University of Bridgeport

INTRO TO VLSI DESIGN
CPE 448

LAB
ASSIGNMENT-5
10%

VLSI LAB

Due On: October 30, 2002
OBJECTIVE: CREATE A FULL ADDER

PROCEDURE:

1. Design FULL adder circuit using transistors in DA.
2. Verify your circuit using Accusim.
4. During the layout, you are not allowed to use 2 HALF-ADDER to make a FULL-ADDER circuit.

DEMO:

These will be expected from each individual:
   i. Schematics of Half Added [i.e. circuit drawn from Design Architect]
   ii. Use of Accusim for the Simulation[with the waveform]
   iii. Use of IC Station for the Layout.
   iv. Exact Area will be calculated, and tabulate.

REPORT:

Hard copy Report should contain following:
   i. Number of components used [ example NMOS, CMOS, PMOS, N-well etc.]
   ii. How did you come up with this design?
   iii. Is your design optimal one? Why?
   iv. Co-ordinates and area of the layout created using IC station.