

ECE 130 HW#9 Due Tuesday, April 12

1. Implement the canonical expression  $f(x,y,z) = \Sigma(1,3,5,6,7)$  using only ONE 74LS138 decoder and as many 2-input NAND gates as you like. Build your circuit using simulation software and verify that it gives the correct output.

2. Implement a 5:32 binary decoder with active-low enable and active-low outputs using 74LS138 decoders and any glue logic (AND, OR, NOT, etc.) that you desire. Build your circuit using simulation software and verify that it gives the correct output.