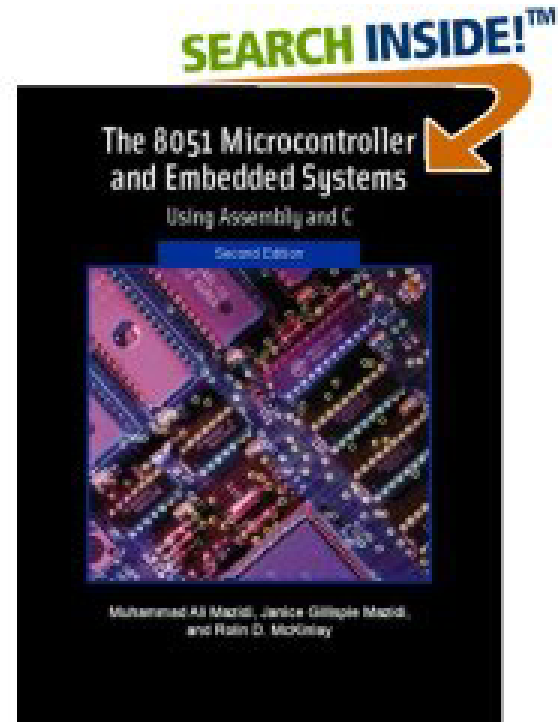


EEE 212
Microprocessors
Spring 2008
Sections 1-7
Introduction

Textbook

- The 8051 Microcontroller and Embedded Systems using Assembly and C
 - Authors: M. A. Mazidi, J. G. Mazidi, and R. D. McKinlay
 - Edition: 2nd
 - Publisher: Pearson



Other Books of Interest (Reserve)

- ❑ The 8051 Microcontroller (MacKenzie), 3rd ed.
- ❑ Microcontroller Projects in C for the 8051 (Ibrahim Dogan)
- ❑ The 8051/8052 Microcontroller: Architecture, Assembly Language, and Hardware Interfacing (Craig Steiner)
- ❑ C and the 8051 (Thomas Schultz)
- ❑ Two important links
 - www.8052.com has links to almost about everything about the 8051 microcontroller
 - www.microdigitaled.com

Grading

- ❑ 1 Midterm 25%
- ❑ 1 Final 30%
- ❑ Lab 30%
 - %6 Preliminary
 - %6 Quiz, Interview?
 - %18 Lab. performance
- ❑ Quiz 15% (4 Quiz Tests)

Instructor and TAs

- ❑ Sections 1 &2: Nail Akar Tel: x2337 Room 211
- ❑ Section 3: Ahmet Suat Ekinci
- ❑ Sections 4,5,6: Heba Yüksel Tel: x2336 Room: Z17
- ❑ Sections 7: Sinan Gezici Tel:3139 Room 210
- ❑ TAs
 - Lab coordinator: Namik Sengezer Tel: x1172 Room: 1B10
 - Others: TBD
- ❑ Lab page
 - www.ee.bilkent.edu.tr/~ee212

Syllabus

Week	Topic	Book Chapter	Lab	Quiz (1st hour of the week)
1	Introduction to computing, and the 8051 microcontroller	0,1		
2	Introduction to 8051 Assembly language programming	2		
3	Jump, Loop, and Call Instructions	3		
4	8051 I/O ports and their programming	4	Lab 0 (Tutorial Lab - Ch. 8)	1
5	8051 addressing modes	5	Lab 1 (I/O ports, LCD)	
6	Arithmetic and logic instructions and programs	6		
7	8051 timers	9	Lab 2 (Arithmetic and logic instructions)	2

8	8051 serial port	10	Lab 3 (timers)	Midterm
9	8051 interrupts	11	Lab 4 (serial port)	
10	8051 interrupts continued	11		
11	ADC, DAC, and sensor interfacing	13	Lab 5 (interrupts)	3
12	8051 interfacing to external memory	14	Lab 6 (ADC, sensor interfacing)	
13	8051 interfacing to external memory contd.	14		
14	Advanced topics: 8051 interfacing with the 8255 , Serial programming interface	15	Lab 7 (DAC)	4

Policies

- ❑ Students who have taken the lab before with a grade of 75/100 can choose not to attend the lab sessions. If so, they should contact Namik Sengezer (3rd floor) namik@ee. in the first TWO weeks of the semester and upon approval, the old grades would count.
- ❑ Attendance requirement 70%, if not → a grade will be cut unless it is an A already, e.g., D → F, B+ → B, A → A
- ❑ The last hour (unless otherwise stated) of the Quiz week (Weeks 4,7,11,14) is dedicated to a quiz test in class. We will use this hour for lecturing in the first three weeks.
- ❑ The official site is mdl.bilkent.edu.tr/moodle/ for all information related to this course except for grades and lab
- ❑ For grading, we use SAPS

Software

- ❑ Franklin software Evaluation Software - Proview

- ❑ Links are available in the textbook

- ❑ Setup files are available at

<http://www.microdigitaled.com/8051/software/Software.htm>

- ❑ Keil (evaluation copy) can also be used