

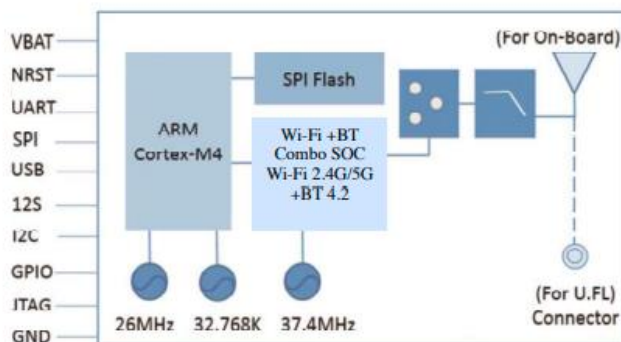
ALC20A_B Wi-Fi 2.4G/5G & BT/BLE Controller

ALXC20A_B is a small-size, low-power, dual-mode IoT controller developed by ALINKET for medical, industrial, electrical, intelligent energy and other industries. The product supports 2.4G/5GHz Wi-Fi and BT&BLE and provides multiple host connection interfaces, such as UART, 12C, GPIO, etc. Based on ALINKET IoT development suite (AiDK), ALXC20A_B controller supports custom function development.

■ Highlights

- Support WLAN 802.11a/b/g/n 2.4GHz/5 GHz WI-FI +Bluetooth 4.2 dual mode
- Cypress Wi-Fi & Bluetooth chip and ST ARM Cortex-M4 MCU
- Support Wi-Fi STA and Soft AP dual mode
- Enterprise Security — WPA/WPA2 enterprise or 802.1x/EAPoI
- Support fast roaming (optimal trigger mechanism)
- Multi-Socket TCP/IP connection
- Bluetooth master-slave mode
- Network configuration Application Flashlink, AP and One-time server configuration
- Support over-the-air upgrade (OTA)
- Support TCP.UDP.MQTT.COAP.LWM2M and other IoT access protocols
- Support built-in antenna or U.FL connector
- Working Temperature: -30°C ~ +85°C
- RoHS/CE/FCC Certification

■ System Architecture



■ Applications

- Environment and energy
- Medical and Health
- Fitness facilities
- Industrial control and monitoring
- Smart city, Smart home
- Wireless sensing network
- Smart Robots & Toys
- And more...

■ Contact

For more information, please contact: Alinket Electronic Technology (Shanghai) Co., Ltd.
Tel: +86 21 58651708, E-Mail: sales@alinket.com, or visit our website at www.alinket.com

■ Ordering Information

ALXC20A : Full-featured Wi-Fi controller with built-in ceramic antenna

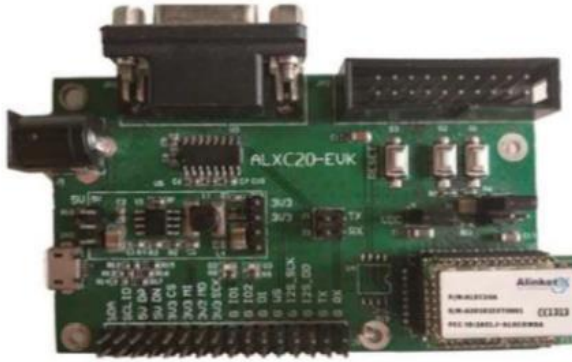
ALXC20B : Full-featured Wi-Fi controller with U.FL connector

■ ALXC20A_B Specification

Module		ALXC20A_B
Size (mm)		28*14.3*2.2
Wi-Fi Technology		IEEE802.11 b/g/n
Wi-Fi Band		2.4G/5G
Bluetooth		BT4.2 (BR/EDR/LE)
MCU	Core	ARM® Cortex®-M4@100MHz
	RAM	128KB
	Flash	512KB
Flash		1MB
Interface		UART, SPI, USB, I2C,ADC,GPIO
TX Power (dBm)	2.4G(b/g/n)	+19.5, +18, +16.5
	5G(a/n)	+19, 16.5
	RT/BLE	+11/+8.5
RX Sensitivity (dBm)	2.4G(b/g/n)	-95, -92, -92
	BT/BLE	-92.5/-97
Power Consumption		~80Ma@500Kbps
Antenna		A: ceramic antenna
		B: external antenna with U.FL connector
Working Mode	Pass-through	N
	ACM	Y
Wi-Fi Security		WEP,WPA/WPA2-Personal&Enterprise (EAPoI)
Network Protocol		TAP/UDP,IP,HTTP,DHCP,DNS,CoAP,LW M2M
Low Power Consumption		Y
Wi-Fi Roaming		Y
Wi-Fi STA & Soft AP mode		Y
Bluetooth master-slave mode		Y
Voltage		3.3V (±10%)
Working Temperature		-30°C ~ +85°C
Wi-Fi Function		OS: Tree RTOS/Threat X; Application: Flashlink, Firmware (OTA)

■ ALXC20A_B Evaluation Board

Alinket provides ALXC20A_B Evaluation Board to verify various interfaces and functions of the product, which can quickly verify the feasibility of technical solutions, and shorten the R&D cycle.



About Alinket Technology, INC.,

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

