



## PRODUCTS | APPLICATIONS | DESIGN SUPPORT | TRAINING | SAMPLE AND BUY | ABOUT US | CONTACT US | myMicrochip Login

## MPLAB 16-Bit Device Blocks for Simulink

Part Number: SW007023





## Download the free version from the "Documentation/Software" tab below.

The free edition offers all the same features as the regular version, except that the number of I/Os is limited to 8. There are six dsPIC products in which there are no restrictions. These include the following devices (and their "A" variant):



33EP256MC506

33FJ32MC204

33FJ128MC802

33EP512MU810

33FJ256MC710 / 33FJ256MC710A

33FJ256GP710 / 33FJ256GP710A

The MPLAB® Device Blocks for Simulink® provide a set of user interfaces and Simulink peripheral blocks for the dsPIC®30 and dsPIC®33 DSCs. Standalone applications can be created from a Simulink discrete time model by adding blocks provided by Microchip. Code for the application is generated, compiled and loaded on a target in a single, one-push-button step. Also provided are many examples in the form of demo models, including a complete BLDC motor control application included in the package.

The newest version, version 3.38 now has support for single-shunt motor control algorithms and also includes Simulink® models for several additional examples.

Features \ Package Contents \ Host System Requirements \ Related Tools \ Supported Devices

- Blocks for peripherals of dsPIC3x Family: Digital In/Out, ADC, PWM, Change Notification, Output Compare, Input Capture, QEI, I2C, SPI, UART, Interrupt, Reset
- Target configuration blocks: Master Block, Simulink Reset Config, Compiler Option, Data Sheet, MCU
  Overload, MCU Load, Task State, Scheduler Option (to define behavior on overload with multi-rate
  scheduler)
- Facility to invoke dsPIC3x dedicated functions written in C through a "C Function Call" block
- Real-time view/analyze or log variables within MATLAB® through a configurable, PICGUI interface
- PWM high speed override block
- Create a ready-to-use MPLAB X project
- Supports over 190 chips
- Download the free version from the "Documentation/Software" tab below.

## Documentation & Software

Back To Top

Documents	Last Updated	Size	
MPLAB 16-Bit Device Blocks for Simulink v3.38	5/9/2016 9:10:55 AM	9MB	1

Products | Applications | Design Support | Training | Sample and Buy | About Us | Contact Us | Legal | Investors | Careers | Support