

$$C_i = \bar{A}_i B_i C_{i-1} + A_i \bar{B}_i C_{i-1} + A_i B_i \bar{C}_{i-1} + A_i B_i C_{i-1}$$

$$a = \bar{A}_3 \bar{A}_2 \bar{A}_0 + \bar{A}_3 A_1 A_0 + A_2 \bar{A}_1 A_0 + A_3 \bar{A}_2 \bar{A}_1$$

$$b = \bar{A}_3 \bar{A}_1 \bar{A}_0 + \bar{A}_1 \bar{A}_0 + \bar{A}_2 \bar{A}_1 + \bar{A}_3 \bar{A}_2$$

$$c = \bar{A}_3 A_2 + \bar{A}_2 \bar{A}_1 + \bar{A}_2 A_0$$

$$d = \bar{A}_2 A_1 A_0 + \bar{A}_2 A_0 + A_1 \bar{A}_0 + \bar{A}_2 A_1$$

$$e = A_1 \bar{A}_0 + \bar{A}_2 \bar{A}_0$$

$$f = \bar{A}_1 A_0 + A_2 \bar{A}_0 + A_2 \bar{A}_1 + A_3 \bar{A}_1$$

$$g = \bar{A}_2 A_1 + A_1 \bar{A}_0 + A_2 \bar{A}_1 + A_3 \bar{A}_1$$

$$a = \bar{A}_3 \bar{A}_2 \bar{A}_0 + \bar{A}_3 A_1 A_0 + A_2 \bar{A}_1 A_0 + A_3 \bar{A}_2 \bar{A}_1$$

$$b = \bar{A}_3 \bar{A}_1 \bar{A}_0 + \bar{A}_1 \bar{A}_0 + \bar{A}_2 \bar{A}_1 + \bar{A}_3 \bar{A}_2$$

$$c = \bar{A}_2 \bar{A}_1 + \bar{A}_2 A_0 + \bar{A}_3 A_2$$

$$d = A_2 \bar{A}_1 A_0 + \bar{A}_2 \bar{A}_0 + A_1 \bar{A}_0 + \bar{A}_2 A_1$$

$$e = \bar{A}_2 \bar{A}_0 + A_1 \bar{A}_0$$

$$f = \bar{A}_1 A_0 + A_2 \bar{A}_1 + A_2 \bar{A}_0 + A_3 \bar{A}_1$$

$$g = \bar{A}_2 A_1 + A_2 \bar{A}_1 + A_2 \bar{A}_0 + A_3 \bar{A}_2$$

$$CP_3 = \bar{Q}_3 \bar{Q}_2 \bar{Q}_1 CP_D + Q_3 Q_2 Q_1 CP_U$$

$$CP_2 = \bar{Q}_2 \bar{Q}_1 CP_D + Q_2 Q_1 CP_U$$

$$CP_1 = \bar{Q}_1 CP_D + Q_1 CP_U$$

$$CP_0 = CP_D + CP_U$$