PICDEM™ Z
ZigBee™ Technology Demonstration Kit

Summary

The PICDEM™ Z demonstration board is an easy-to-use ZigBee™ Technology wireless communication protocol development and demonstration platform. The demonstration kit includes the ZigBee protocol stack and two PICDEM Z boards, each with an RF daughter card.

The demonstration board is also equipped with a 6-pin modular connector to interface directly with Microchip's MPLAB® ICD 2 In-Circuit Debugger (DV164005). With MPLAB ICD 2, the developer can reprogram or modify the PIC18 MCU Flash memory and develop and debug application code all on the same platform. Microchip MPLAB IDE software is available for download on the Microchip web site at no charge.

Features

Key features of the PICDEM Z Demonstration Board include:

- ZigBee software stack supporting RFD (Reduced Function Device), FFD (Full Function Device) and Coordinator
- PIC18LF4620 MCU featuring nanoWatt Technology, 64 KB Flash memory and robust integrated peripherals
- Daughter card with Microchip MRF24J40 IEEE-802.15.4 2.4 GHz transceiver
- Microchip sniffer board with USB interface
- ZENA™ software – protocol stack configuration tool and wireless network analyzer
- In-Circuit Serial Programming™ (ICSP™) and MPLAB ICD 2 interface connector
- RS-232 interface
- 9V DC to 3.3V DC regulator
- Temperature sensor (Microchip TC77), LEDs and button switches to support demonstration

Package Contents

- Two PICDEM Z demonstration boards each with an RF transceiver daughter card
- ZigBee protocol stack source code (on CD ROM)
- PICDEM Z User's Guide (on CD ROM)

ZigBee Protocol Stack Availability

The ZigBee software stack is available from Microchip under a no-cost license agreement. The source code and license are available for download from the Microchip web site at www.microchip.com.

Host System Requirements

- PC-compatible system with an Intel Pentium® class or higher processor, or equivalent
- A minimum of 32 MB RAM, 128 MB recommended
- A minimum of 85 MB available hard disk space
- Microsoft Windows® 98 Second Edition, Windows ME, Windows 2000 or Windows XP
- CD ROM drive
- One serial port

MICROCHIP

Microchip Technology Incorporated

Part Numbers and Ordering Information

PICDEM™ Z ZigBee™ Technology Products		
Part Number	**Description**	**Availability**
DM163027-4	PICDEM Z 2.4 GHz Demo Kit	December 2006
AC163027-1	PICDEM Z Motherboard	December 2006
AC163027-4	PICDEM Z 2.4 GHz RF Card	December 2006

Development Tools from Microchip		
Part Number	**Development Tool**	**Description**
SW007002	MPLAB® IDE – includes: MPASM™ Assembler, MPLINK™ Linker/MPLIB™ Librarian and MPLAB SIM Software Simulator	Integrated Development Environment (download free of charge at www.microchip.com)
SW006011	MPLAB C18 C Compiler	C Compiler for PIC18CXXX MCUs
SW006012	MPLAB C30 C Compiler	C Compiler for dsPIC30F MCUs
DV164101	PICkit 1 Flash Starter Kit	Flash Starter Kit
DV164120	PICkit™ 2 Starter Kit	Starter Kit
DV164005	MPLAB ICD 2	In-Circuit Debugger
ICE2000	MPLAB ICE 2000 Modular In-Circuit Emulator	Full-featured Modular In-Circuit Emulator for PIC12, PIC16 and PIC18 MCUs
ICE4000	MPLAB ICE 4000 Modular In-Circuit Emulator	Full-featured Modular In-Circuit Emulator for PIC18 MCUs and dsPIC DSCs
DV003001	PICSTART Plus Programmer	Entry-level Development Kit with Programmer
DV007004	MPLAB PM3 Universal Device Programmer	Full-featured Modular Device Programmer
DM303006	KEELOQ® Security ICs Evaluation Kit II	Encoder/Decoder Evaluator
DV103003	microID® Developer's Kit	13.56 MHz Anticollision microID Developer's Kit for MCRF355 and MCRF360

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