

I forgot to attach this problem with the lap report

1.6 Problem

A 4-input , 3-output circuit that compares 2-bit unsigned numbers and output a (1) on one of the three output lines according to weather the first number is greater than , equal to , or less than the other number , you can only use two 4X1 multiplexers .

A1	A0	B1	B0	A>B	A<B	A==B
0	0	0	0	0	0	1
0	0	0	1	0	1	0
0	0	1	0	0	1	0
0	0	1	1	0	1	0
0	1	0	0	1	0	0
0	1	0	1	0	0	1
0	1	1	0	0	1	0
0	1	1	1	0	1	0
1	0	0	0	1	0	0
1	0	0	1	1	0	0
1	0	1	0	0	0	1
1	0	1	1	0	1	0
1	1	0	0	1	0	0
1	1	0	1	1	0	0
1	1	1	0	1	0	0
1	1	1	1	0	0	1

Table 4 (truth table of the 2-bit comparator)

