PICDEM™ MC LV Demonstration Board

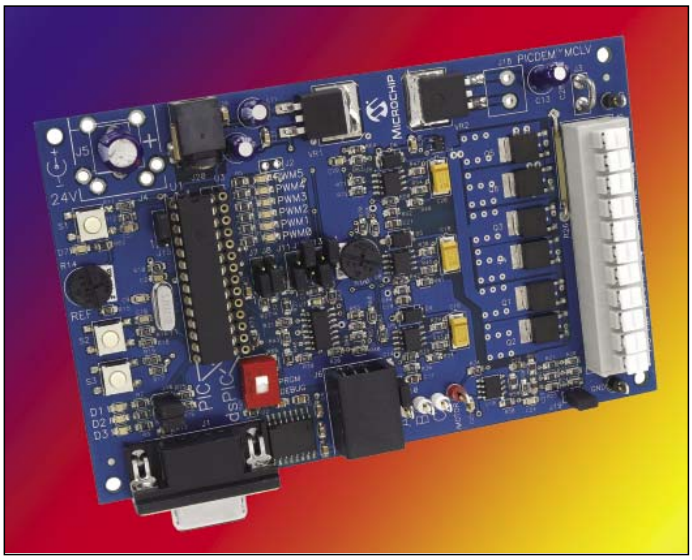
Summary

The PICDEM™ MC LV Development Board is a development and evaluation tool that provides designers a quick and cost-effective method to evaluate both sensored and sensorless brushless DC (BLDC) motor control applications. Users can create embedded motor control applications using Microchip's 28-pin, PIC18F microcontrollers and dsPIC30F Digital Signal Controllers. Supported devices are provided in the table below.

Two pre-programmed, Flash-based samples are provided in the kit including PIC18F2431 and dsPIC30F3010 devices. The board is also populated with an ICD connector for the MPLAB® ICD 2 In-Circuit Debugger and an RS-232 port for external communication, LED indicators, push button switches, speed control potentiometer and motor sensor inputs.

Finally, users can develop their application with a simple graphical interface, known as the Motor Control Graphical User Interface (MC-GUI). The MC-GUI provides a quick and easy way for designers to configure and monitor their motor system parameters such as motor control type, motor speed, rotational direction, current, voltage and fault status.

Supported Devices	Packages
PIC18F2331	28-pin SPDIP
PIC18F2431	28-pin SPDIP
dsPIC30F2010	28-pin SPDIP
dsPIC30F3010	28-pin SPDIP
dsPIC30F4012	28-pin SPDIP



Features

Key features of the PICDEM MC LV Development Kit include:

- Supports PIC18F and dsPIC® 28-pin motor control devices
- Capable of driving motors up to 48V, 2.2 Amps
- Motor terminal strip
- 3-phase voltage source inverter bridge
- Over-current protection, level programmable using potentiometer
- Temperature sensor with I²C™ interface
- Push button switches and master reset
- Test points for motor current and back EMF sensing
- Speed control potentiometer
- Active RS-232 connector
- MPLAB ICD 2 connector
- **FREE!** Motor Control GUI software
- 3-phase, 24V BLDC motor (optional)
  Part Number : AC300020
- 24V external power supply (optional)
  Part Number : AC002013

MICROCHIP
Development Systems

Package Contents

- PICDEM MC LV Development Board with pre-programmed (BLDC firmware) PIC18F2431 and dsPIC30F3010 devices
- Software and Documentation CD containing the MC-GUI, User's Guide and sample applications programs

Host System Requirements (For the Motor Control GUI)

- PC-compatible system with an Intel Pentium® class or higher processor, or equivalent
- A minimum of 16 MB RAM
- A minimum of 16 MB available for hard drive space
- CD-ROM drive
- One available standard serial port with a matching COM port available through the operating system
- Microsoft Windows® 98, Windows NT® 4.0, Windows 2000 or Windows XP

Part Numbers and Ordering Information

PICDEM™ MC LV Development Board		
Part Number	**Description**	**Availability**
DM183021	PICDEM MC LV Development Board	Now
AC002013	24 Volt Power Supply (optional)	Now
AC300020	24V BLDC Motor with Cables (optional)	Now

Note: For best results using the PICDEM MC LV Development Board, purchase of the optional 24V Power Supply (AC002013) and 24V BLDC Motor with Cables (AC300020) is recommended.

Development Tools from Microchip	
MPLAB® IDE	Integrated Development Environment (IDE)
MPASM™ Assembler	Universal PICmicro® Macro-Assembler
MPLINK™ Linker/MPLIB™ Librarian	Linker/Librarian
MPLAB SIM	Simulator Software Simulator
MPLAB C18	C Compiler for PIC18CXXX MCUs
MPLAB C30	C Compiler for dsPIC30F MCUs
PICkit™ 1/PICkit 2	PICkit 1 Flash Starter Kit/PICkit 2 Starter Kit
MPLAB ICD 2	In-Circuit Debugger
MPLAB ICE 2000	Full-featured Modular In-Circuit Emulator for PIC12, PIC16 and PIC18 MCUs
MPLAB ICE 4000	Full-featured Modular In-Circuit Emulator for PIC18 and dsPIC MCUs
PICSTART® Plus Programmer	Entry-level Development Kit with Programmer
MPLAB PM3 Device Programmer	Full-featured, Modular Device Programmer
KEELOQ® Evaluation Kit	Encoder/Decoder Evaluator
microID® Developer's Kit	125 kHz and 13.56 MHz RFID Development Tools
Analog & Interface Boards	A variety of demonstration and evaluation boards for interface, linear, mixed-signal, power management and thermal management functions.

Visit our web site at www.microchip.com for additional product information and sales office locations.

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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

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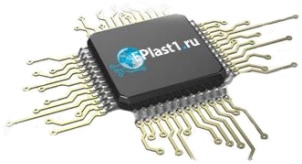
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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