

Department of Electrical and Computing Engineering

## UNIVERSITY OF CONNECTICUT

## ECE 3411 Microprocessor Application Lab: Fall 2015 Question XIV

There are  $\frac{4 \text{ question}}{1000 \text{ to the instructions given}}$ . There are  $\frac{2 \text{ pages}}{1000 \text{ gas}}$  in this quiz booklet. Answer each question according to the instructions given.

You have **5 minutes** to answer the questions.

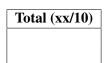
If you find a question ambiguous, be sure to write down any assumptions you make. **Be neat and legible.** If we can't understand your answer, we can't give you credit!

Write your name in the space below. Write your initials at the bottom of each page.

## THIS IS A CLOSED BOOK, CLOSED NOTES QUIZ. PLEASE TURN YOUR NETWORK DEVICES OFF.

Any form of communication with other students is considered cheating and will merit an F as final grade in the course.

Do not write in the box below



Name:

**Student ID:** 

- 1. Encircle the correct answer. SPI and  $I^2C$  protocols are:
- (a) Asynchronous
- (b) Synchronous
- (c) None of the above
- **2.** Encircle the correct statement about SPI and  $I^2C$  protocols:
- (a) SPI is half duplex whereas  $I^2C$  is full duplex.
- (b) SPI is full duplex whereas  $I^2C$  is half duplex.
- (c) Both SPI and  $I^2C$  are full duplex.
- (d) Both SPI and  $I^2C$  are half duplex.

**3.** Suppose a SPI Slave wants to send 2 byes of data to a SPI Master. Select the correct statement from the following:

- (a) Slave initiates SPI communication by itself and sends 2 bytes of data.
- (b) Slave asks the Master to initiate SPI communication and then sends 2 bytes of data to Master.
- (c) Master initiates SPI communication by itself and sends 2 bytes of data to Slave.
- (d) None of the above
- 4. Which one is correct for transferring a data byte from an  $I^2C$  Master to Slave:
- (a) Master sends Address, Slave ACKs, Master sends Data, Slave ACKs.
- (b) Slave sends Address, Master ACKs, Master sends Data, Slave ACKs.
- (c) Slave requests Address, Slave ACKs, Master sends Data, Master ACKs.
- (d) None of the above

## End of Question

Please double check that you wrote your name on the front of the question.