

LAB 4 DEMO – Single Cycle CPU and C Stuff Cont....

Team _____

Reviewer _____

Designing a Single Cycle CPU (430)

Hardware - 280

(100) All modules integrated

Data Memory in SRAM

Instruction Memory on Cyclone II

Register File

ALU

Program Counter

Instruction Register

Instruction Decoder

Control Block

Instruction Address Calculation

Multiplexers

(60) Functional

Fully

Partially

None

(40) Single Cycle Instruction Cycle Implemented

How demonstrated

(60) All Instructions Supported

NOP, ADD, SUB, AND, OR, XOR, SLT, SLL, LW, SW, J, JR, BGT

How Does Program Start and End

(10) How are Instructions Entered into Instruction Memory

(10) How is Data Entered into Data Memory

Software 100

(50) Test Program Assembled

(50) Test Program Executes

Fully

Partially

None

Presentation 50