MICROCHIP

PICkit™ 2

Development Tool Overview

Aug 08

PICkit™ 2 Debug Express

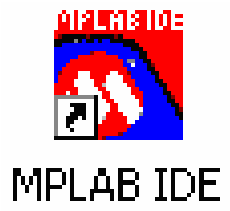
- In-Circuit-Debugging with MPLAB® IDE
- Debug in the application circuit
- Supported Device Families:
  PIC10F
  PIC12F
  PIC16F
  PIC18F
  PIC24
  dsPIC30, dsPIC33
- All PICkit 2 units are Debug Express Capable

PICkit™ 2 Debug Express

- **1- 4 Breakpoints, depending on MCU**
- **Run, Halt, Step In, Step Over**
- **Watch Special Function Register & File Register values when halted or stepping**
- **Modify register values**
- **Advanced Breakpoints for PIC18F, PIC24, & dsPIC® devices**
  - Break on File Register read or write
  - Set breakpoint pass counts

PICkit™ 2 Programmer

Program with PICkit 2 using these software programs:

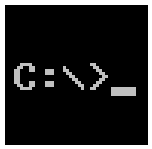


MPLAB® IDE

- **Program all devices supported for debug directly from the IDE**

PICkit 2 Programmer Application

- **Additional device support, including PIC32 and Microchip serial EEPROM products**
- **Exposes more PICkit 2 features**
- **PICkit 2 Programmer-To-Go setup**

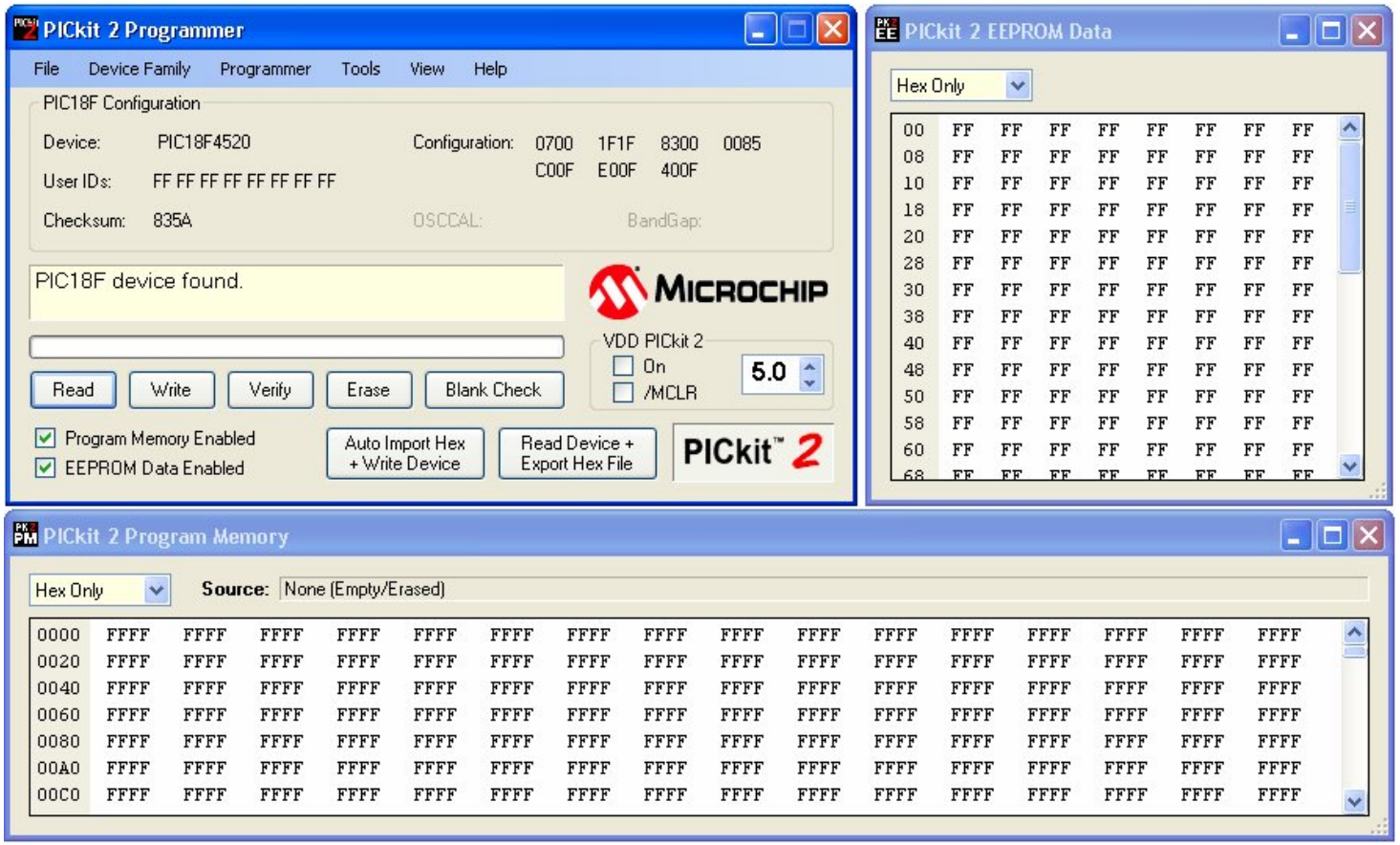


PK2CMD Command Line Utility

- **Use with batch files, custom GUI software in Visual Basic, C++, C#, Labview, and others**
- **Call from 3rd party development environments**
- **Available for Linux and Mac OS X platforms**

PICkit™ 2 Programmer Application

Windows PC application provides a simplified, feature rich interface for PICkit 2.



