

# BlueFan BH661C, Dual Mode Bluetooth 4.2 Module

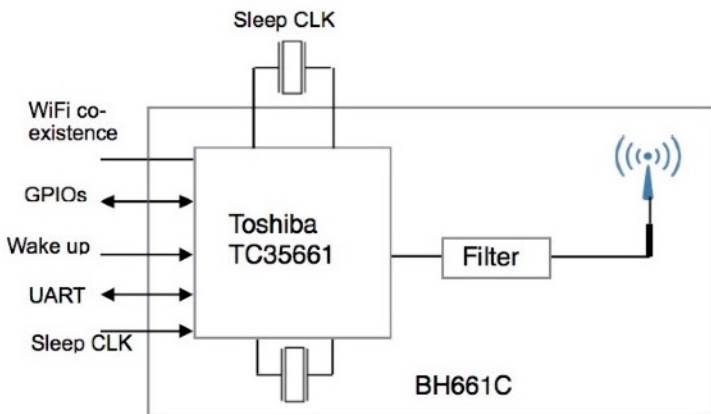


## Features

BlueFan BH661C module uses Toshiba TC35661 SoC. With an integrated antenna, FCC, and other certifications, it allows faster time to market and reduced development cost.

## Easy Prototyping and production

BH661C has Castellated pins. It can be soldered by hand during prototyping and a precision SMT line is not required for production



## Specifications

- Processor: Toshiba TC35661
- Bluetooth Classic and BLE (Dual Mode) Support
- Transmitter power +2 dBm; Receiver sensitivity: -91 dBm.
- Bluetooth Profiles:
  - BH661C-503 V4.2 SPP and GATT.
  - BH661C-009 V4.2 WBS (WideBand Speech)
  - BH661C-551 V4.2 SPP and GATT, secure connection.
  - BH661C-203 V3.0 SPP, achieving 1.2 Mbps SPP throughput.
- On board masked ROM and SRAM for reliable operation
- Host Control Interface (HCI) protocols, UART interface
- General Purpose IO
  - SPI interface
  - I<sup>2</sup>C interface
  - UART interface, 2400bps to 4.33Mbps

- Wake up interface from sleep and deep sleep modes
- On-board main clock
- External 32.768 kHz sleep clock
- Integrated chip antenna
- Bluetooth line of sight range: 50 meters
- Operation voltage: 1.8V-3.6V
- Operation Temperature: -40°C to +85°C
- Dimension: 16.7x11x1.9mm,
- Package: castellated, 24 pins.
- Integrated shield to resist EMI

## Certifications

- FCC ID: X8WBH661
- Industrial Canada ID: 4100A-BH661
- Toshiba QDID for TC35661: 48709

## Evaluation Board

- HCI commands for BLE.
- Simplified TCU commands for Bluetooth classic SPP.
- Windows PC evaluation software: <https://dl.dropboxusercontent.com/u/54939426/BlueFanHCIwin.rar>
- MAC PC evaluation software: [https://dl.dropboxusercontent.com/u/54939426/BlueFanHCI\\_mac.zip](https://dl.dropboxusercontent.com/u/54939426/BlueFanHCI_mac.zip)
- BlueFan apps available at Apple App Store and Google Play Store.

## Applications

- Wearable
- Access Points
- Industrial Control
- Medical
- Scanners
- iOS and Android devices
- Wireless sensors
- Cable replacement
- Instrumentation
- Automobile
- Sports

## Ordering Information:

Part Number	BH661C-503	BH661C-551	BH661C-009
Evaluation board part number	EV-BH661C-503	EV-BH661C-551	EV-BH661C-009
Availability	Production	Production	Production