

ECE 204L - BINARY NUMBERS AND CODES - LAB 9 BINARY ADDERS

WINTER 2004

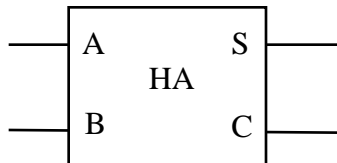
A.P. FELZER

OBJECTIVE

The objective of this lab is to design and build a binary adder.

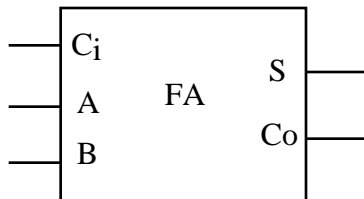
LAB

1. Given the following half-adder



- Prelab** - Write out the truth table for the HA
- Prelab** - Design your HA with AOI gates. Include pin numbers on your logic diagram
- Build and test your HA
- Verify that your HA is working correctly

2. Given the following full adder FA



- Prelab** - Write out the truth table for a FA
- Prelab** - Draw a block diagram of the FA made from two half-adders and an OR gate
- Build and test your FA
- Document that your FA is working correctly