

## LAB Session #1

### Introduction



- Sang Wook Stephen Do
  - Known as 'Sang' @ USC
  - Email:
    - sdo@usc.edu
    - Please prefix '[EE357]' on the subject line.
  - Office hours:
    - Monday & Wednesday 12:30 ~ 1:50 PM.
    - EEB230
    - (213) 740-2240
  - Class website:
    - Blackboard.usc.edu
  - Research interest
    - Multi-core/processor coherence and consistency

- Class/LAB meeting
  - Friday
    - 11:00 ~ 11:50
    - 12:00 ~ 12:50
    - RTH 105
- LAB assignments
  - Assigned, finished and evaluated during class.
  - 2 individuals / team
  - Grades will be posted on the class website ([blackboard.usc.edu](https://blackboard.usc.edu))

- Tools
  - Coldfire board (MCF52259)
    - One board / team
    - Ask Tim Boston in EEB100.
    - Have components such as:
      - Flash memory (512 KB); RAM (64 KB), Interrupt controller; timers; UART (RS232) serial port; USB; and etc.
    - [www.freescale.com](http://www.freescale.com)
    - Manuals uploaded on blackboard.usc.edu
      - coldFireManual.pdf
      - MCF52259RM.pdf
  - Codewarrior
    - Eclipse-based IDE (Integrated Development Environment)
      - Coding; debugging; running; inspecting machine states; and etc.
    - Connects to the Coldfire board through USB
  - VirtualBox
    - Runs pre-installed Codewarrior on Ubuntu image.
      - Installation guide and the Ubuntu image file will be distributed.

- LAB schedule
  - Subject to change with notification.

2013 EE357 LAB (discussion) schedule – Sang W. S. Do ([sdo@usc.edu](mailto:sdo@usc.edu))

Class meeting: every Friday 11 – 12; 12 – 1 in RTH 105

| Week | Date       | LAB   |
|------|------------|---|
| 1    | 01/18/2013 | Introduction: Codewarrior setup and teaming up          |
| 2    | 01/25/2013 | LAB1: C and Assembly project (10 pts.)                  |
| 3    | 02/01/2013 | LAB2: Looping and I/O (20 pts.)                         |
| 4    | 02/08/2013 | Contd.  |
| 5    | 02/15/2013 | LAB3: Addressing mode and assembly directives (10 pts.) |
| 6    | 02/22/2013 | LAB4: Array processing (20 pts.)                        |
| 7    | 03/01/2013 | Contd.  |
| 8    | 03/08/2013 | LAB5: Branch subroutine (10 pts.)                       |
| 9    | 03/15/2013 | LAB6: Array processing using function calls (10 pts.)   |
| 10   | 03/29/2013 | LAB7: TRAP (10 pts.)                                    |
| 11   | 04/05/2013 | LAB8: Floating point handling (30 pts.) or UART         |
| 12   | 04/12/2013 | Contd.  |
| 13   | 04/19/2013 | Contd.  |
| 14   | 04/26/2013 | LAB9: State machine (20 pts.) or UART                   |
| 15   | 05/03/2013 | Contd.  |

\* Max. points: 140 pts.