Score: _____   Name: _____

ECE 3055 Quiz II, Wednesday, January 28

The instruction, **or $2,$3,$5** is executed on the MIPS single clock cycle datapath. Assume the registers are all loaded with the register number prior to execution and all data memory words are loaded with the memory address of the first byte of the word. Fill in the values of the following control signals and buses.

MIPS Datapath bus values in hexadecimal

Instruction Bus = __00651025__

Register file Read Data Bus 1 = __00000003__

Register file Read Data Bus 2 = __00000005__

Write Register Bus = __02__

Write Data Bus = __00000007__

MIPS Control Signals in Binary

MemWrite = __0__

ALUSrc = __0__

PCSrc = __0__

ALU Op (two-bits) = __10__

ALU control (three bits) = __001__