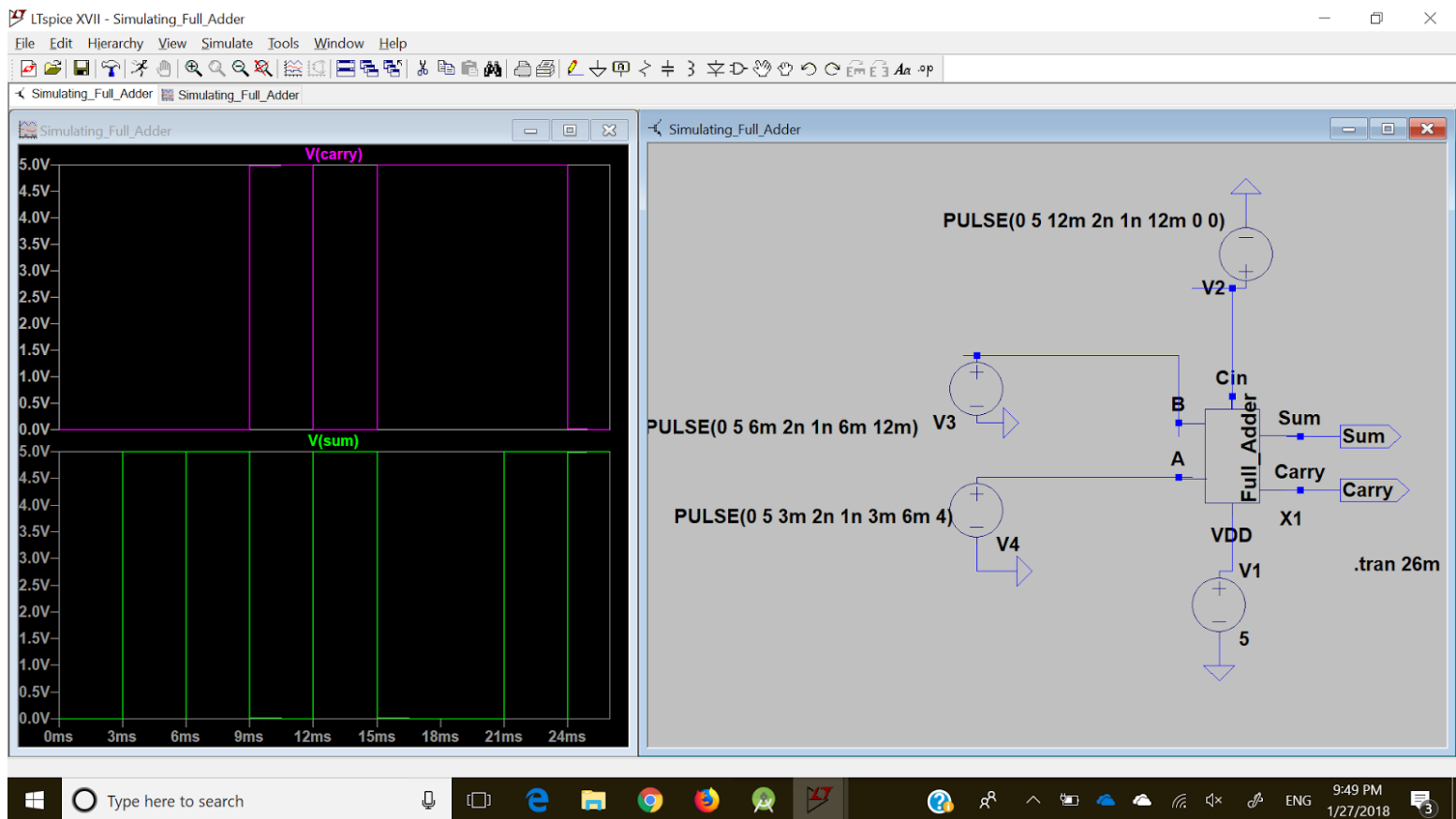


## Hw3 Ripple Carry Adder, Multiplier, Metric measurements

