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# Low Power Solutions Demonstration Board

## Summary

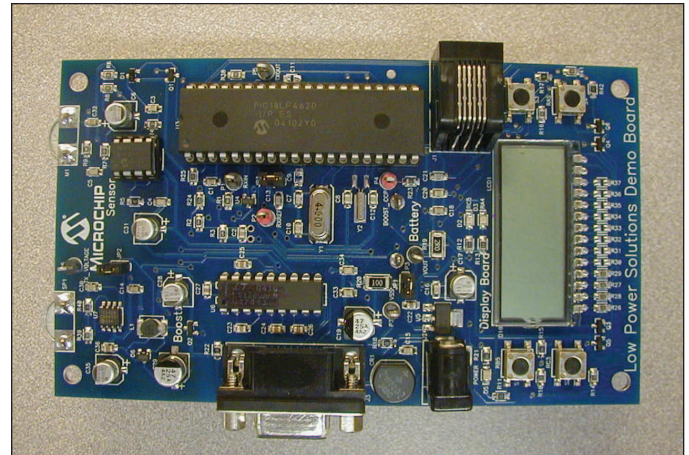
The Low Power Solutions Demonstration board provides designers a convenient and fun way to explore PICmicro® nanoWatt features within a functional ultrasonic range-finder application. It features the PIC18F4620, Microchip Technology's latest power managed device.

The development tool is ideal for learning nanoWatt features and implementing system power reduction techniques. The Low Power Solutions Demonstration board is part of the Workshop-in-a-Box 2, a complete nanoWatt training kit designed for self-paced and instructor-led training.

The Low Power Solutions Demonstration board CD includes three self-paced, step-by-step lab exercises, using the PIC18F4620, which illustrate the following concepts: nanoWatt features to reduce power consumption, improving system power consumption and improving board performance.

## Features

- Fully functional ultrasonic range finder with LCD display (PCB also supports four 7-segment LEDs)
- DC boost circuit
- USART
- Connector for MPLAB® ICD 2 In-Circuit Debugger
- Two power supply options: 9V power supply or 9V battery
- Test points to measure system and PICmicro power consumption via current meter
- Three switches for input and a reset switch and 2 LEDs
- Microchip TC1047A Temperature Sensor
- In-Circuit Debugger (ICD) connector for programming via In-Circuit Serial Programming™ (ICSP™) technology or developing with the MPLAB ICD 2



## Package Contents

- Low Power Solutions Demonstration Board preprogrammed with functional range finder code
- CD with user's guide, sample code written for the MPLAB C18 Compiler and three step-by-step labs illustrating nanoWatt features

## Host System Requirements

- PC-compatible system with a Intel Pentium® class or higher processor, or equivalent
- A minimum of 32 MB RAM
- A minimum of 40 MB available hard drive space
- CD-ROM drive (for use with the accompanying CD)
- Available serial port
- Microsoft Windows® 95/98, Windows NT®, Windows 2000 or Windows XP



**MICROCHIP**

Development Systems

Microchip Technology Incorporated

## Ordering Information

### Low Power Solutions Demonstration Board

Part Number	Description	Availability
DM163026	Low Power Solutions Demonstration Board	Now

### 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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