



Features and Benefits

- Thin package: 1.5mm
- Small footprint: 10mm x 11.3mm
- Multiple power-save modes to maximize battery life
- Advanced Security
- Bluetooth active signaling interface for optimum packet efficiency
- QoS Packet prioritization for time sensitive payload.
- Independent / Shared Antenna
- OS Support for Windows Mobile[®], Linux[®]
- WLAN SDIO / SPI Host Interfaces
- BT UART / USB Host interfaces

WLAN / BT Product Brief LGEE1W8GZC (WLBT8111) LGEE1W8KCC (WLBT8112)

WLAN 802.11b/g and BT V2.0 EDR Module

SyChip Inc. introduces the types GZ and KC, WLBT8111 / WLBT8112, a dual radio module conforming to IEEE 802.11b/g wireless LAN and Bluetooth version 2.0 with Enhanced Data Rate.

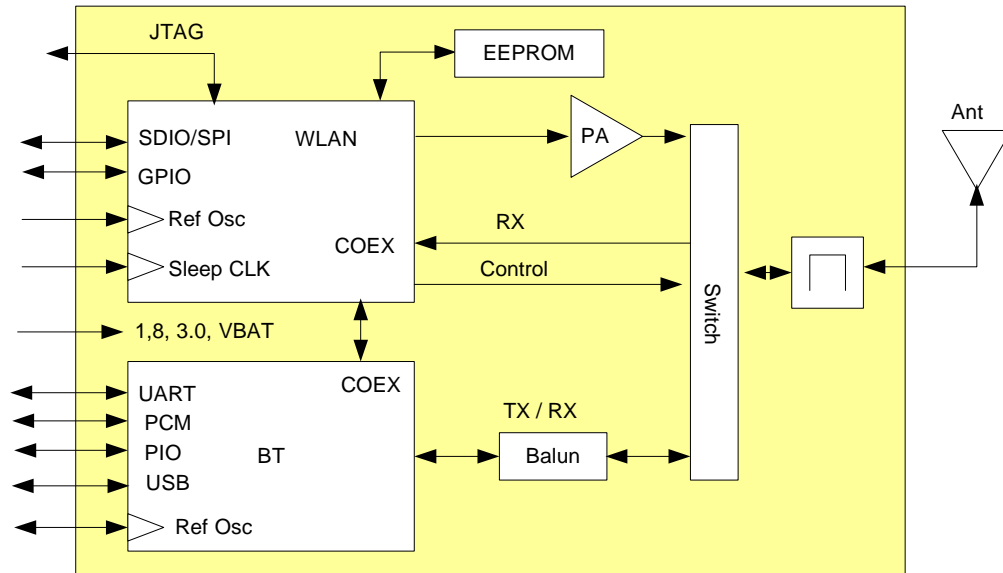
The new Module provides the best of both wireless LAN and Bluetooth in a compact package. The feature set for WLAN includes IEEE 802.11i security, Quality of Service (QoS) traffic prioritization for VoIP and multimedia applications, an ultra low power sleep mode. The feature set for Bluetooth includes v2.0 with EDR for high throughput along with real time data profiles for audio packets. An internal Bluetooth signaling interface along with AFH is utilized for enhanced co-existence for the two radios who share the same 2.4 GHz spectrum.

The module provides a single RF interface to support a shared antenna configuration. The primary benefit of shared antenna is maximized range and minimized host PCB area as only one antenna is needed.

This module is targeted to Mobile Phones and consumer electronics where high integration, proven coexistence, and fast design cycles are highly valued.

The module integrates the latest silicon technology for mobile client Wireless LAN and Bluetooth offering the best feature set while minimizing space and power consumption.

This module utilizes a QFN package and allows direct attachment to the main Printed Circuit board utilizing industry standard surface mount technology processing for high volume production.



WLBT8111/8112 Block Diagram

Specifications:

- Standards Conformance: 802.11b/g WLAN, BT v2.0 EDR
- Frequency Range: 2.4 to 2.5 GHz
- Operational Voltage range: 1.8, 3.0, 3.6Vdc
- WLAN Host Interface: 1.8 or 3.3vdc
- BT Host Interface 1.8vdc for 8111, 3.0v for 8112
- WLAN RF Power: +12 to +15dBm
- BT RF Power: +0dBm
- WLAN Sleep current: 250uA
- Receive DC Current: 250mA
- Transmit DC Current: 210 mA
- BT current 17 – 36mA.
- BT Sleep current: 42uA
- Physical Dimensions: 10mm x 11.3mm x 1.5mm
- RF Interfaces: PCB pad
- WLAN Host Interfaces: SDIO, SPI
- BT Host Interface: UART, USB

Visit our website: www.sychip.com

Corporate Headquarters
Parkway Centre II
2805 North Dallas Parkway, Suite 400
Plano, TX 75093 U. S. A.
Tel: (1) 972-202-8888 • Fax: (1) 972-633-0327