# WQ9201 2x2 Wi-Fi SoC Chip



#### **Overview**

Adopting WUQI-proprietary RF dual-band architecture and WUQI's original low-power CMOS PA technology, WQ9201 supports dual-band concurrency (DBDC) at 2.4 GHz and 5 GHz and provides the leading RF and baseband performance at extremely low power consumption, achieving high throughput and stable wireless transmission. This chip has been widely applied to products featuring in fast data transmission, such as smart phones, tablets, PCs, TVs, and set-top-boxes.

### **Functions**

- · Highly-integrated Wi-Fi and Bluetooth functions. WQ9201 conforms to Wi-Fi protocols of IEEE 802.11 a/b/g/n/ac/ax, is compatible with Bluetooth 5.4 protocol stack, as well as supports BT/BLE dual-mode and BLE audio. At the same time, the chip supports flexible Wi-Fi/BT coexistence.
- · With self-developed RISC-V CPU, WQ9201 adopts WUQIdesigned dual-frequency RF circuits, and is integrated with high-performance PA/LNA, supporting up to 80 MHz bandwidth, 1024QAM modulation mode, and a maximum PHY rate of 1.2 Gbps.
- supports OFDMA, 2x2 UL&DL MU-MIMO, and OFDMA+MU-MIMO, greatly increasing the number of terminals allowed for simultaneous access, effectively reducing communication
- supports DBDC at 2.4 GHz and 5 GHz. Taking advantages of WUQI-designed DBDC architecture, the chip supports high-performance concurrency modes of STA+AP, STA+P2P GO, and STA+P2P GC, improving user experience.

## **Applications**





Pad





Smart phone



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## **Block Diagram**