

CENG 336

INT. TO EMBEDDED SYSTEMS

DEVELOPMENT

Spring 2006

Recitation 05

OUTLINE

- Small Device C Compiler (SDCC) Introduction
- Sample program

Introduction to SDCC

- SDCC is a freeware, retargettable, optimizing ANSI - C compiler
- The current version targets the Intel 8051, Zilog Z80, Dallas 80C390, Motorola HC08 and Microchip PIC MCUs.
- An open source project and available at:
<http://sdcc.sourceforge.net/>
- Supported platforms:
 - **Linux** and **Microsoft Windows**
- **SDCC** will compile natively on **Linux** using using GCC

Introduction to SDCC – Cont.

Some of the features:

- a full range of data types:
 - **char** (8 bits, 1 byte),
 - **short** (16 bits, 2 bytes),
 - **int** (16 bits, 2 bytes),
 - **long** (32 bit, 4 bytes),
 - **float** (4 byte IEEE).
- the ability to add inline assembler code anywhere in a function
- no recursive function!