

Lab 9.

We have discussed multiplier and distributed arithmetic for use in operations like MAC.

Task 1.

- A. Create multiplier to implement $z = x*y + u + v$, where variables are single bit numbers.
- B. Chain these multipliers to create a multiplier implementing $z = x*b + u + d$, where b and d are single bit wide and x and u are n bit wide.
- C. Chain the $n \times 1$ multipliers obtained in B to make a $n \times m$ multiplier for $z = x*y + u + v$, where x and u are n bit numbers and y and b are m bit numbers.