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DS51815B



# ZeroG 802.11 PICtail™ Plus Daughter Board

## Overview

The ZeroG 802.11 PICtail™ Plus Daughter Board is a demonstration board for evaluating Wi-Fi connectivity using PIC® microcontrollers and the ZeroG ZG2100 module.

## Features

- ZeroG ZG2100 Wi-Fi module with 802.11 connectivity
- Daughter board supports PICtail and PICtail Plus connectors

Please see reverse side for schematic.

## Getting Started

To get started, an Explorer 16 development board or PICDEM.net™ 2 development board is required. The ZeroG PICtail should be inserted into the topmost slot of the PICtail Plus connector J5 on the Explorer 16 demo board, or in the PICtail connector on the PICDEM.net 2 board.

## TCP/IP Stack and Firmware

The Microchip TCP/IP stack and other firmware examples can be downloaded from http://www.microchip.com/Ethernet, then select “TCP/IP Stack”, or go directly to http://www.microchip.com/tcpip. Support for the ZeroG 802.11 PICtail is in version 5.0 and later. Examples for the Explorer 16 development board and a PIC24F or PIC32 PIM are provided as well as a PIC18 example using the PICDEM.net 2 board. See the stack help file for more details.

## Signal Interface

| Function | I/O | PIC18 Pin | PIC24F Pin | Description |
|---|---|---|---|---|
| CSN | I | RC2 | RB2 | SPI Chip Select |
| SCK | I | RC3/SCK | RF6/SCK1 | SPI Clock |
| SDO | O | RC4/SDI | RF7/SDI1 | SPI Data Out from ZG2100M |
| SDI | I | RC5/SDO | RF8/SDO1 | SPI Data In to ZG2100M |
| INT_NX | O | RB0INT0 | RE8/INT1 | Interrupt Signal to PIC® Device |
| RST_N | I | RB1 | RF0 | Reset Signal to ZG2100M |
| CE_N | I | RB2 | RF1 | Chip Enable Signal to ZG2100M |

## Wireless Router Configuration

The Microchip TCP/IP stack examples are written to interface to a wireless router with the following configuration:
SSID: MicrochipDemoAP
Channel: 1, 6, or 11
Security: Disabled
These can be changed in the file TCPIPConfig.H.

## Media Access Control (MAC) Address

For evaluation purposes, the TCPIP stack is preconfigured to use the preprogrammed MAC address on the ZG2100M. This is found in the file, `TCPIPConfig.H`.

## Board Schematic

