

CS152
Laboratory #4: Design Review
Discussion 102: Friday 12:30-2:00pm
Review Date: February 28, 1996
Due Date: March 1, 1996

Young Cho

D. E. Culler

Group Name: _____
Group Account: _____
Total Points: _____

I	Introduction.....	(/10)
A	Cover sheet	(/01)
B	Table of Content	(/01)
C	Background.....	(/08)
II	Laboratory Exercises	(/70)
A	Step 0: Building VHDL model.....	(/04)
	1 buft32.vhd	
	2 Symbol	
B	Step 1: VHDL Implementation	(/12)
	1 Brief description	
	2 Component testing	
	3 Encapsulation of adder - CP	
	4 ALU encapsulation	
	5 Comparator in gates and VHDL	
	6 Extender in VHDL	
C	Step 2: Single Cycle Datapath.....	(/20)
	1 Initial datapath (step 2.1)	
	2 Decoder (step 2.2)	
D	Step 3: PC and Memory	(/20)
	1 PC in VHDL	
	2 Datapath with PC and Memory	
	3 Testing Procedures	
	4 lw and sw implementation	
	5 jr and beq implementation	
E	Complete Single Cycle Datapath.....	(/14)
	1 Show that datapath complete and functional	
III	Conclusion	(/10)
A	Results	
B	Experience - Partnership	
C	Future	
IV	Appendix.....	(/10)
A	Other Testing Vectors	
	1 On all the components in Step 0 and 1	
	2 Progressive testing vectors for Single Cycle Datapath	
B	VHDL code listings	
C	Logs and others	