CSW808K IEEE 802.11b/g/n IoT Module SMT type



Bointec



802.11bgn IoT module,SMT type(saw edge,flash 4Mb)

Introduction of Products

Bointec CSW808K is a low-cost, low-power consumption IOT module. The CSW808K integrate

Wi-Fi single chip, which supports IEEE 802.11b/g/n stream, providing GPIO for intelligent control, and UART interfaces for device communication.

CSW808K integrate PCB Printed antenna and 4Mbits flash to reduce customer platform size. And also integrate power manage unit for single 3.3V power source for cost effective design.

Bointec CSW808K embedded 32-bit RISC MCU for 802.11b/g/n drivers, supplicant, TCP/IP protocol stack, and networking applications, can be operated in station mode and softAP mode. CSW808K is an ideal solution for embedded device to enable networking service with minimized design effort.

Product Highlight

- -IEEE 802.11 b/g/n compliant with 2.4GHz frequency band
- -32-bit RISC microprocessor as the host MCU
- -Supports either Client and AP mode that can be selected
- -Embedded IEEE 802.11 b/g/n drivers, supplicant, and TCP/IP stack
- -Smart WiFi configuration supported
- -Integrate PCB Printed antenna and 4Mbits flash
- -Rich interfaces, UART and GPIOs
- -Support WEP and WPA2 encryption mode
- -RF ON/OF control
- -Sleep mode management
- -Small footprint : 20 mm x 15 mm x 2.45 mm
- -Optional onboard antenna or External antenna
- -Worldwide regulatory compliance
- -RoHS & Halogen free compliant / Lead free



	General	Product quick glance
Processor	Mediatek® MT7681N	
Frequency band	2.4GHz (2.412 GHz to 2.484 GHz)	
Bandwidth	HT20 and HT40	
Antenna	●Built-in printed antenna	
	External antenna via IPEX connector (Optional)	CSW808K
	●1T1R	
Interfaces	● UART 115200bps(maximum)	
	● GPIO	71
	WiFi	
Standard	IEEE 802.11 b/g/n	
Internet Protocols	IPv4, TCP/UDP, ARP/NDP, DHCPv4,	
Security Protocols	WPA, WPA2-PSK,WEP	ME Drawing/placement
	Power Consumption	
Operating Voltage	3.3 V ± 0.05V	
Power Consumption	● Transmit: 250 mA @16dBm	
	●Receive: 75 mA (typical)	
	●Power saving mode(DITM=1): 1.09mA	
	Standby mode(Sleep): 130uA	
	Dimension	
PCB Size	20 x 15 x 2.45 mm	see Top View Bottom View
Package	LGA / saw edge	
	Environmental	
Operating Temperature	Industrial: N/A	
	Commercial: -15°C ~ +75°C	
Storage Temperature	Industrial: N/A	Block diagram
	Commercial: -40°C ~ +85°C	
Operating Humidity	Operating humidity: 20-80%	
		3.3V PRU 1.5V1.2V Encryption Engine Packet Buffer BF

	T] r	
SW1.2V Encryption Engine Packet Buffer	802.11n 1'1	RF Transmitter	1
ART 32bit RISC MCU 80MHz	WLAN MAC/BB/ Radio	RF L	RF Front End
eFuse	ושן	Receiver	
		MT7681	
MB 40MHz Flash XTAL			foc

Ordering Information	

Part Number	System Description
TFGA-CSW808K0-31	finished non packaing,OEM,CSW808K
T.CSW808K-DK	CSW808K-DK,Single packed, development kit packed







TAIJET BOINTEC CO LTD 4F,#114,ZHOUZI ST., NEIHU-TAIPEI 11493, TAIWAN TEL:+886-2-2759-0081 EMAIL:contact@bointec.com WWW.BOINTEC.COM

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