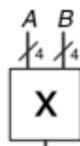


Moltiplicatore

Una porta AND equivale a un moltiplicatore a 1 bit.



(a)

$$\begin{array}{r} A \quad B \\ \times \quad B \\ \hline A_3 \quad A_2 \quad A_1 \quad A_0 \\ \times \quad B_3 \quad B_2 \quad B_1 \quad B_0 \\ \hline A_3B_0 \quad A_2B_0 \quad A_1B_0 \quad A_0B_0 \\ A_3B_1 \quad A_2B_1 \quad A_1B_1 \quad A_0B_1 \\ A_3B_2 \quad A_2B_2 \quad A_1B_2 \quad A_0B_2 \\ A_3B_3 \quad A_2B_3 \quad A_1B_3 \quad A_0B_3 \\ \hline + \quad \quad \quad \quad \quad P_7 \quad P_6 \quad P_5 \quad P_4 \quad P_3 \quad P_2 \quad P_1 \quad P_0 \end{array}$$

(b)

(c)

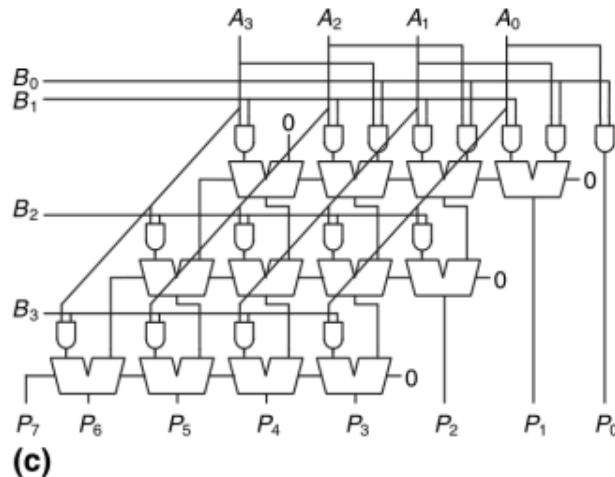


Figure 5.20 4×4 multiplier:
(a) symbol, (b) function,
(c) implementation