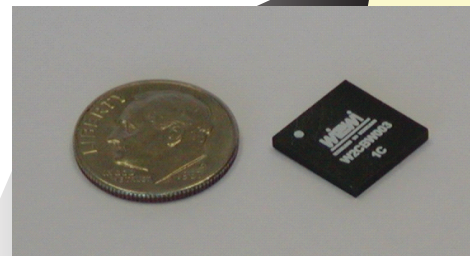




Wireless 2 Wireless



## Applications

- Warehousing and logistics handhelds
- Automotive aftermarket
- Medical equipment
- Industrial handhelds
- M2M applications
- POS terminals
- Internet-enabled consumer devices
- VoFi and other smartphones
- WiFi enabled security cameras

## Ordering Information

W2CBW003-TR - WiFi/BT SiP, Tape and Reel

W2CBW003-T - WiFi /BT SiP, Tray

W2CBW003-001: Designates UART BT Int

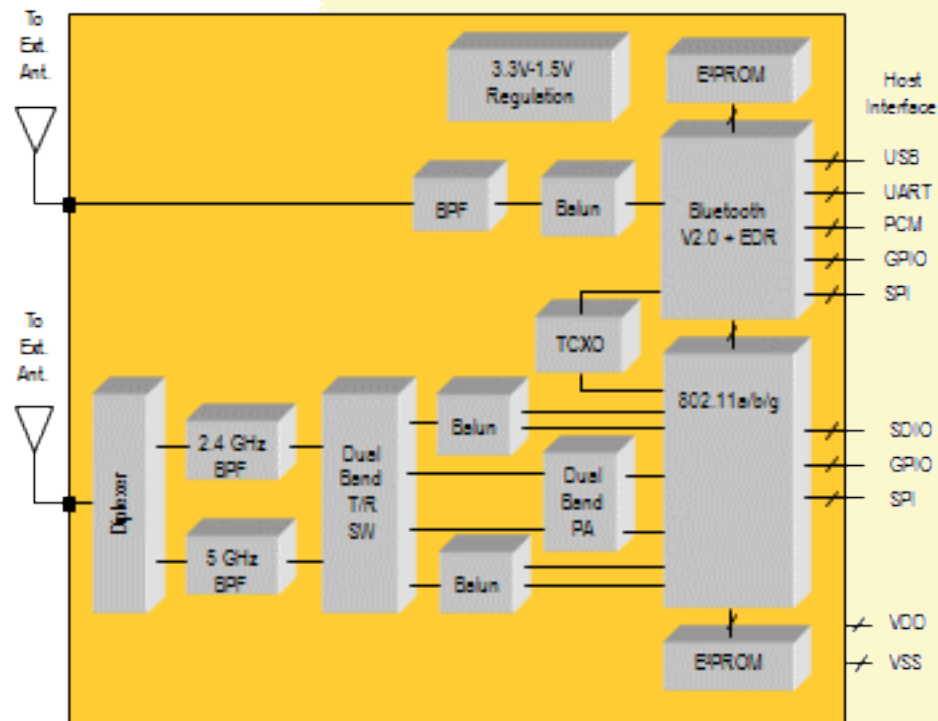
W2CBW003-SAM - WiFi/BT SiP Sample Pack

W2CBW003-DEV - WiF/BT SiP Evaluation Kit(

## Features

- Small form factor SiP solution, 12mm x 12mm x 1.4mm, 100 Pin LGA, 1mm pitch
- Low power consumption and power save mode
- Full support for 802.11 e(QoS) and 802.11i (Security)
- Integrated RF-friendly LDO for single rail operation
- Integrated PA, EEPROM, Balun, and clocking
- Optimized front-end design for receive sensitivity, plus full coexistence support
- Full driver support for popular OSs for the Marvell PXA processor family, Linux support for many other ARM-9 based processors
- Includes both an SDIO and a GSPI interface for WiFi, and a UBS and UART interface for BT
- RoHS compliant
- 7 GPIOs for WiFi, 2 GPIOs for BT

Wi2Wi Inc. 2107 N First Street Ste 540, San Jose, CA 95131  
USA Tel: +1 408 416 4000 FAX: +1 408 416 4201  
www.wi2wi.com



## W2CBW003 - Specifications

### Package Dimensions

- 12mm (L) x 12mm(W) x 1.4mm(H)

### Package Type

- 100-pin BGA, 1 mm pitch

### Power Ratings

- Supply Voltage : 3.3VDC, regulated to 1.5V
- Peak Current: 275 mA  
(continuous transmit, 802.11g and BT)
- IEEE Power Save Mode: 10 mA
- Standby mode (both radios): 30 mA
- Deep Sleep Mode: 2mA

### Temperature Range

- Operating: -20° C to + 75° C
- Storage: -40° C to + 85° C
- Humidity: 5% to 95%, Non-condensing

### Data Rates

- CCK: 1,2,5.5, and 11Mb/s
- OFDM: 6,9,12,18,24,36,48, and 54 Mb/s
- BT v2.0: up to 1Mbps
- BT EDR: 2,3 Mbps

### Interfaces - WiFi

- SDIO 1 bit and 4 bit, GSPI

### Interfaces - BT

- USB (default) or UART

### Transmit Power

- +15dBm typical for both 802.11 b and g
- BT v 2.0: +3dBm, EDR: -1dBm

### Security

- WEP,TKIP, WPA and WPA2, AES/CCMP per 802.11 i
- CCX upon request

### Baseband Modulation - WiFi

- 802.11g: OFDM
- 802.11b: DSSS/CCK

### Baseband Modulation - BT

- v2.0: GFSK
- Bluetooth EDR:  $\pi/4$  DQPSK, 8DPSK

### Receiver Sensitivity - BT

- 1 Mb/s @ -84 dBm GFSK
- 2 Mb/s @ -87 dBm  $\pi/4$  DQPSK
- 3 Mb/s @ -80 dBm 8DPSK

### Receiver Sensitivity - WiFi

- 54 Mb/s @ -74 dBm OFDM
- 6Mb/s @ -90 dBm OFDM
- 11Mb/s @ -88 dBm CCK
- 1Mb/s @ -90 dBm DSSS

### Quality of Service

- 802.11 e EDCF

### Host Processors/OS With Driver Support

- Marvell PXA Family - most OSs
- Freescale i.MX21 and 31 - Linux OS, SDIO
- Samsung SC2443, 2412 - Linux (SDIO), WinCE

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Wi2Wi:

W2CBW003-DEV W2CBW003-001