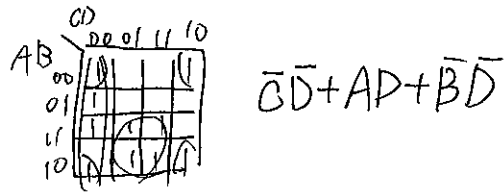


(4). 00101001 + 01001001 (BCD) 運算結果以十六進位表示

$$\begin{array}{r} 00101001 \quad 29 \\ + 01001001 \quad 49 \\ \hline 01110010 \quad 78 \\ + \quad \quad 0110 \\ \hline 01111000 \end{array}$$

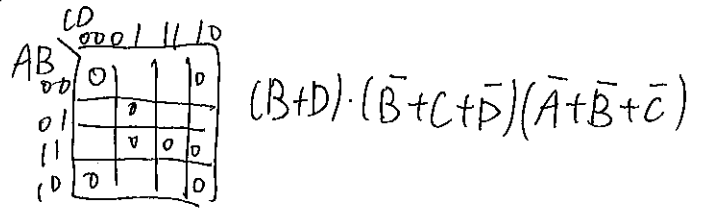
3. $F(A,B,C,D) = \Sigma(0,2,4,8,9,10,11,12,13,15)$



(5). L 的 ASCII 碼以十六進位表示

A = 41H, L = 4CH.

4. $G(A,B,C,D) = \Sigma(1,3,4,6,7,9,11,12)$



(7). t 的 ASCII 碼以十六進位表示

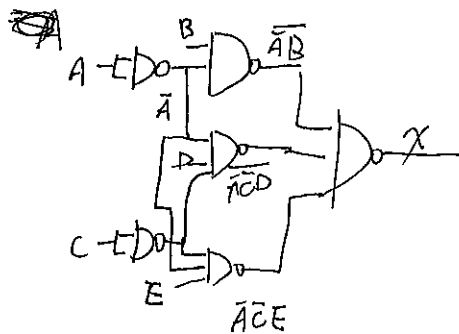
a = 61H, t = 74H.

5. $X = \bar{A}[B + \bar{C}CD + E]$

$$\begin{aligned} &= \bar{A}B + \bar{A}\bar{C}D + \bar{A}CE \\ &= \overline{\bar{A}B + \bar{A}\bar{C}D + \bar{A}CE} \end{aligned}$$

$$\overline{\bar{A}B + \bar{A}\bar{C}D + \bar{A}CE}$$

A B C



(8). '5' = 35H. 加入同位元便成奇同位

01101011

(10). 30 - 13 2's 結果

$$\begin{array}{r} 0011110 \\ + 1110011 \quad 13 \text{ 2's} \\ \hline 0010001 \end{array}$$

2. (2). $\overline{\bar{A}B(CD + \bar{E}F)(\bar{A}B + \bar{C}D)}$

$$= \overline{AB + \bar{C}D} \cdot \overline{\bar{E}F} + \overline{\bar{A}B} \cdot \overline{\bar{C}D}$$

$$= \overline{AB + (\bar{C} + D)(E + \bar{F}) + ABCD}$$

6. (1). $A\bar{B} + \overline{A(B+C)} + B(\bar{B} + C)$

$$= A\bar{B} + \overline{A\bar{B}C} + \bar{B}C = A\bar{B}$$

(2). $\overline{AB + AC + \bar{A}BC} = \overline{A\bar{B} \cdot \bar{A}C + \bar{A}BC}$

$$= (\bar{A} + \bar{B})(\bar{A} + \bar{C}) + \bar{A}BC$$

$$= \bar{A}\bar{A} + \bar{A}\bar{B} + \bar{A}\bar{C} + \bar{B}\bar{C} + \bar{A}BC$$

$$= \bar{A} + \bar{B}\bar{C}$$