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Utility Band BPSK 6 Kbps Power Line Soft Modem PICtail Plus Daughter Board   **Buy it Now**
Part Number: AC164145
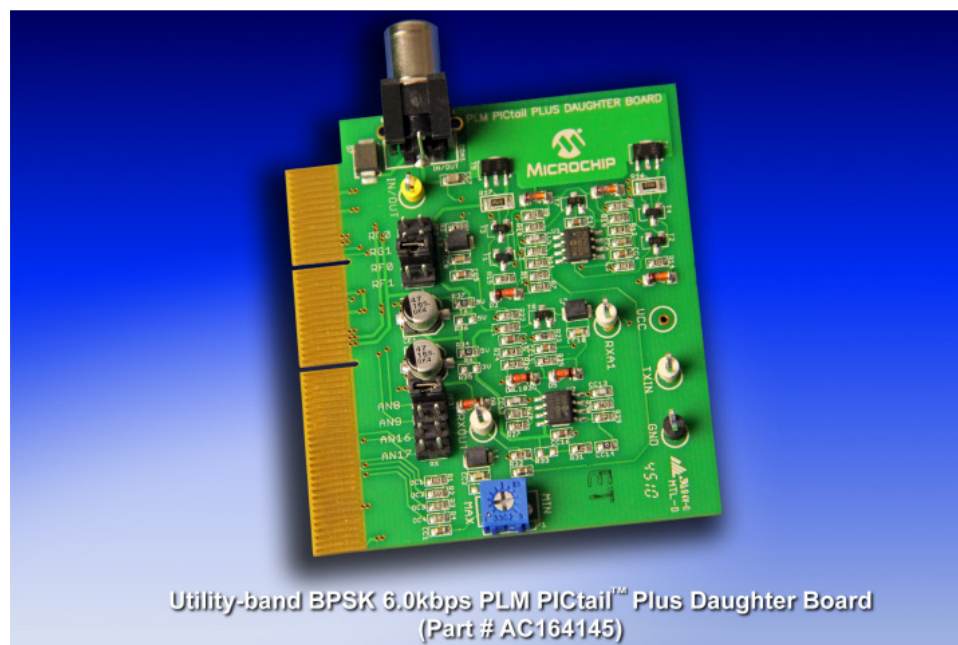
Utility-band BPSK 6.0kbps PLM PICtail™ Plus Daughter Board
(Part # AC164145)

Overview

The **Power-Line Modem (PLM) PICtail™ Plus Daughter Board** provides communication over power-lines using a Binary Phase Shift Keying (BPSK) modulation scheme. These boards interface to the popular Explorer 16 Development Board and operate in the CENELEC A utility frequency band at a carrier frequency of 72 kHz. The software modem runs on the dsPIC33F Digital Signal Controller (DSC) and utilizes an Analog Front End (AFE) to interface to the AC power mains.

Each of the communication nodes utilizes a high voltage (HV) adapter cable that connects Utility-Band BPSK-Based 6 Kbps Power-Line Soft-Modem to the AC mains. The HV adapter cable incorporates the circuitry required to provide the noise-filtering and isolation from the power-line.

Features

- Operates on 5V and 9V power supply
- Modulation and demodulation in software
- Variable transmit power level setting
- Compatible with 220V/50 Hz and 110V/60 Hz power-lines, or any AC line ranging from 0-220VAC at 50 or 60Hz

Getting Started

To get started, two Explorer 16 boards with dsPIC33FJ256GP710A devices and two 9V power supplies are required for point to point communication. The Power-Line Modem (PLM) PICtail Plus Daughter Boards allow insertion into the Explorer 16 development boards in only one orientation. The demonstration software provides all of the source code required to implement power-line communication. In addition, there are also five different demos with example source code. Two Utility-Band BPSK-based 6 Kbps Power-Line Soft-Modems are included in this kit. Explorer 16 boards can be purchased separately.

Package Contents

- Info Sheet
- (2) Utility-Band BPSK-based 6 Kbps Power-Line Soft-Modem PICtail Plus Daughter Boards