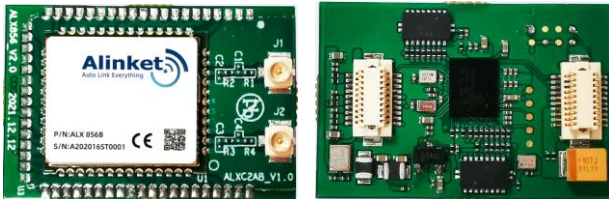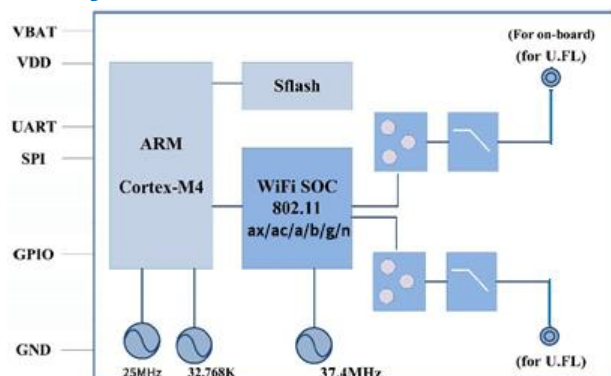# ALX856B Wi-Fi Controller

ALX856B is a series of small, low-power, self-contained certified 2.4g/5g dual band network controllers. It can bring internet connection to your equipment through UART, SPI and other interfaces. This series of controllers is an ideal solution for equipment manufacturers in medical care, industrial control, household appliances and intelligent energy industries.

27.5mm(W)*18.4mm(D)*5.2mm(H)

System Architecture

▮ Advantage

- Support 2T2R ieee802.0 11 ax / AC / A / B / g / N, 2.4g/5g band

- Support multiple interfaces: UART, SPI, etc

- Multi socket TCP / UDP connection

- Network configuration app flashlink

- Support Wi Fi station and SoftAP dual mode

- Roaming (optimal trigger mechanism)

- Enterprise level security mechanism - WPA / WPA2 enterprise or 802.1x/eapol

- Support OTA upgrade

- Temperature: - 30 ° C to + 85 ° C

- ROHS certification

▮ Application

- Environment and energy

- Medical and health

- Industrial control and monitoring

- Smart city, smart home
- Wireless sensor network
- Wireless audio and video
- more...

ALX856B Standard

modular		ALX856B
size (mm)		27.5x18.4x5.2
Wi Fi Technology		2T2R 802.11 a/b/g/n/ac/ax Wi-Fi
frequency band		2.400 GHz ~ 2.4835 GHz (2.4GHz ISM Band) 5.15~5.35GHz、5.47~5.725GHz、5.725~5.85GHz (5GHz UNII Band)
Transmit power (dBm)	2.4G(b/g/n)	+17.5, +17, +16
	5G(a/n/ac)	+16, +15.5, +14
Receiving sensitivity (dBm)	2.4G(b/g/n)	-88, -84, -78
	5G(a/n/ac)	-83, -78, -77
Microprogram controller	kernel	ARM® Cortex®- M4@180MHz
	Memory	256KB
	read-only memory	1024KB
Wired interface		UART, SPI, I2C, ADC, GPIO
Voltage		3.3V (±5%)
temperature		-30°C ~ +85°C
humidity		10% ~ 90%

ALX856B Software Features

modular		ALX856B
Working mode	transparent transmission	N
	ACM *	Y
	Transmission and ACM mixing	N
Wi-Fi encryption		WEP, WPA/WPA2-Personal & Enterprise(EAPoL)
Network protocol		TCP/UDP, IP, HTTP, DHCP, DNS, CoAP, LWM2M
low power consumption		Y
roam		Y
Station & SoftAP mode		Y
Wechat – airkiss Technology		Y
Positioning technology		Y
Audio technology		Y

* remarks: Please contact your local sales office or dealer for more information.

About ALINKET electronic technology,

ALINKET provides a series of leading cloud access wireless communication controllers including wi - fi, Bluetooth, low-power Bluetooth and WI - fi + Bt / ble

ALINKET aims to establish an effective world ecosystem of Internet of things.