

IEEE802.11 b/g/n WLAN 2.4G Single Band + Bluetooth 4.1 Multi-Mode IoT Controller



■ Features

- Size: 8 mm (W) * 8 mm (D) * 1.6 mm (H)
- IEEE 802.11 b/g/n, WLAN 2.4GHz single band, Bluetooth 4.1 Multi-Mode IoT Controller
- Small size, easy to integrate
- High speed SDIO 2.0 & UART interface
- High Wi-Fi & BT Performance
- Low Power Consumption
- Operating temperature: -30 to 85°C
- FCC and CE compliance
- RoHS certification

■ Applications

- Environmental & energy monitoring
- Wireless Sensing, remote data logging
- Appliance control
- Fitness equipment
- Medical and Healthcare
- Industrial Control and Monitoring
- Smart Home, Smart Appliances
- Home Energy Management System
- Wireless Audio
- Smart toys & robots
- And more...

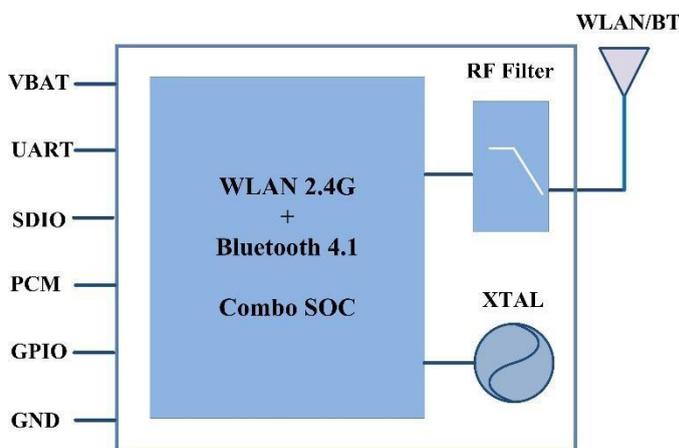
Using a Wi-Fi or BT IoT controller to connect your device to the internet only solves half the problem. Alinket provides a set of development tools and middleware system to support global IoT products developing and cloud connecting.

■ Highlights

The ALXC10 is a family of small, low-powered, self-contained, certified 2.4G WLAN & Bluetooth 4.1 IoT network controllers. It can bring internet connectivity to your devices through various interfaces such as SDIO, UART, PCM etc. The controllers are an ideal solution for device manufacturers who are looking for wireless connectivity in medical and healthcare applications, industrial control equipment, home appliances and smart energy systems.

The ALXC10 controllers are completely compatible with Alinket Linux development kit architecture and support Alinket proprietary software architecture.

■ ALXC10 System Architecture



ALXC10 Specification

Technology	IEEE802.11 b/g/n, WLAN 2.4G, Bluetooth 4.1 (BR, EDR & Low Energy) compliant
Wi-Fi Security	WEP, TPK, WPA, WPA2, AES
Interfaces	SDIO 2.0, UART
Data Rate	UART 4Mbit/s, SDIO 2.0 – 1bit 25Mbps, gSPI – 50Mbps
Microprocessor & Memory	ARM Cortex - M3, 640KB ROM & 512kB RAM
Max. RF Transmit Power	WLAN 2.4 GHz: +18.5dBm (11b), +18dBm (11g), +15.5dBm (11n); Bluetooth: 11dBm (max.)
Min. Receive Sensitivity	WLAN 2.4GHz: -97dBm (11b), -91dBm (11g), -90dBm (11n); Bluetooth: -94.5dBm
Voltage	3.3V±10%
Peripherals	PCM, GPIO
Wi-Fi Power Consumption	Work Mode: 60 mA; Idle Mode: 5 mA; Sleep Mode: 300uA
BT Power Consumption	Work Mode: 20mA (peak); Adv./Scan: ~100µA; Sleep Mode: 6µA

Evaluation Board

Evaluating the ALXC10 controller using Alinket’s Wi-Fi & BT software is agile and friendly by simply plugging the board into a PC using a standard JTAG and getting started on one of our demo application. The evaluation board includes:

- Mini-USB connector; USB power supply
- Rich peripheral interfaces
- LEDs



Contacts

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ALXC10

ALXC10	WLAN 2.4G, Bluetooth 4.1, Multi-Mode Controller, No Antenna (Customer needs to design it)
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About Alinket Technology, INC.

Alinket offers a range of leading cloud-connected wireless communication controllers including Wi-Fi, Bluetooth, BLE, and WiFi+BT/BLE. Alinket is building an effective eco-system for the IOT world.

