



Key Features:

- Uses half height Mini-Card Form Factor
- Certified Bluetooth™ and Wi-Fi™ Radio Solution with Coexistence
- Integrated Ultra Low Power Consumption GPS
- INTEL McCaslin Platform I/O Pin Definition
- RoHS Compliant

Applications:

- Ultra Mobile Personal Computers
- Mobile Internet Devices
- MP3 Audio and MP4 Video Players
- Personal Digital Assistants (PDAs)
- VOIP Phones and Terminals
- Industrial Products
- Handheld Terminals
- Other Portable Devices which require Wireless connectivity.

Complete Multi-Mode Radio Subsystem:

- ISM Band 802.11b/g
- Full support for 802.11e (QoS)
- Support for 802.11i (Security)
- Bluetooth v2.0 + EDR™
- 20 Channel High Performance GPS Receiver
- Fully Integrated Coexistence Solution

Interfaces:

- SDIO 1.1 interface for 802.11 Wi-Fi™
- USB 2.0 Interface for Bluetooth™
- UART NMEA for GPS
- 50Ω Antenna Launch for each Radio

W2CBWG01

W2CBWG03

General Description:

The W2CBWG01 and the W2CBWG03 are fully integrated 802.11b/g WLAN, Bluetooth™ and GPS Solutions designed specifically for ultra-mobile portable electronics. Designed to interface with the INTEL McCaslin Ultra-Mobile PC Platform.

Driver Support:

WinXP
WinVista

Part Numbers:

W2CBWG01 Mini-Card

- SDIO 802.11b/g
- USB Bluetooth™ v2.0+EDR
- UART NMEA GPS

W2CBWG03 Mini-Card

- SDIO 802.11b/g
- USB Bluetooth™ v2.0+EDR

Operating Frequencies

- 802.11b/g & Bluetooth: 2.4GHz Band
- GPS 1.57542 GHz

802.11 + Bluetooth™ Transmit Power:

- 802.11 b Pout = +15 dBm Typ.
- 802.11g Pout = +15 dBm Typ.
- Bluetooth v2.0 Pout = +3 dBm Typ.
- Bluetooth EDR Pout = -1 dBm Typ.

802.11 + Bluetooth™ Receiver Sensitivity:

- 54 Mb/s @ -74 dBm 802.11g OFDM
- 6 Mb/s @ -90 dBm 802.11g OFDM
- 11 Mb/s @ -88 dBm 802.11b DSSS
- 1 Mb/s @ -90 dBm 802.11b DSSS
- 1 Mb/s @ -84 dBm BT GFSK
- 2 Mb/s @ -87 dBm BT $\pi/4$ DQPSK
- 3 Mb/s @ -80 dBm BT 8DPSK

Baseband Modulation:

802.11 b/g

- OFDM, CCK

Bluetooth™ v2.0

- GFSK

Bluetooth™ EDR:

- $\pi/4$ DQPSK, 8DPSK

Quality of Service/Security Support:

- 802.11e EDCF
- WEP, TKIP, WPA and AES/CCMP per 802.11i

802.11 + Bluetooth™ Data Rates:

- DSSS/CCK: 1, 2, 5.5, and 11Mb/s
- OFDM: 6, 9, 12, 18, 24, 36, 48, and 54Mb/s
- V2.0: up to 1 Mb/s
- EDR: 2, 3Mb/s

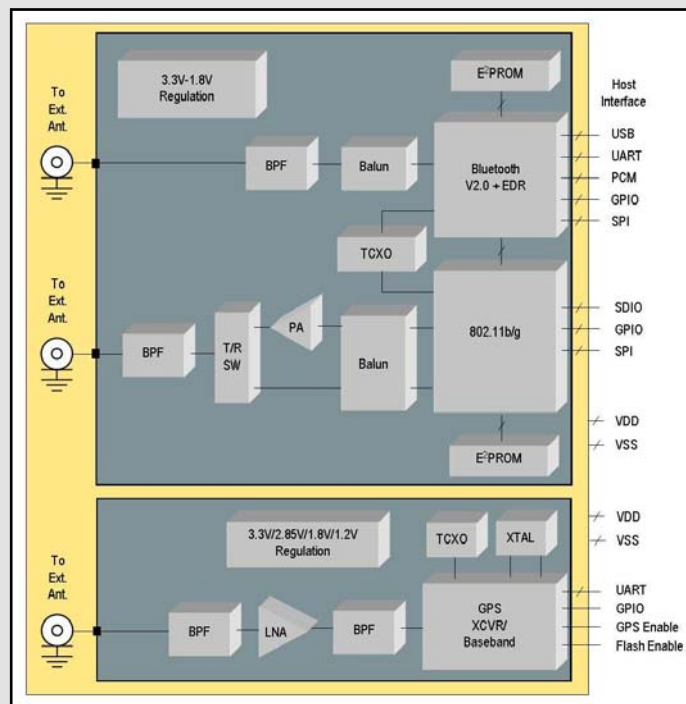
GPS Acquisition Time (TTTF):

- Hot Start TTTF @ -136 dBm: 0.6 sec
- Hot Start TTTF @ -141 dBm: 0.9 sec
- Hot Start TTTF @ -146 dBm: 1.9 sec
- Cold Start TTTF @ -136 dBm: 36 sec
- Reacquisition @ -136 dBm: 100 msec

GPS Receiver Sensitivity:

- Minimum Acquisition Signal : -141 dBm
- Minimum Tracking Signal: -157 dBm

The W2CBWG01 and W2CBWG03 deliver completely integrated 802.11b/g, Bluetooth™ and GPS functionality in a single easy to install Mini-Card Form Factor.



Dimensions:

- 26.8(L) x 30.0mm(W) x 3.3mm(H)

Form Factor:

- Half Height Mini-card

Interfaces:

- 802.11b/g: SDIO
- Bluetooth™: USB
- GPS: UART

Temperature Range:

- Operating Temperature: -30°C to +85°C
- Storage Temperature: -40°C to +85°C
- Humidity: 5% to 95%, Non-condensing

Your Wi2Wi Representative:

About Wi2Wi, Inc.

Operating since 1997, Wi2Wi Inc. is a premier supplier of Modem, 802.11, Bluetooth, GPS and combination solutions. Wi2Wi develops and supplies Module and System-in-Package Wireless Products to the world's largest Handheld, PC and Peripheral OEMs. Wi2Wi, with its patent-pending wireless integration technology along with industry leading silicon and supply chain partners, is committed to providing cost effective, high quality solutions for the wireless communications market.

To request more information about Wi2Wi please contact us at: info@wi2wi.com or visit us on the web at www.Wi2Wi.com

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