

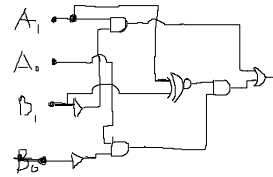
i	A <sub>1</sub>	A <sub>0</sub>	B <sub>1</sub>	B <sub>0</sub>	A=B	A>B	A<B
0	0	0	0	0	1	0	0
1	0	0	0	1	0	0	1
2	0	0	1	0	0	0	1
3	0	0	1	1	0	0	1
4	0	1	0	0	0	1	0
5	0	1	0	1	0	0	1
6	0	1	1	0	0	0	1
7	0	1	1	1	0	0	1
8	1	0	0	0	0	1	0
9	1	0	0	1	0	0	1
10	1	0	1	0	0	0	1
11	1	0	1	1	0	0	1
12	1	1	0	0	0	1	0
13	1	1	0	1	0	0	1
14	1	1	1	0	0	0	1
15	1	1	1	1	1	0	0

$$\begin{aligned} & \bar{A}_1 A_0 \bar{B}_1 \bar{B}_0 \\ & A_1 \bar{A}_0 \bar{B}_1 \bar{B}_0 + \\ & A_1 \bar{A}_0 \bar{B}_1 B_0 + \\ & A_1 A_0 \bar{B}_1 \bar{B}_0 + \\ & A_1 A_0 \bar{B}_1 B_0 + \\ & A_1 A_0 B_1 \bar{B}_0 \end{aligned}$$

$$\begin{aligned} & A_1 \bar{B}_1 (\bar{A}_0 \bar{B}_0 + \bar{A}_0 B_0 + A_0 \bar{B}_0 + A_0 B_0) + \bar{A}_1 A_0 \bar{B}_1 \bar{B}_0 + A_1 A_0 B_1 \bar{B}_0 \\ & A_1 \bar{B}_1 ((A_0 \oplus B_0) + (\bar{A}_0 \oplus B_0)) + \bar{A}_1 A_0 \bar{B}_1 \bar{B}_0 + A_1 A_0 B_1 \bar{B}_0 \end{aligned}$$

$$A_1 \bar{B}_1 + A_1 \bar{B}_0 (\bar{A}_1 \bar{B}_1 + A_1 B_1)$$

$$A_1 \bar{B}_1 + A_0 \bar{B}_0 (\bar{A}_1 \oplus B_1)$$



$$\begin{aligned} & = \bar{A}_1 \bar{A}_0 \bar{B}_1 \bar{B}_0 + \bar{A}_1 A_0 \bar{B}_1 B_0 + A_1 \bar{A}_0 B_1 \bar{B}_0 + A_1 A_0 B_1 B_0 \\ & = \bar{A}_0 \bar{B}_0 (\bar{A}_1 \bar{B}_1 + A_1 B_1) + A_0 B_0 (\bar{A}_1 \bar{B}_1 + A_1 B_1) \\ & = \bar{A}_0 \bar{B}_0 (\bar{A}_1 \oplus B_1) + A_0 B_0 (\bar{A}_1 \oplus B_1) \\ & (\bar{A}_1 \oplus B_1) (\bar{A}_0 \bar{B}_0 + A_0 B_0) \\ & (\bar{A}_1 \oplus B_1) \cdot (\bar{A}_0 \oplus B_0) \end{aligned}$$

$$A < B$$

$$= \bar{A}_1 \bar{A}_0 B_1 \bar{B}_0 + \bar{A}_1 \bar{A}_0 \bar{B}_1 B_0 + \bar{A}_1 A_0 B_1 \bar{B}_0 + \bar{A}_1 A_0 \bar{B}_1 B_0 + A_1 \bar{A}_0 B_1 \bar{B}_0 + A_1 \bar{A}_0 \bar{B}_1 B_0$$

$$= \bar{A}_1 B_1 (\bar{A}_0 \bar{B}_0 + \bar{A}_0 B_0 + A_0 \bar{B}_0 + A_0 B_0) + \bar{A}_1 \bar{A}_0 \bar{B}_1 B_0 + A_1 \bar{A}_0 B_1 \bar{B}_0$$

$$= \bar{A}_1 B_1 ((A_0 \oplus B_0) + (\bar{A}_0 \oplus B_0)) + \bar{A}_1 \bar{A}_0 \bar{B}_1 B_0 + A_1 \bar{A}_0 B_1 \bar{B}_0$$

$$= \bar{A}_1 B_1 + \bar{A}_0 \bar{B}_0 (\bar{A}_1 \bar{B}_1 + A_1 B_1)$$

$$= \bar{A}_1 B_1 + \bar{A}_0 \bar{B}_0 (\bar{A}_1 \oplus B_1)$$