PICkit™ 2 Programmer Application

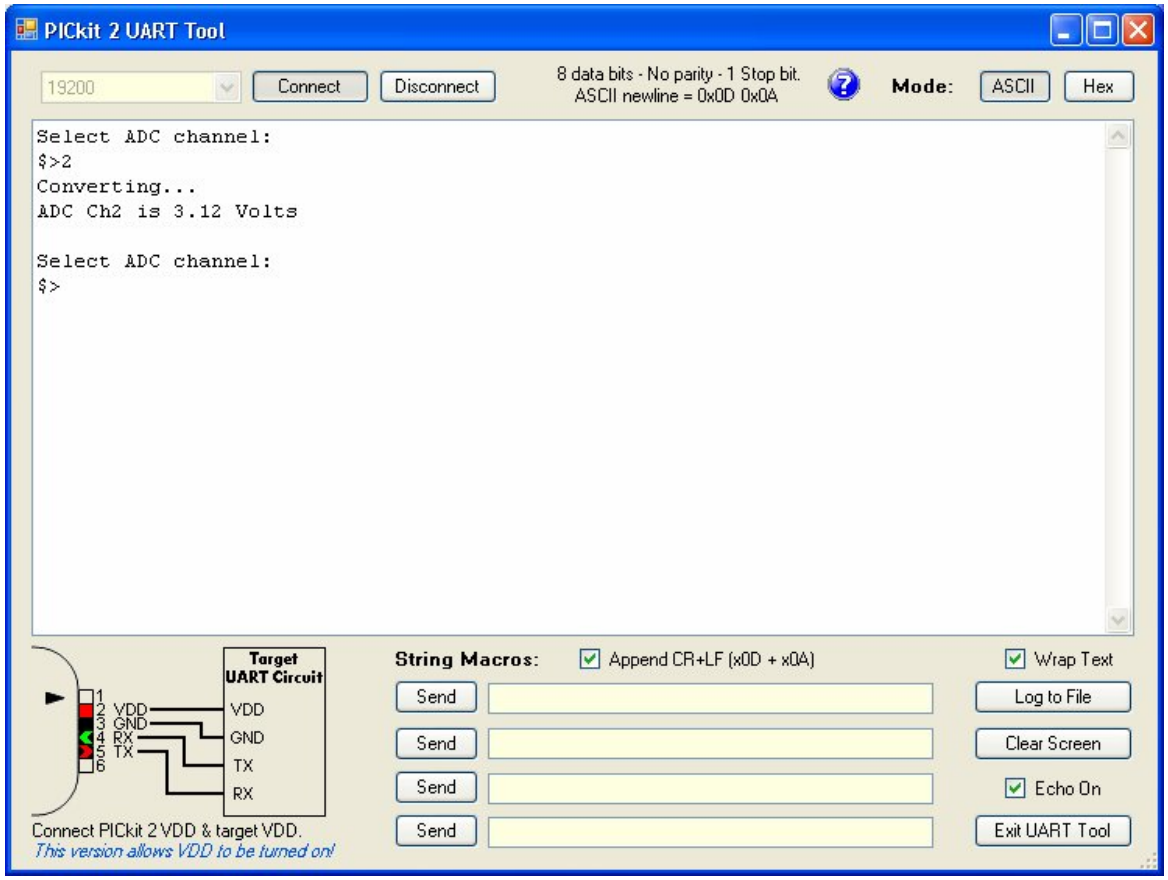
- Programs all current 8-, 16-, and 32-bit Flash PIC® microcontrollers.
- Easy to use with MPLAB® IDE and other development environments.
- Programmer-To-Go: Set up a PICkit 2 to program a device without the need for a PC.
- Includes the UART Tool and Logic Tool microcontroller development utilities

PICkit 2™ Programmer-To-Go

- Download program code to a PICkit 2 unit from the Programmer application.
- With a portable USB power source, PICkit 2 will program the downloaded code into a PIC Microcontroller, without using a PC.
- Full documentation and setup Wizard included in the PICkit 2 Programmer application.

