

Department of Electrical and Computer Engineering

College of Engineering and Applied Sciences

WESTERN MICHIGAN UNIVERSITY



ECE 2510 Introduction to Microprocessors

Chapter 2

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Chapter 2 Overview

- Software Development Environment
 - ICC12 Compiler/Assembler/Linker/Loader
 - D-Bug12 Microcontroller Resident Debugger
- Assembly Programming
 - Assembly Language Code Syntax
 - Assembler Directives
 - Assembly Language for Simple Tasks
 - Loops for repetitive tasks
 - Loops for time delay
 - Bit field manipulation

Software Development Environment

- Create a project in the environment
- Load files containing code into the project
- For high-level languages: Compile into assembly language
- For assembly language: Assemble into object code module
- Link multiple object code modules into machine code module
- Load machine code module onto the target host
- Executing machine code
 - For development: Use a monitor program or debugger to run machine code
 - For users: Execute machine resident code