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Computer Science 3210 Lab 02 section b and section c

Lab 2(b) Problem 1

Design an 8-bit full adder. Draw the block diagram

S4

1 – bit

Full Adder

1 – bit

Full Adder

1 – bit

Full Adder

1 – bit

Full Adder

1 – bit

Full Adder

1 – bit

Full Adder

1 – bit

Full Adder

1 – bit

Full Adder

A0

B0

Carry in

A1

B1

A2

B2

A3

B3

A4

B4

A5

B5

A6

B6

A7

B7

Carry Out

S0

S1

S2

S3

S5

S6

S7

Lab 2(b) Problem 2

Draw the circuit for the following Boolean expression:

P = (X and Y) or (not X or Z)

X

Y

Z

P

Lab 2(c) Problems Registers and Memory

2. Store the following value in EAX register: 12784569h

31

0

4 Bytes

|  |  |  |  |
| --- | --- | --- | --- |
| 0001 0010 | 0111 1000 | 0100 0101 | 0110 1001 |