

x_0	x_1	x_2	x_3	x_4	x_5	x_6	x_7	y_2	y_1	y_0
1	-	-	-	-	-	-	-	0	0	0
0	1	-	-	-	-	-	-	0	0	1
0	0	1	-	-	-	-	-	0	1	0
0	0	0	1	-	-	-	-	0	1	1
0	0	0	0	1	-	-	-	1	0	0
0	0	0	0	0	1	-	-	1	0	1
0	0	0	0	0	0	1	-	1	1	0
0	0	0	0	0	0	0	1	1	1	1

→ all zeros : dont care

$$y_2 = \bar{x}_0 \cdot \bar{x}_1 \cdot \bar{x}_2 \cdot \bar{x}_3 \left(x_4 + \bar{x}_4 x_5 + \bar{x}_4 \bar{x}_5 x_6 + \bar{x}_4 \bar{x}_5 \bar{x}_6 x_7 \right. \\ \left. + \bar{x}_0 \bar{x}_1 \bar{x}_2 \bar{x}_3 \bar{x}_4 \bar{x}_5 \bar{x}_6 \bar{x}_7 \right) \quad (d)$$

$$\Rightarrow y_2 = \bar{x}_0 \bar{x}_1 \bar{x}_2 \bar{x}_3 \cdot (\bar{x}_4 + \bar{x}_4 x_5 + \bar{x}_4 \bar{x}_5 x_6 + \bar{x}_4 \bar{x}_5 \bar{x}_6)$$

$$\Rightarrow y_2 = \bar{x}_0 \bar{x}_1 \bar{x}_2 \bar{x}_3 (x_4 + x_5 + \bar{x}_5 x_6 + \bar{x}_4 \bar{x}_5)$$

$$y_2 = \bar{x}_0 \bar{x}_1 \bar{x}_2 \bar{x}_3 (x_4 + \bar{x}_4 x_5 + \bar{x}_4 \bar{x}_5)$$

$$y_2 = \bar{x}_0 \bar{x}_1 \bar{x}_2 \bar{x}_3 (1)$$

$$y_2 = \bar{x}_0 \bar{x}_1 \bar{x}_2 \bar{x}_3$$

$$y_1 = \bar{x}_0 \bar{x}_1 (x_2 + \bar{x}_2 x_3 + \bar{x}_2 \bar{x}_3 \bar{x}_4 \bar{x}_5 (x_6 + \bar{x}_6 x_7) + \bar{x}_0 \bar{x}_1 \bar{x}_2 \bar{x}_3 \bar{x}_4 \bar{x}_5 \bar{x}_6 \bar{x}_7) \quad (d)$$

$$\Rightarrow y_1 = \bar{x}_0 \bar{x}_1 (x_2 + \bar{x}_2 x_3 + \bar{x}_2 \bar{x}_3 \bar{x}_4 \bar{x}_5)$$

$$\Rightarrow y_1 = \bar{x}_0 \bar{x}_1 (x_2 + x_3 + \bar{x}_3 \bar{x}_4 \bar{x}_5)$$

$$\Rightarrow y_1 = \bar{x}_0 \bar{x}_1 (x_2 + x_3 + \bar{x}_4 \bar{x}_5)$$

$$y_0 = \bar{x}_0 (x_1 + \bar{x}_1 \bar{x}_2 x_3 + \bar{x}_1 \bar{x}_2 \bar{x}_3 \bar{x}_4 x_5 + \bar{x}_0 \bar{x}_1 \bar{x}_2 \bar{x}_3 \bar{x}_4 \bar{x}_5 \bar{x}_6 x_7) + \quad (d)$$

$$\Rightarrow y_0 = \bar{x}_0 (x_1 + \bar{x}_1 \bar{x}_2 x_3 + \bar{x}_1 \bar{x}_2 \bar{x}_3 \bar{x}_4 x_5 + \bar{x}_1 \bar{x}_2 \bar{x}_3 \bar{x}_4 \bar{x}_5 \bar{x}_6)$$

$$\Rightarrow y_0 = \bar{x}_0 (x_1 + x_2 x_3 + \bar{x}_2 \bar{x}_3 \bar{x}_4 x_5 + \bar{x}_2 \bar{x}_3 \bar{x}_4 \bar{x}_5 \bar{x}_6)$$

$$\Rightarrow y_0 = \bar{x}_0 (x_1 + \bar{x}_2 x_3 + \bar{x}_2 \bar{x}_4 x_5 + \bar{x}_2 \bar{x}_4 \bar{x}_5 \bar{x}_6)$$

$$y_0 = \bar{x}_0 (x_1 + \bar{x}_2 x_3 + \bar{x}_2 \bar{x}_4 x_5 + \bar{x}_2 \bar{x}_4 \bar{x}_6)$$

$$y_0 = \bar{x}_0 x_1 + \bar{x}_0 \bar{x}_2 x_3 + \bar{x}_0 \bar{x}_2 \bar{x}_4 x_5 + \bar{x}_0 \bar{x}_2 \bar{x}_4 \bar{x}_6$$

$$y_1 = \bar{x}_0 \bar{x}_1 (x_2 + x_3 + \bar{x}_4 \bar{x}_5)$$

$$y_2 = \bar{x}_0 \bar{x}_1 \bar{x}_2 \bar{x}_3$$

$$\begin{array}{l} \bar{x}_0 \bar{x}_1 \rightarrow t_{01} \\ \bar{x}_2 \bar{x}_3 \rightarrow t_{23} \end{array} \quad \Bigg] \rightarrow t_{01} \cdot t_{23} = y_2$$

$$\begin{array}{l} \bar{x}_4 \bar{x}_5 \rightarrow t_{45} \\ x_2 + x_3 \rightarrow m_{23} \end{array} \quad \Bigg] \rightarrow t_{45} + m_{23} = w_1, \quad t_{01} \cdot w_1 = y_1$$

$$\bar{x}_0 x_1 \rightarrow f_1$$

$$\bar{x}_0 \bar{x}_2 \rightarrow k_1, \quad k_1 \cdot x_3 = f_2$$

$$k_1 \cdot \bar{x}_4 \rightarrow k_2$$

$$k_2 \cdot x_5 \rightarrow f_3$$

$$k_2 \cdot \bar{x}_0 \rightarrow f_4$$

$$\begin{array}{l} f_1 + f_2 = a \\ f_3 + f_4 = b \end{array} \quad \Bigg] \rightarrow a + b = y_0$$