

**Due to Ms. Sue Peti by 5pm on Friday 1 March 2002**  
*this project counts as 10% of your course grade*

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1. Do **Lab Exercise 4 on page 61** of *Rapid Prototyping of Digital Systems, Second Edition*.

Turn in:

- a) a document that describes your design and any design decisions that you made (10 points)
- b) a readable (not microscopic) printout of the schematic (3 points)
- c) a printout of the test vectors and simulation output that shows that the circuit works as expected, annotated to explain to me what it is showing (10 points)
- d) a printout of any appropriate timing analyses (2 points)
- e) a signature on the statement below (print out this page) by Prof. Walker, by the TA (Meiduo Wu), or by two other students in the class (25 points):

I certify that \_\_\_\_\_ has successfully downloaded this design to a UP1 board and the design works correctly.

\_\_\_\_\_ Name \_\_\_\_\_ Date

\_\_\_\_\_ Name \_\_\_\_\_ Date

2. Do **Lab Exercise 11 on page 62** of *Rapid Prototyping of Digital Systems, Second Edition*, testing both the add and subtract functions of the LPM\_ADD\_SUM megafunction.

Turn in:

- a) printouts (a) through (e) similar to those in problem 1 above (25 points)
- b) a signature on the statement below (print out this page) by Prof. Walker, by the TA (Meiduo Wu), or by two other students in the class (25 points):

I certify that \_\_\_\_\_ has successfully downloaded this design to a UP1 board and the design works correctly.

\_\_\_\_\_ Name \_\_\_\_\_ Date

\_\_\_\_\_ Name \_\_\_\_\_ Date