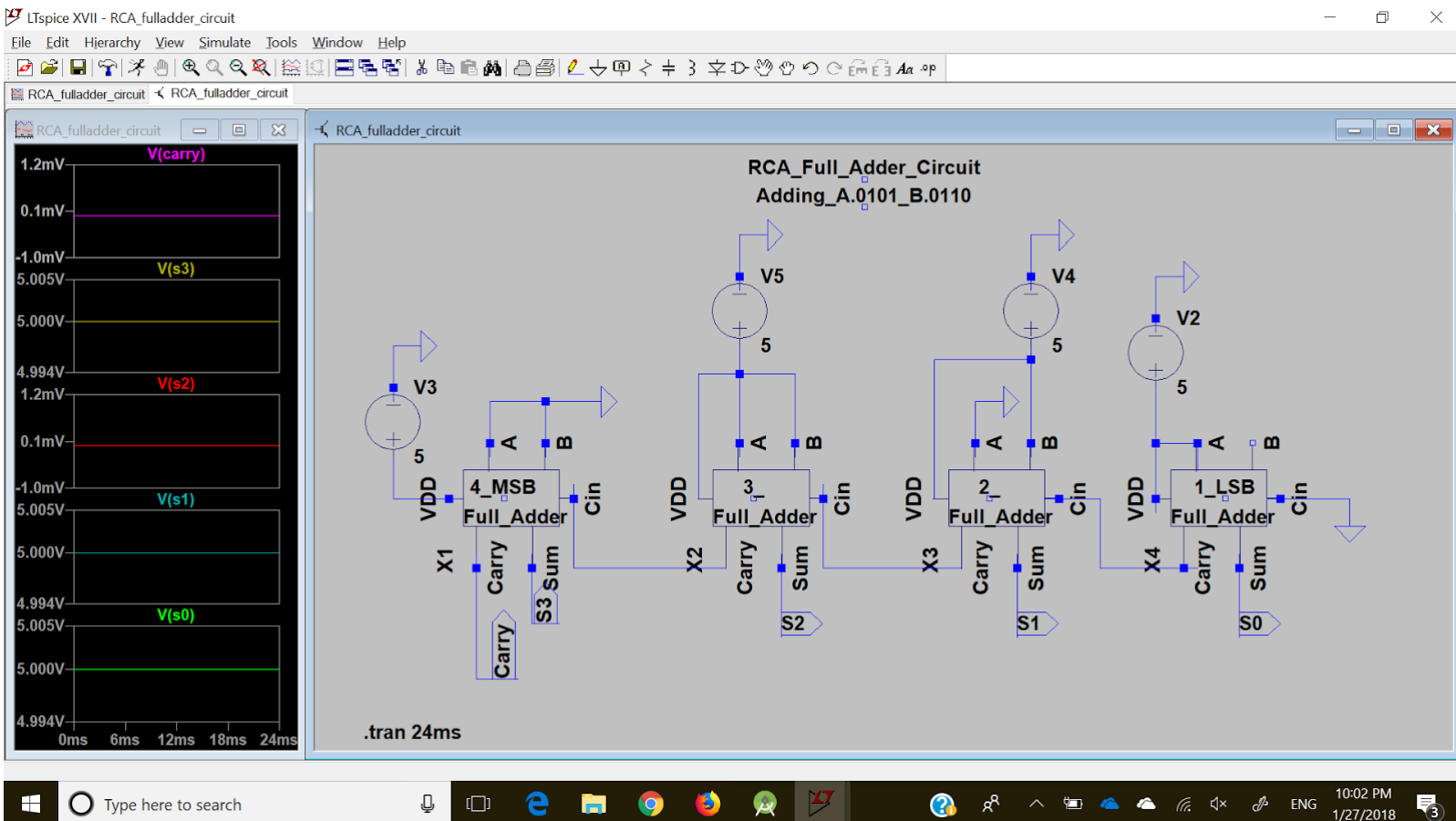
1. OK!!!
2. 4 bit Ripple Carry Adder built with Full Adder
  - a. Below: Full Adder



