

# EE361 Microcomputer-Based Digital Design

## Quiz 4

OPEN BOOK, OPEN NOTES.

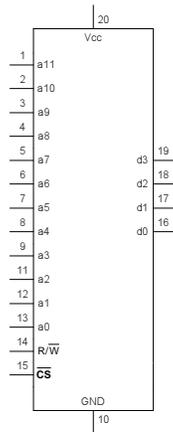
Name: \_\_\_\_\_

Section: \_\_\_\_\_

Date: 7 November 2008

**There is another problem on the back of this sheet.**

1. Consider this memory integrated circuit:



a. How many distinct locations are there within this chip?

b. How many bits are stored at each location?

c. How many bits of data can this chip store?

2. Suppose a certain PIC16F884 is configured to operate with a 15 MHz crystal oscillator. The SSPCON register contains the hexadecimal value  $32_{16}$ . During those times when data are actually being transmitted by the processor, what is the throughput in useful bits per second? (A useful bit is a data bit, as opposed to an overhead bit.)