York University

Dept. of Computer Science and Engineering

Hardware and Architecture for DSP

CSE4210

HW 1
Due Oct 1, 2007

1. Draw the circuit (at single bit adder, multiplexer and gate level) to add 2 7 bits numbers using conditional sum adder

2. Consider the IEE 754 single precision format, if A =(1).0100… x 2^{-126}, B = (1).000… x 2^{-3}, C = (1).000… x 2^{5}
    a. What is the result of A*B*C RM round if performed (A*B)*C
    b. Repeat if performed A*(B*C)

3. Using residues of the form 2^{k} and 2^{k-1}, create an efficient residue system to include the range 32. Perform the operation -3*2+7