

16.480/552 Fall 2014 Review for Exam1

Note that this review is only for information purpose.

The first exam will cover the materials we have discussed so far in the lectures and Lab 1. Please make sure you understand the lecture notes. The actual exam might not be an exact match to every topic in the following list.

NRE and Unit Cost

Processor technologies

Embedded microprocessors/microcontrollers

Memory organization, various types of memory

Memory interfacing

- Control signals from microprocessor
- 3-8 decoder
- decoding circuitry to connect multiple memory mapped devices

Interfaces and Buses

Interrupt, DMA

Sensor, ADC and sensor interfacing

Lab 1

- sensor circuit design
- control of ADC in PIC

Exam 1 Format

(with estimated points)

Multiple-choice (Type A, each question has only one correct answer) 2pts x 6 questions = 12 pts

Multiple-choice (Type B, each question may contain more than one correct answers) 4pts x 3 = 12 pts

Short answers (4 questions) 42pts

Programming (1 questions) 12pts

Circuitry design (2 question) 22pts