

CME2003 Logic Design

Experiment 3

Design a circuit that displays the odd and even integers between 0-7. Use a 3x8 DEMUX and 2-input AND gates to implement the design.

$$F_1(A, B, C) = \prod (0, 2, 4, 6)$$
$$F_2(A, B, C) = \prod (1, 3, 5, 7)$$

Preliminary Work

Draw truth tables and logic diagrams of the design.

Construct and test the designed circuit in MaxPlus II. Bring the logic diagrams and waveforms.

Come with your PreLab report and data sheets of the ICs you used in your designs.

Prepare the PreLab report **individually**.

Equipments

- 74LS138 (DeMultiplexer) and other necessary ICs such as Inverter, AND
- Breadboard
- Connection cables