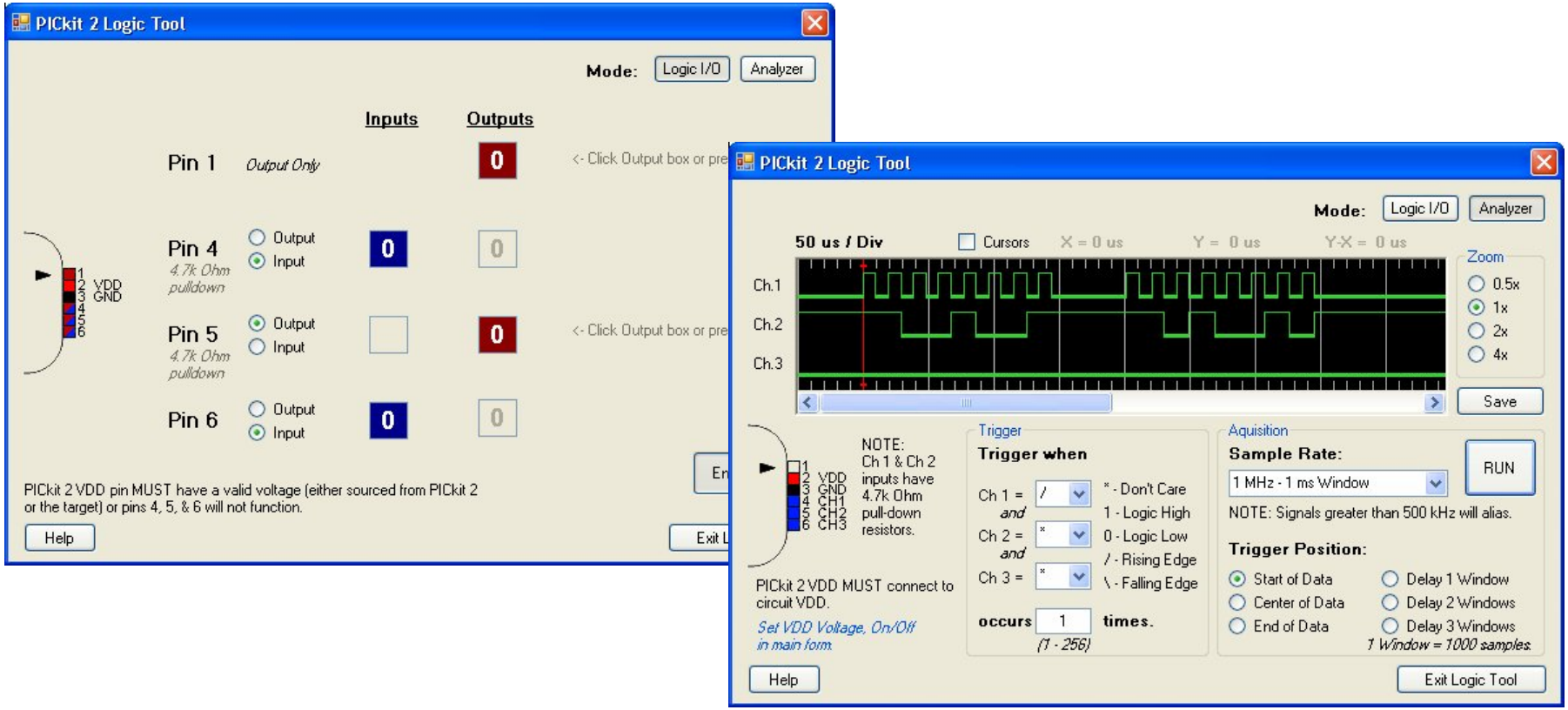
PICkit 2 UART Tool

The UART Tool provides a terminal-like UART interface for microcontroller development.



PICkit 2 Logic Tool

The Logic Tool provides basic pin stimulus and logic analyzer functions via the PICkit 2 unit.



Multiple PICkit 2 units on 1 PC

- MPLAB IDE v8.15 and later and the PICkit 2 Programmer applications support multiple PICkit 2 units on 1 PC.
- Simultaneously debug 2 microcontrollers with 2 PICkit 2 units using 2 instances of the MPLAB IDE on 1 PC.
- At the same time, use a 3rd PICkit 2 unit with the Logic Tool to capture I2C peripheral bus waveforms, and a 4th PICkit 2 unit with the UART Tool to log application data to a text file. All on the same PC.

PICkit CDROM

All PICkit 2 units ship with the PICkit CDROM, which includes a wealth of information:

- Tutorials on getting started in the MPLAB IDE and the PICkit 2 Programmer.
- A 12 Lesson series on Midrange PIC assembly programming.
- A tutorial on debugging with the PICkit 2.
- Demo C compilers, example C projects, and tutorials on C language development and debugging.
- Demo Basic compiler with example project and tutorial.
- Documentation on the MPLAB IDE and PICkit 2 software and hardware.
- Datasheets and application notes on a wide range of PIC microcontrollers and topics.
- Code examples in assembly and the C language.
- Information on third-party tools and learning resources.

PICkit 2 Demo Boards

A wide variety of demo boards compatible with PICkit 2 are available from Microchip. Please contact your local Microchip sales office or FAE for more information.

PICkit 2 on the Web:
www.microchip.com/pickit2