



## Key Points

- Compatible with NetBurner MOD5234, MOD5270 and MOD5282 Modules.
- Secure data communications with 64/128-bit WEP
- Wireless Standards: IEEE 802.11 b/g, 2.4GHz RF band mode PA
- Modulation: OFDM, DSSS, CCK, DQPSK, DBPSK, 64 QAM, 16 QAM
- SPI Interface
- Operating range: -10° to 70°C

## NetBurner 802.11 b/g Wireless Solution

### Overview

Quickly and easily add 802.11 b/g wireless connectivity to your NetBurner core module product with the NBWIFIUG-100CR add-on module. The small 2" x 1.2" module communicates via the SPI interface to your compatible core module. The TCP/IP stack supports multiple network interfaces and you can both wireless and wired connections at the same time.

The NBWIFIUG-100CR is compatible with the Mod5234, Mod5270 and Mod5282 modules. The wireless development kit is compatible with the NNDK-MOD5234-KIT, NNDK-MOD5270-KIT, NNDK-MOD5270LC-KIT and NNDK-MOD5282-KIT.



NBWIFIUG-100CR



NBWIFIUG-100CR with antennae and adapter board (included with development kit)

## Specifications

### Wireless Standards

- IEEE 802.11 b/g
- 2.4GHz RF band mode PA

### Security

- 64/128-bit WEP

### Modulation

- OFDM, DSSS, CCK, DQPSK, DBPSK, 64 QAM, 16 QAM

### Interface: SPI

**Operating Temperature:** -10° to 70°C

**Power:** 3.3V @ 160mA

### Compatibility:

To use the NBWIFIUG-100CR 802.11b/g module, you will need a compatible module development kit (NNDK-5234-KIT, NNDK-MOD5270-KIT, NNDK-MOD5270LC-KIT, or NNDK-5282-KIT). The development kit must include a MOD-DEV-100 carrier board revision of 1.12 (or later) or a MOD-DEV-70 carrier development board revision 1.6 (or later). If you have a module development kit with a carrier board revision earlier than 1.12 (MOD-DEV-100) or 1.6 (MOD-DEV-70), you will need to purchase a new development kit.

## Part Numbers

### NetBurner 802.11b/g Wireless Module Add-on

*P/N: NBWIFIUG-100CR*

A compatible NetBurner network development kit and the NNDK-NBWIFIUG-KIT is required to use this product.

### NetBurner 802.11b/g Wireless Module Add-on Development Kit

*P/N: NNDK-NBWIFIUG-KIT*

Includes a NBWIFIUG-100CR module, an adapter board, and an antenna. A compatible NetBurner network development kit is required to use this product.

## Ordering Information

**E-mail:** sales@netburner.com

**Online Store:** www.Netburner.com

**Telephone:** 1-800-695-6828

## Module Pinout and Signal Description

The NBWIFIUG-100CR Module has a 10-pin header which enables you to quickly and easily connect to your own carrier board. Table 1 provides descriptions of pin function of the module header.

**Table 1: Module Header Pinout and Signal Descriptions**

| Pin | Silkscreen | SPI Signal | Module Signal | SPI Function               |
|-----|------------|------------|---------------|----------------------------|
| 1   | GND        | GND        | GND           | Ground                     |
| 2   | SD02       | Unused     |               |                            |
| 3   | SD03       | SS         | QSPI_[0:3]    | Slave Select (Chip Select) |
| 4   | SDCMD      | MOSI       | QSPI_DOUT     | Master Out / Slave In      |
| 5   | GND        | GND        | GND           | Ground                     |
| 6   | VDD        | VCC        | VCC           | Supply Voltage 3.3V        |
| 7   | SDCLK      | SC(L)K     | QSPI_CLK      | Clock                      |
| 8   | GND        | GND        | GND           | Ground                     |
| 9   | SD00       | MISO       | QSPI_DIN      | Master In / Slave Out      |
| 10  | SD01       | IRQ        | IRQ[3:7]      | Interrupt                  |

### Note:

1. The NBWIFIUG-ADPT-100CR routes IRQ3 and QSPI\_1 to be used as interrupt and slave select respectively.