MPLAB® Xpress Evaluation Board

Xpress Your Creativity

Brilliant ideas are fleeting. As soon as they are recognized, they must be captured quickly and made real with the highest possible urgency. In embedded design, the creative process is often blunted by the massive array of choices required to simply begin the development cycle. The tasks of selecting a target MCU, finding the appropriate tool chain and setting everything up on your PC can keep your best ideas from becoming great products. The MPLAB® Xpress Evaluation Board (DM164140) was designed with a single objective—to help your ideas take the shortest journey from imagination to reality.

Crafted for Cloud-Based Development

The MPLAB Xpress Evaluation Board offers seamless integration with our software tool chain, including the MPLAB Xpress Cloud-Based IDE. MPLAB Xpress is an online development environment that contains the most popular features of our award-winning MPLAB X IDE. This simplified and streamlined application is a faithful reproduction of our desktop-based program, which allows you to easily transition between the two environments.

On-Board Application Processor

The centerpiece of the MPLAB Xpress Evaluation Board is the PIC16F18855 MCU, an 8-bit device with the unique combination of low power consumption, performance to handle almost any application task and on-chip peripherals that enable you to control your system with a minimal amount of code. The PIC16F18855's peripherals can be set up graphically using the MPLAB Code Configurator plug-in, saving you weeks of development time.

Easy System Expansion

Adding sensors, actuators and drive circuitry to your design is a simple task using the on-board MikroBus™ Expansion Header. Over 180 MikroElektronika Click™ expansion boards are available, with options ranging from Wi-Fi®, Bluetooth® and GSM to relays, motor drivers and sensors.

Drag-and-Drop Programming

Programming the MPLAB Xpress Evaluation Board is quick and easy. We've integrated a unique drag-and-drop programmer for compatibility with almost any USB-connected PC, laptop or tablet. The MPLAB Xpress Evaluation Board connects to your PC as a USB Flash drive, so no drivers are needed. Programming of the target device is completed in microseconds, with no waiting.

Key Features

- Compact, credit card-sized footprint offers flexibility during the prototyping phase
- On-board PIC16F18855 MCU supports a wide range of applications
- MikroBus Expansion Header with over 180 off-the-shelf options for adding functionality to your design
- Integrated drag-and-drop programmer with USB interface—no drivers required
- Analog potentiometer and push-button switches for user input
- Integrates seamlessly with MPLAB Xpress Cloud-Based IDE and MPLAB Code Configurator for the quickest development cycle

Get Started Now

Getting started has never been easier. Simply point your favorite web browser to http://MPLABXpress.microchip.com, plug in your MPLAB Xpress Evaluation Board and begin building your next award-winning design.

About the PIC16F18855 MCU

The PIC16F18855 MCU represents Microchip's latest generation of 8-bit devices for mixed-signal applications. Featuring our latest Core Independent Peripherals (www.microchip.com/CIP) for application flexibility and code-free setup, the PIC16F18855 also offers impressive analog and functional safety features. An integrated 10-bit Analog-to-Digital Converter (ADC) with computation allows automated signal analysis with oversampling and filtering features. On-chip memory scan and smart timing features bring a whole new range of safety capabilities to users who require cost-effective MCUs. Additionally, this device offers 14 KB of Flash memory, up to seven PWMs and multiple communication channels in a small 4×4 mm 28-pin footprint. Find out more at www.microchip.com/PIC16F18855.

About MPLAB Code Configurator

MPLAB Code Configurator is a free software plug-in that bridges our MCUs, development hardware and IDEs. It allows you to generate easily modifiable, production-ready application code for many 8- and 16-bit PIC® microcontrollers in just a few mouse clicks. Find out more at www.microchip.com/MCC.
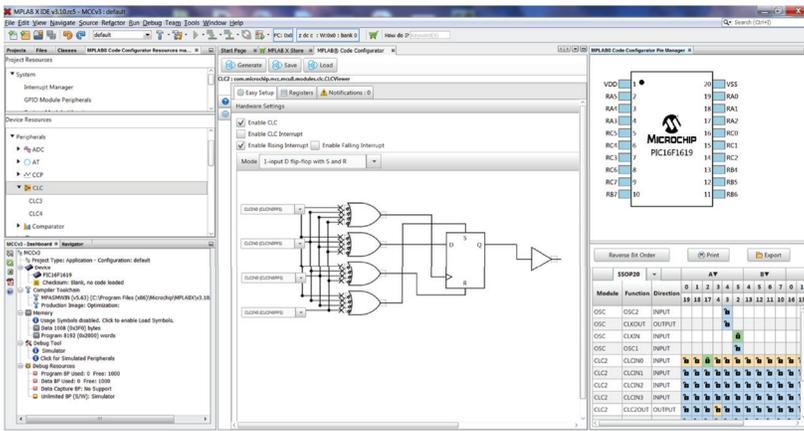
Other Development Hardware for 8-bit PIC Microcontrollers

Explorer 8 Development Kit (DM160228)

The Explorer 8 Development Kit is a full-featured development platform. It supports the largest number of 8-bit PIC microcontrollers ranging from 6 to 100 pins, making it the most versatile development board in our lineup. Featuring available Bluetooth expansion, MikroElektronika Click board support, and an expansion header for add-on boards, this kit provides professional users with a comprehensive development experience.

PICDEM™ Lab II Development Board (DM1636046)
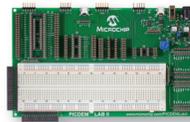
The PICDEM Lab II Development Board is an update to the popular PICDEM Lab Development Board. Its extreme flexibility and available peripherals make it an excellent choice for those designing power supplies, motor drive circuits or other analog-intensive systems.

Curiosity Development Board (DM164137)

The Curiosity Development Board is targeted at first-time users, hobbyists and those seeking a low-cost rapid-prototyping board. The Curiosity Development Board has an on-board programmer/debugger, and can be expanded using any of MikroElektronika's Click boards. Bluetooth Low Energy is also supported when using an optional RN4020 Bluetooth module.

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www.microchip.com/8bit

Visit our web site for additional product information and to locate your local sales office.

Microchip Technology Inc. · 2355 W. Chandler Blvd. · Chandler, AZ 85224-6199

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