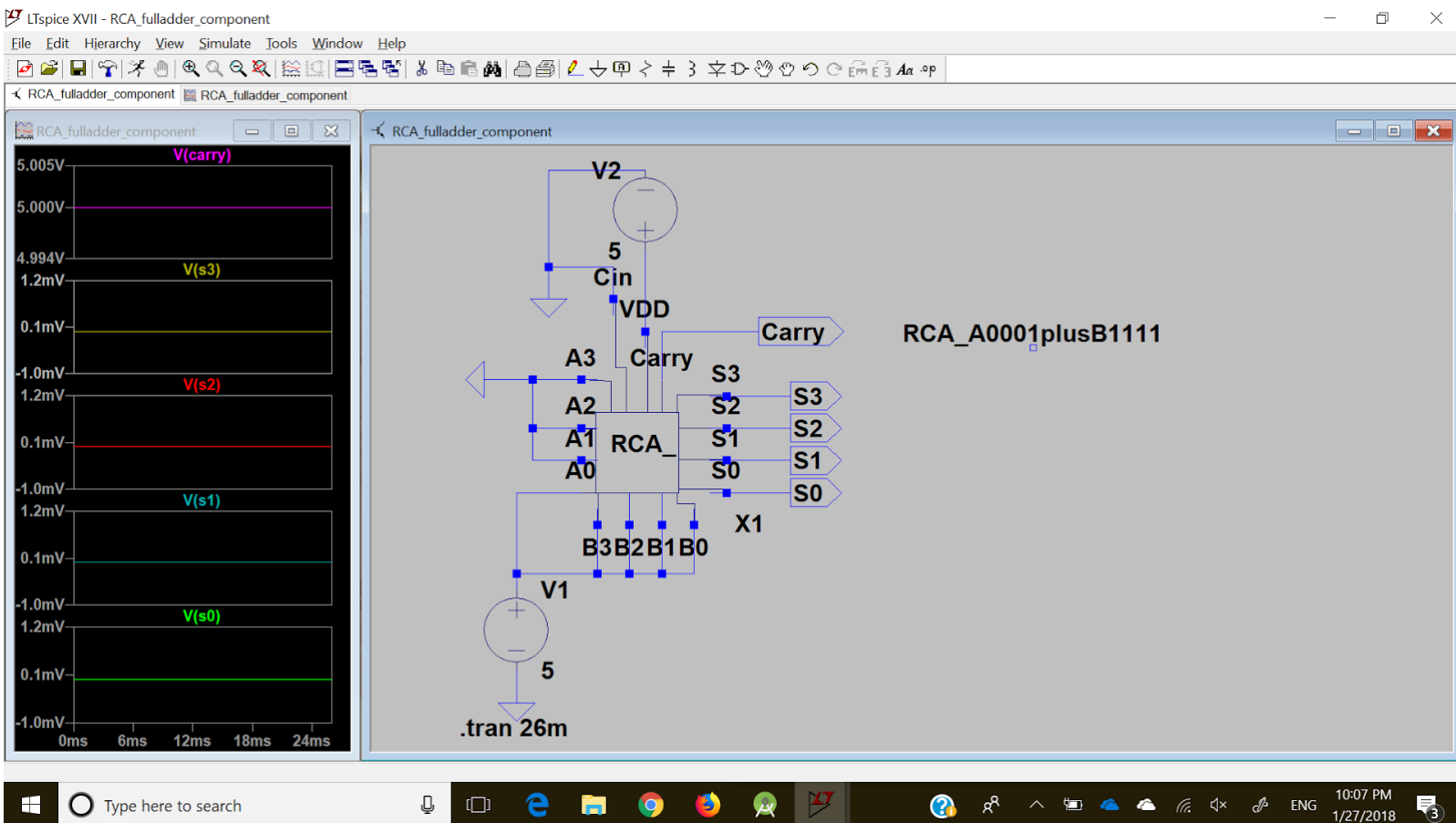
ABCin	000	001	010	011	100	101	110	111
Time[ms]	0	3	6	9	12	15	18	21
Carry	0	0	0	1	0	1	1	1
Sum	0	1	1	0	1	0	0	1

