

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
- RF transceiver and antenna interface via daughter card for flexibility
- Supports 2.4 GHz frequency band via Chipcon CC2420 RF transceiver
- 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

Development Systems

Microchip Technology Incorporated

Part Numbers and Ordering Information:

PICDEM™ Z ZigBee™ Technology Products		
Part Number	Description	Availability
DM163027-2	PICDEM Z 2.4 GHz Demo Kit	December 2004
AC163027-1	PICDEM Z Motherboard	December 2004
AC163027-2	PICDEM Z 2.4 GHz RF Card	December 2004

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	Flash 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

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