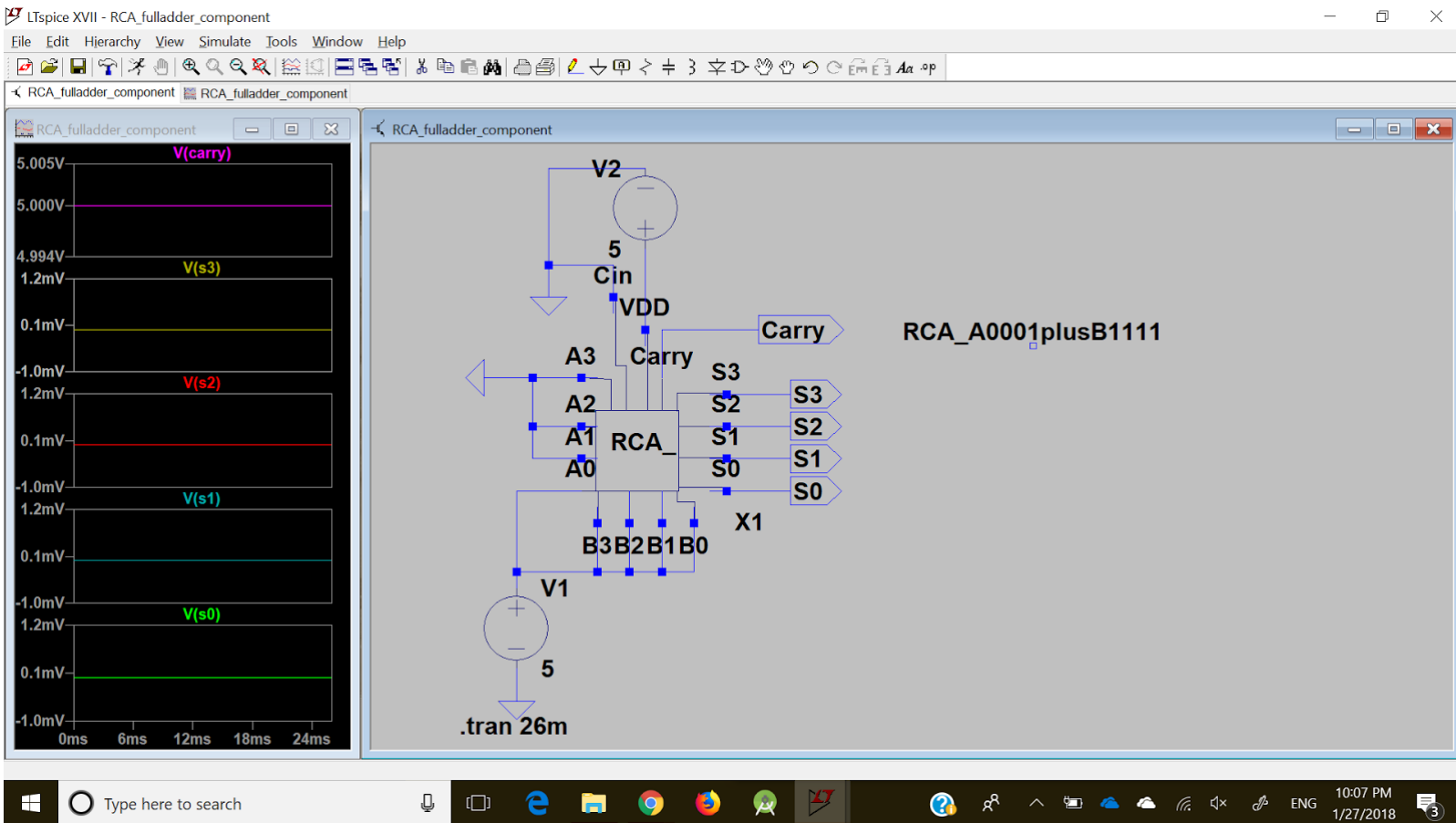
ABCin	000	001	010	011	100	101	110	111
Time[ms]	0	3	6	9	12	15	18	21
Carry	0	0	0	1	0	1	1	1
Sum	0	1	1	0	1	0	0	1

Table: Full Adder Carry and Sum Simulation

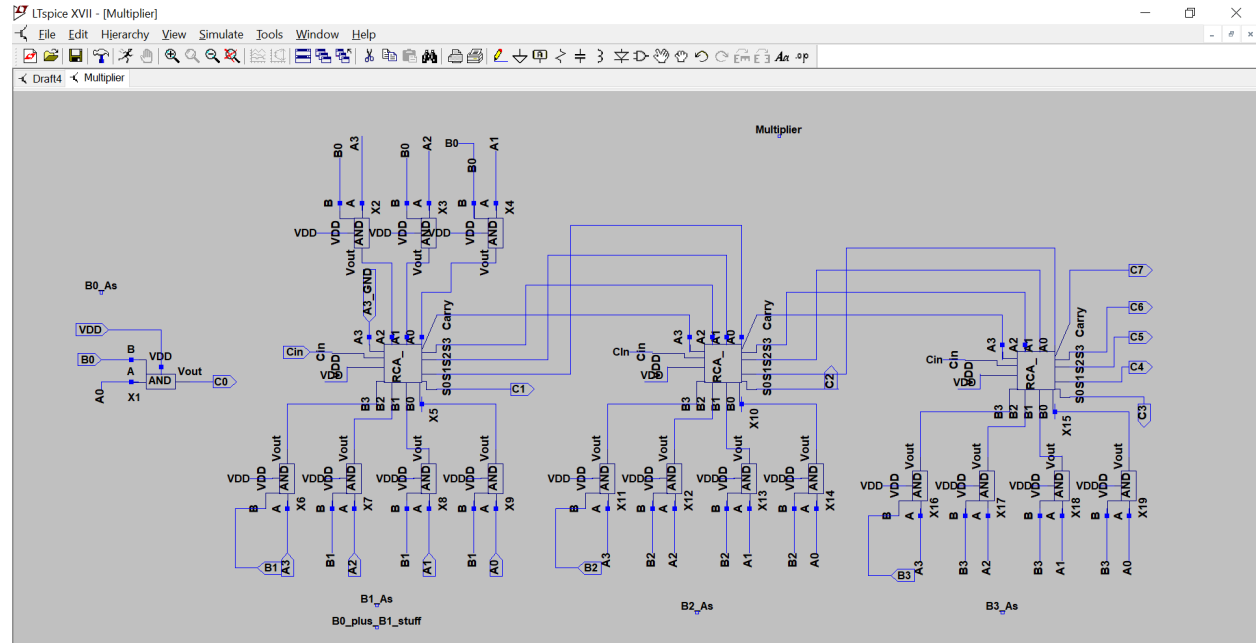
- b. Below: Ripple Carry Adder made with Full Adder  
Adding A = 0101(5) with B = 0110 (6) to get 1011 (11)



- 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.