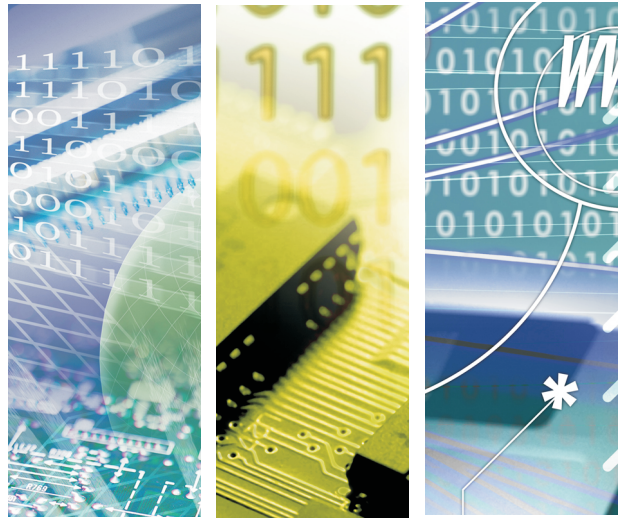# CSW968A
WiFi 802.11 a/b/g/n IoE Module

CSW968A

State-of-the-art Solution of IoE Applications.

Introduction of Products

Taijet Bointec CSW968A WiFi module provides a highly-integrated and flexible platform for developing and evaluating products and applications based on the QCA4004 SoC. The CSW968A module can be either used with the development kit for software development or incorporated into OEM products to enable rapid deployment of WiFi connected systems. The CSW968A module includes the following components:

- QCA4004 chip
- Trace antenna and U.FL connectors to support 2.4/5 GHz operation with antenna diversity
- RF matching circuits
- Components required to run a Wi-Fi channel

The QCA4004 is a single chip 1x1 802.11 a/b/g/n device optimized for low-power embedded applications with single-stream capability for both Tx and Rx. It has an integrated network processor with a large set of TCP/IP with IPv4/IPv6-based services. These services can be accessed via a serial SPI link or by a UART link connected to an external host CPU.
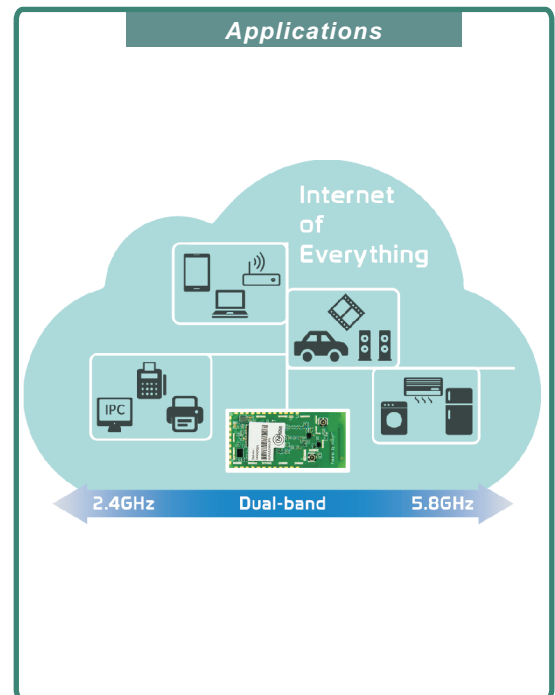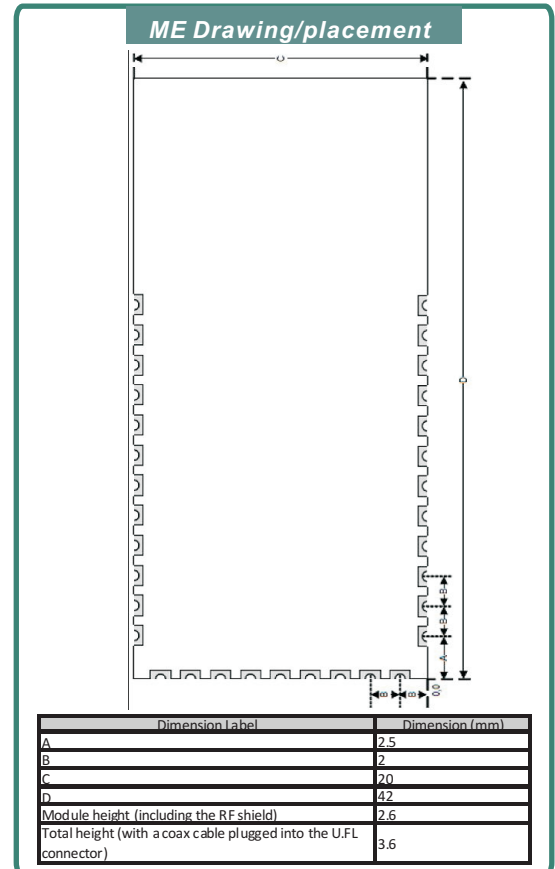
Product Highlight

- Main Chipset Qualcomm® QCA4004
- Powered by AllJoyn
- IEEE 802.11 a/b/g/n compliant with 2.4GHz and 5GHz dual band frequency
- Supporting HT20/HT40 bandwidth
- 1T1R, Single stream; Support antenna diversity
- Integrated PA and LNA; Support for external PA and external LNA
- 802.11a: 6, 9, 12, 24, 36, 48, 54Mbps; 802.11b: 1, 2, 5.5, 11Mbps; 802.11g: 6, 9, 12, 24, 36, 48,54Mbps ;802.11n: Support PHY rate up to 150Mbps.
- Low power listen mode
- UART/USB/SPI/I^2C/GPIO interface
- External antenna via IPEX connectors
- Pre- certified FCC

Specification:

Feature	Specification
General	
Processor	Qualcomm® QCA4004
Frequency band	Dual-Band of 2.4GHz and 5GHz
Bandwidth	HT20 and HT40
Antenna	• External antenna via IPEX connector (Optional) • 1T1R
Interfaces	• UART • GPIOs, • USB • I^2C • SPI/SDIO • I^2S
WiFi	
Standard	IEEE 802.11 a/b/g/n
Internet Protocols	IPv4/IPv6, TCP/UDP, ARP/NDP, DHCPv4, ICMPv6
Security Protocols	WPS, WPA, WPA2, WEP, TKIP
Power Consumption	
Operating Voltage	3.3 V ± 10%
Power Consumption	• Transmit: 250 mA @16dBm • Receive: 75 mA (typical) • Power saving mode(DITM=1): 1.09mA • Standby mode(Sleep): 130uA
Environment	
Operating Temperature	• Industrial: -40°C ~ +85°C • Commercial: -10°C ~ +65°C
Operating Humidity	• Operating humidity: 20-70%
Dimension	
PCB Size	42 x 20 x 2.5 mm (height is 3.6mm when a coax cable is plugged into the u.FL connector)
Certificate	
• Pre-certified FCC • RoHS compliant	

ME Drawing/placement

Dimension Label	Dimension (mm)
A	2.5
B	2
C	20
D	42
Module height (including the RF shield)	2.6
Total height (with a coax cable plugged into the U.FL connector)	3.6

Applications

Internet of Everything

2.4GHz   Dual-band   5.8GHz

Bointec Authorized Distributer