

# 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.

### Americas

Atlanta - 678-957-9614  
Boston - 774-760-0087  
Chicago - 630-285-0071  
Cleveland - 216-447-0464  
Dallas - 972-818-7423  
Detroit - 248-538-2250  
Kokomo - 765-864-8360  
Los Angeles - 949-462-9523  
Phoenix - 480-792-7200  
Santa Clara - 408-961-6444  
Toronto - 905-673-0699

### Asia/Pacific

Australia - Sydney - 61-2-9868-6733  
China - Beijing - 86-10-8528-2100  
China - Chengdu - 86-28-8665-5511  
China - Hong Kong SAR - 852-2401-1200  
China - Nanjing- 86-25-8473-2460  
China - Qingdao - 86-532-8502-7355  
China - Shanghai - 86-21-5407-5533  
China - Shenyang - 86-24-2334-2829  
China - Shenzhen - 86-755-8203-2660  
China - Wuhan - 86-27-5980-5300  
China - Xiamen - 86-592-2388138  
China - Xian - 86-29-8833-7252  
China - Zhuhai - 86-756-3210040  
India - Bangalore - 91-80-3090-4444  
India - New Delhi - 91-11-4160-8631  
India - Pune - 91-20-2566-1512  
Japan - Yokohama - 81-45-471-6166  
Korea - Daegu - 82-53-744-4301  
Korea - Seoul - 82-2-554-7200  
Malaysia - Kuala Lumpur - 60-3-6201-9857  
Malaysia - Penang - 60-4-227-8870  
Philippines - Manila - 63-2-634-9065  
Singapore - 65-6334-8870  
Taiwan - Hsin Chu - 886-3-6578-300  
Taiwan - Kaohsiung - 886-7-536-4818  
Taiwan - Taipei - 886-2-2500-6610  
Thailand - Bangkok - 66-2-694-1351

### Europe

Austria - Weis - 43-7242-2244-39  
Denmark - Copenhagen - 45-4450-2828  
France - Paris - 33-1-69-53-63-20  
Germany - Munich - 49-89-627-144-0  
Italy - Milan - 39-0331-742611  
Netherlands - Drunen - 31-416-690399  
Spain - Madrid - 34-91-708-08-90  
UK - Wokingham - 44-118-921-5869

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**MICROCHIP**

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## Board Schematic

