# SYN43711 Wi-Fi, Bluetooth SoC
## PRODUCT BRIEF

The SYN43711 integrates Wi-Fi™ 6/6E and Bluetooth™ 5.3 radios on a single state-of-the-art system on chip (SoC) to reduce the space, cost, power, complexity, and time to market of wirelessly enabled IoT devices. The Wi-Fi radio is IEEE 802.11ax compliant with legacy support for 802.11a/b/g/n/ac and has a 1 x 1 antenna arrangement for a throughput of up to 600 Mbps. The Bluetooth 5.3 radio features LE Audio for multiple concurrent Bluetooth audio streaming connections.

## BENEFITS

▶ High integration reduces footprint, cost, power, complexity, and time to market.

▶ 2.4 GHz and 5 or 6 GHz bands simultaneously with up to 600 Mbps throughput.

▶ Allows multiple concurrent Bluetooth connections and audio streams.

▶ Advanced Wi-Fi/Bluetooth radio co-existence.

## APPLICATIONS

▶ Multimedia streaming for smart home

▶ Wireless home security cameras

▶ Premium appliances

▶ Drones

▶ Robots

▶ Automotive Infotainment systems

▶ Smart factories/industry 4.0

PERFORMANCE AND COST OPTIMIZED

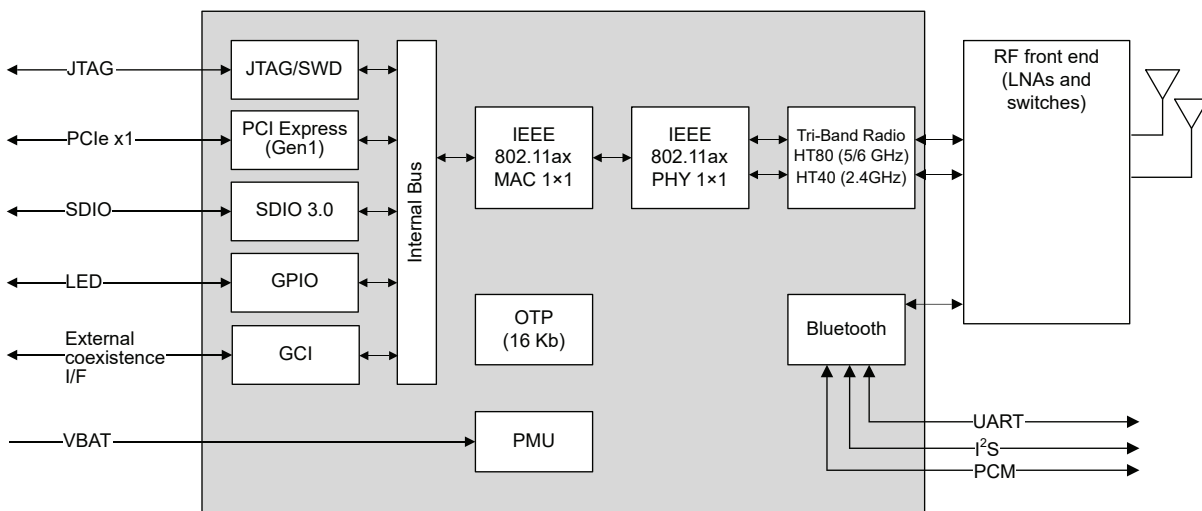ROBUST, HIGH-PERFORMANCE WI-FI

BEST WI-FI AND BLUETOOTH COEXISTENCE

LOW SYSTEM COST FOR IOT

## FEATURES

▶ Supports Wi-Fi 2.4/5/6/6E with best CMOS RF, including integrated PAs and LNAs (external PA and LNA optional) with highest transmit (Tx) power level and receive (Rx) sensitivity.

▶ Integrated Bluetooth 5.3 with support for Bluetooth Low Energy (BLE).

▶ LE Audio support.

▶ Synaptics Smart Co-Ex for best-in-class coexistence of Wi-Fi and Bluetooth radios in the 2.4 GHz band.

▶ Measures 5.41mm x 4.24 mm x 0.51mm and comes in two WLBGA packages: standard and plated-through-hole (PTH).

## SYSTEM BLOCK DIAGRAM



SYN43711 block diagram

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