

Part Number: SW006012

## Summary

The MPLAB® C30 compiler is a full-featured ANSI compliant C compiler for the Microchip 16-bit devices: PIC24, dsPIC30F and dsPIC33F. MPLAB C30 is fully compatible with Microchip's MPLAB Integrated Development Environment (IDE), allowing source level debugging with the MPLAB ICE In-Circuit Emulator, MPLAB ICD 2 In-Circuit Debugger and MPLAB SIM Simulator.

## Features

- ANSI compliant with standard, math, memory, data conversion and math libraries
- Generates relocatable object modules for enhanced code reuse
- Optimized to generate as much as 30% less code than other 16-bit MCU compilers
- Strong support for in-line assembly when total control is absolutely necessary
- Allows code and data to be located at absolute addresses
- Supports advanced code size optimizations

## New in MPLAB C30 v2.00

- Early adopter support for PIC24 and dsPIC33 devices
- Early adopter device support. for dsPIC30F2020/21/22/23
- Support for DSP accumulator registers from the C language
- Support for DSP intrinsics (functions) from the C language. DSP intrinsics map directly to native dsPIC assembly language instruction
- Student Edition of the C compiler

## Student Edition

The MPLAB C30 C Compiler Student Edition is free! It is full-featured for the first 60 days. After 60 days only optimization level 1 can be enabled in the compiler. The compiler will continue to function after 60 days, but code size may increase.

## Upgrade to v2.03

Use this to upgrade a previously purchased version of the compiler. The upgrade includes full documentation. All documents are also available separately in the **Downloads** section.

MPLAB C30 v2.03 supports PIC24 and dsPIC33 devices. Owners of previous versions can upgrade by clicking on the link below. The MPLAB C30 Student Edition is also updated.

## Patch for Interrupt and CONFIG2 fix

This patch fixes inaccurate warnings for PIC24F, PIC24H, and PIC33F interrupt function names and corrects an incorrect address for configuration word CONFIG2 on a PIC24F device. This patch can be applied to the Student Edition v2.03