Table: Full Adder Carry and Sum Simulation

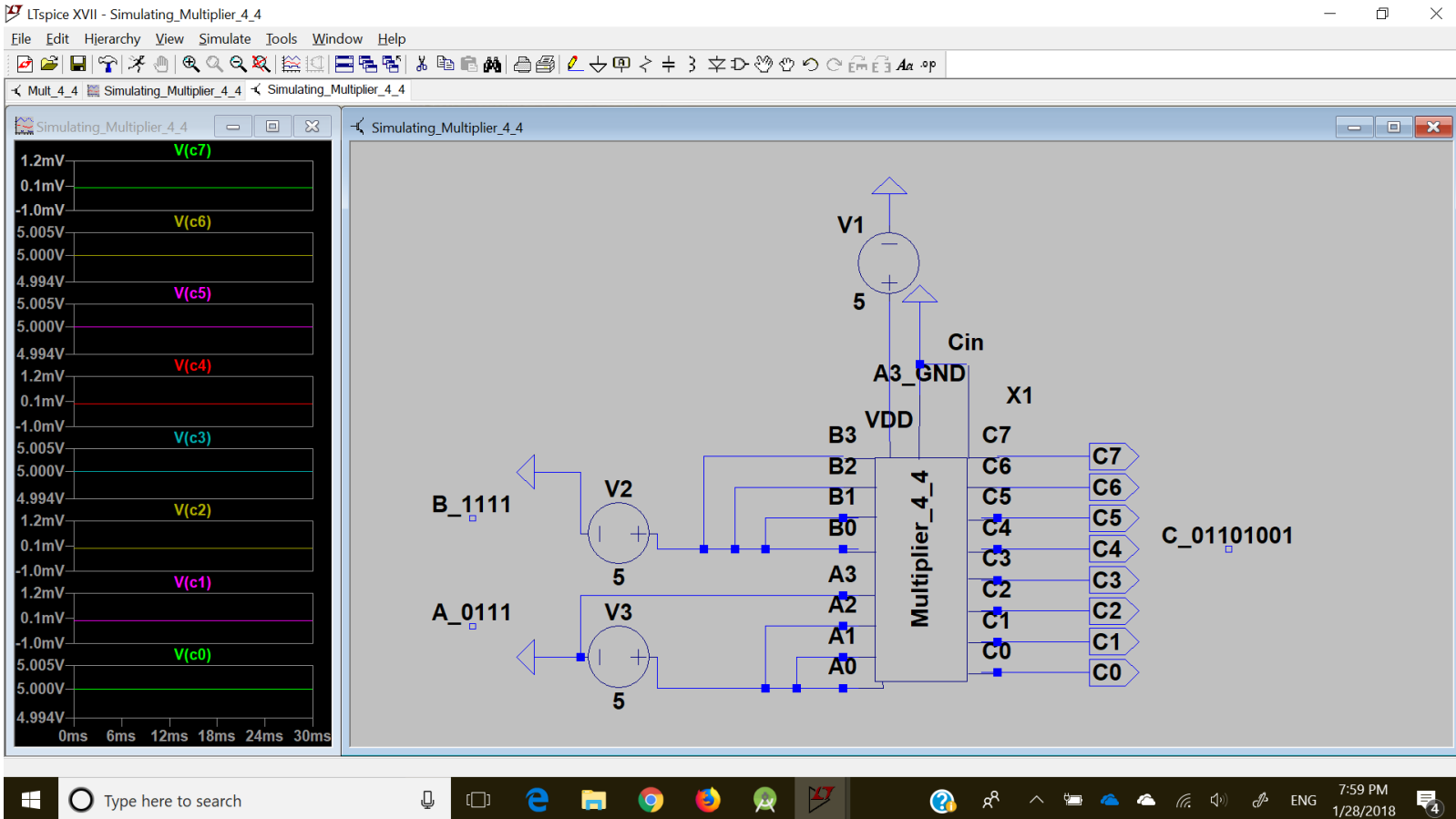
b. Below: Ripple Carry Adder made with Full Adder
Adding A = 0101(5) with B = 0110 (6) to get 1011 (11)

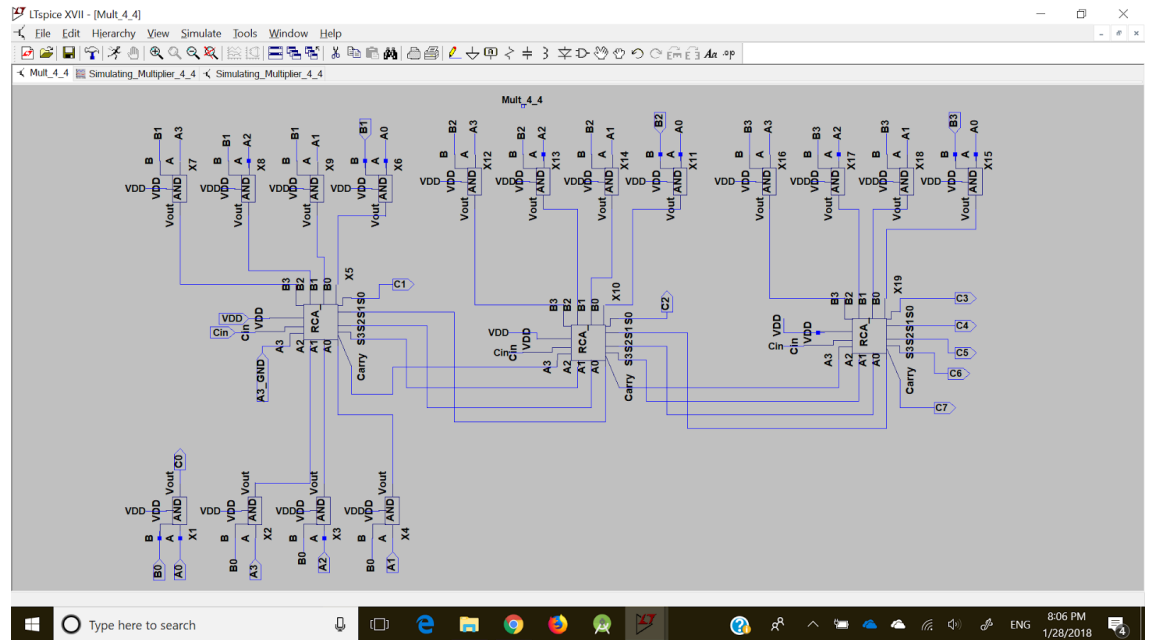


- c. Below: Ripple Carry Adder made with RCA_component
Adding A = 0001(1) with B = 1111 (16) to get 0000 (0) Carry 1



3. 4-bit Multiplier: A = 0111 (7), B = 1111(15), A*B = 01101001 (105)





a.
b.