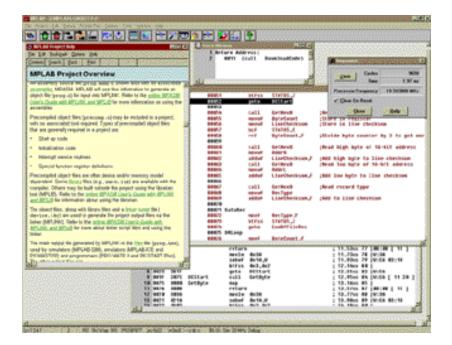
# **MPLAB®IDE**

# Integrated Development Environment



# MPLAB IDE gives PICmicro® MCU users the flexibility to edit, compile, and debug from a single user interface.

MPLAB Integrated Development Environment (IDE) is a development platform for the Microchip Technology PlCmicro microcontroller (MCU) families. Designed for use with the Microsoft® Windows® operating environment, MPLAB IDE offers a project manager and text editor, a user-configurable toolbar containing four predefined sets, and a status bar that communicates editing and debugging information.

MPLAB IDE is the common user interface for Microchip development systems tools including MPLAB Editor, MPASM™ Assembler, MPLAB SIM Software Simulator, MPLIB™ Librarian, MPLINK™ Linker, MPLAB C17, MPLAB C18 and MPLAB ICD C compilers, MPLAB ICE 2000 In-Circuit Emulator, PICSTART® Plus Development Programmer, and PRO MATE®II Programmer. Additional products may become available as add-on tools in the future.

The MPLAB IDE desktop provides the development environment and tools for developing and debugging your application as a project, allowing you to quickly move between different development and debugging modes. With the MPLAB IDE environment, you can write and debug your source code, automatically locate errors in source files for editing, debug with breakpoints based on internal register values, watch the program flow with MPLAB SIM (software simulator) or MPLAB ICE, make timing measurements with a "stop watch," view variables in watch windows, program firmware with PICSTART Plus or PRO MATE II programmers, and find quick answers to questions from the MPLAB IDE on-line help.

## Features:

## **MPLAB Project Manager**

- Organizes the different files that comprise your application firmware under one "Project"
- Allows you to create a project, add, edit or debug a source code file in a project; build object files and download code to the emulator or simulator with a mouse click
- Supports multiple source files from MPASM, MPLAB C17/MPLAB C18 and third-party tools, precompiled libraries and object files, and linker scripts
- Includes configurable build tools

## MPLAB SIM Software Simulator

- Discrete-event simulator integrated into the MPLAB IDE features debug capabilities including unlimited breakpoints, trace, examine/modify registers, watch variables, and time-stamp. Same debug interface for emulator and ICD
- Simulates the core functions as well as most peripherals of the PICmicro MCUs

#### MPLAB Editor

- Full-featured programmer's editor lets you write and edit firmware source files for PICmicro MCUs
- Creates reusable source file templates for quick creation of new source files

## **MPASM Universal Assembler**

- Has full-featured macro capabilities, conditional assembly and several source and listing formats
- Generates various object code formats to support Microchip development tools and third-party programmers without exiting MPLAB IDE

## **MPLINK Linker**

- A linker for Microchip's MPLAB C17/ MPLAB C18 C compilers and the relocatable assembler, MPASM
- Combines multiple input object modules, generated by MPLAB C17/MPLAB C18 or MPASM assembler, into a single executable file
- Generates the symbolic information for debugging with MPLAB IDE



## **MPLAB® IDE**

## **Ordering Information:**

## **Model Name:**

MPLAB IDE

## Ordering Part Number:

SW007002

#### **Tools Supported:**

MPLAB ICE 2000 In-Circuit Emulator MPLAB ICD In-Circuit Debugger ICEPIC™ Emulator System **PICSTART Plus** Low-cost Programmer PRO MATE II Full-featured Programmer

## **Host System Requirements:**

PC with Pentium® processor or greater Microsoft® Windows® operating system\* **COM Port** 

## **Customer Support:**

Microchip maintains a worldwide network of distributors, representatives, local sales offices, Field Application Engineers, and Corporate Application Engineers. Microchip's Internet home page can be reached at: www.microchip.com

## **System Description:**

MPLAB IDE allows you to write, debug, and optimize the PICmicro MCU applications for firmware product designs.

MPLAB IDE software package includes the following:

- MPLAB Project Manager
- MPLAB SIM Software Simulator
- MPI AB Editor
- MPASM Universal Macro Assembler for the PICmicro MCUs
- MPLINK Linker, MPLIB Librarian

To order or obtain more information about MPLAB IDE, contact the Microchip sales office nearest you.

Development Tools from Microchip			
MPLAB®IDE	Integrated Development Environment		
MPASM™ Assembler	Universal PICmicro macro-assembler		
MPLINK™ Object Linker	Linker		
MPLIB™ Object Librarian	Librarian		
MPLAB C17	C compiler for PIC17CXXX MCUs		
MPLAB C18	C compiler for PIC18CXXX MCUs		
C compilers	Sold by third-party vendors (HI-TECH, IAR, CCS)		
MPLAB SIM Simulator	Software Simulator		
MPLAB ICD	In-circuit Debugger		
ICEPIC™ Emulator	Low-cost in-circuit emulator		
MPLAB ICE 2000	Full-featured modular in-circuit emulator		
PICSTART® Plus Programmer	Entry-level development kit with programmer		
PRO MATE® II Programmer	Full-featured, modular device programmer		
KEELOQ® Evaluation Kit	Encoder/Decoder evaluator		
KEELOQ Transponder Evaluation Kit	Transmitter/Transponder evaluator		
microID™ Developer's Kit	125 kHz and 13.56 MHz RFID development tools		
MCP2510 CAN Developer's KIt	MCP2510 CAN evaluation/development tool		
MXDEV™ 1 Analog Evaluation System	Evaluation kit for MCP devices		

<sup>\*</sup> PICMASTER® and PICMASTER CE are not supported under Microsoft Windows NT®

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