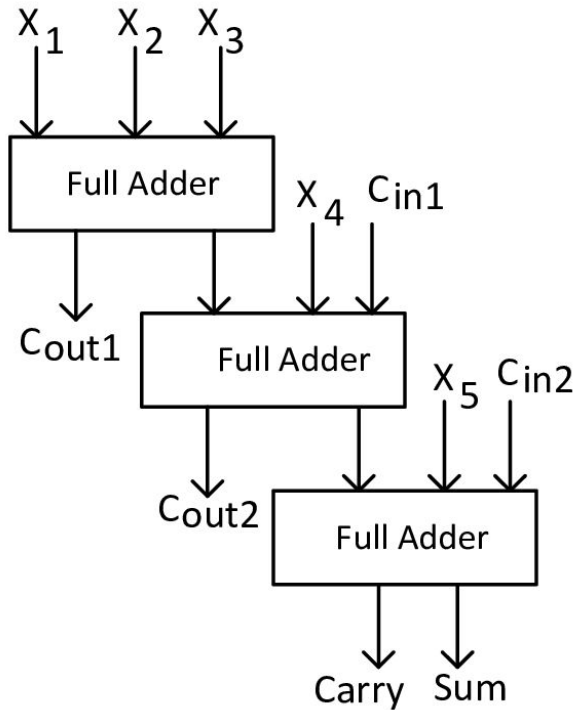


DADDA MULTIPLIER USING 5:2 COMPRESSOR

A 5:2 compressor has 3 full adders. It takes 5 Data inputs along with 2 Carry input and produces 1 Sum and 3 Carry output



A dadda multiplier using 5:2 compressor does 16 X 16 multiplication by

- (i) first reducing the columns of partial products to a max height of 12
- (ii) reducing the columns from (i) to a max height of 5
- (iii) reducing the columns from (ii) to a max height of 2
- (iv) Recursive adder to add the 2 rows from (iii)

OUTPUT :

```
sherin@sherin: ~/Documents/VLSI LAB/project
File Edit View Search Terminal Help
sherin@sherin:~/Documents/VLSI LAB/project$ iverilog dadda.v
sherin@sherin:~/Documents/VLSI LAB/project$ iverilog tb.v
sherin@sherin:~/Documents/VLSI LAB/project$ ./a.out
input 1    input 2    product
  1         1         X
  1         1         1
  2         2         1
  2         2         4
  6         2         4
  6         2        12
sherin@sherin:~/Documents/VLSI LAB/project$
```