Test 3 Study Guide

- 1. Be able to identify SSRAM, SRAM, DRAM, SDRAM, Dual Port SRAMs from pinout on datasheet. Be able to determine the memory organization (K x M) from pinout.
- 2. Know facts on memory data sheet.
- 3. Review hardware/software interrupts. Know reasons for steps in interrupt cycle. Know what an interrupt vector table is.
- 4. Know 2T and 4T bus cycles. Know what wait states are.
- 5. Be able to work problems similar to that found on homework #10.
- 6. Know what IN/OUT instructions do. Know parallel printer handshaking sequence.
- 7. Know the difference between polled and interrupt-driven IO.
- 8. Know what a circular buffer data structure is and what it is used for.
- 9. Know how to write an Interrupt Service Routine (ISR).
- 10. Know how hardware interrupts are generated via the INTR input to the 8086.
- 11. Know what fixed priority versus rotating priority means.
- 12. Know what the 8255 (Programmable Peripheral Interface) and 8259A (Programmable Interrupt Controller) were used for.

General: Expect to have a lot of short answer questions. You WILL be asked to write an ISR based on a circular buffer. You will NOT be able to use a calculator on the test. I will handout the same reference materials that I did last time.

WARNING: THIS IS NOT AN EXHAUSTIVE LIST OF TOPICS. You are responsible for everything we have covered since last test.