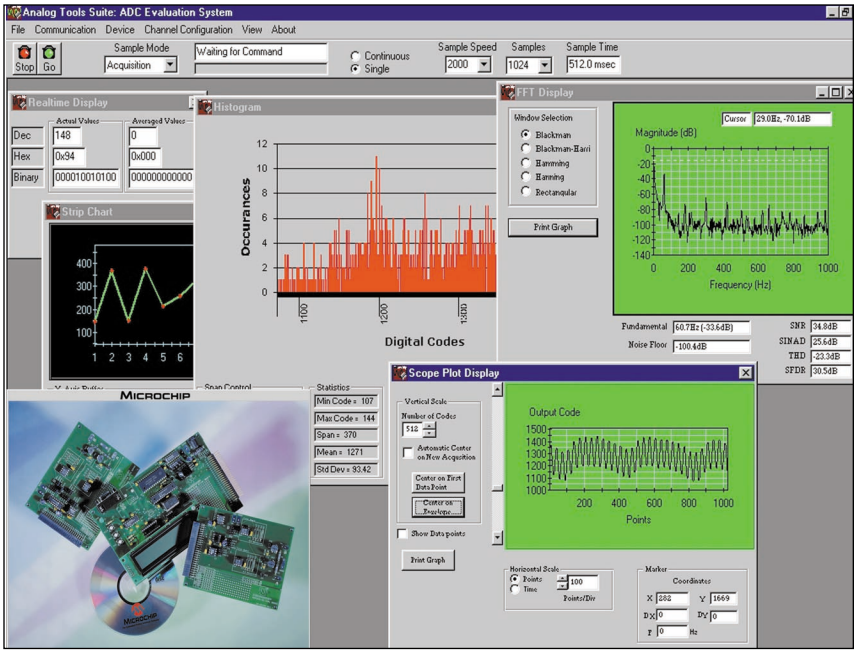
MXDEV™ 1
Analog Evaluation System



A versatile and easy-to-use tool!

This Analog Evaluation System gives system designers the ability to control Microchip stand-alone analog devices, acquire data and then analyze the data using stripcharts, histograms and Fast Fourier Transforms (FFTs). User-friendly data analysis software is included with the device-specific Daughter Boards.

The evaluation system consists of two parts: a Driver Board, which performs the data analysis and connects to a PC for subsequent analysis and display; and a Daughter Board, which plugs into the Driver Board and contains the device to be evaluated. Device-specific software is included.

In addition to the ability of the Driver Board to work with device-specific Daughter Boards, users can create their own daughter boards based on their own design requirements. Also, there is a prototype area on the Driver Board for user-designed circuits that could be used in place of the Daughter Boards.

The Daughter Boards include the device under evaluation and associated interface circuitry. It may also include components for signal stimulus and connectors for an external signal. On the DV3204A Daughter Board, for example, choices include selection of the ADC input channel, the ADC reference voltage source and the routing of the signal through buffers and/or filters.

Daughter Boards are currently available for the following products: MCP32001/01, MCP3004/08, MCP3201/02 and MCP3204/08.

Additions to this Analog Evaluation System will be released to coincide with new product introductions.

Features:

- Allows single or continuous conversions for the ADC under evaluation
- Data can be acquired in real time mode (max sample rate about 200 sps) or acquisition mode (max sample rate of 50 ksps)
- Displays data in a variety of formats; real time numeric, real time stripchart, Fast Fourier Transform (FFT), histogram, oscilloscope plot, data list, etc.
- FFT display allows a variety of windowing options: Blackman, Blackman-Harris, Hamming, Hanning and Rectangular
- Selectable input signal source: on-board potentiometer or external
- Selectable trigger: internal or external
- Low-pass filter modules can be inserted into the signal chain for further flexibility
- Prototype area for addition of user-defined circuitry
- Complete documentation, User's Guides and CD-ROM

MICROCHIP
The Embedded Control Solutions Company®

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Ordering Information:

Model Name:

MXDEV 1 Analog Evaluation System

Part Numbers:

DVMCPA - Analog Evaluation Driver Board Version 1
DV3001/02 - MCP3001/01 Daughter Board
DV3004/08 - MCP3004/08 Daughter Board
DV3201A - MCP3201/02 Daughter Board
DV3204A - MCP3204/08 Daughter Board
DV41010 - MCP41010 Daughter Board
DV41050 - MCP41050 Daughter Board
DV41100 - MCP41100 Daughter Board
DV42010 - MCP42010 Daughter Board
DV42050 - MCP42050 Daughter Board
DV42100 - MCP42100 Daughter Board

Host System Requirements:

PC running Microsoft® Windows 95
or higher
16MB RAM, 32 MB recommended
Program size: 4 MB
Monitor with 800 x 600 resolution
CD-ROM drive
COM port

For more information on how to order the MXDEV 1 Analog Evaluation System, please contact your local Microchip Sales Office or Authorized Distributor.

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:

The Driver Board allows the user to develop with the PICmicro® microcontroller (MCU) most suited to their application. The Driver Board includes SRAM for data storage, an RS-232 interface and an LCD for displaying configuration data and acquisition data.

The DV3001A, DV3004A, DV3201A and DV3204A Daughter Boards support evaluation of the MCP3001/01, MCP3004/08, MCP3201/02 and MCP3204/08, respectively. The Daughter Board ships with a PIC16C63 which contains device-specific code and plugs into a socket on the Driver Board. In addition to device specific software, application notes are available that show how to interface the PICmicro MCUs with the ADC.

The Daughter Board includes jumper-selectable options for maximum flexibility. Choices include: selection of the signal source between the on-board potentiometer and an external source; selection of the reference voltage between the on-board VREF and an external source; and selection between single-ended and pseudo-differential inputs (depending on the device being evaluated). A prototype area on the daughter board allows for additional circuitry.

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 Device 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

Americas

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As of 02/01/01

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