

RA Ecosystem Partner Solution

SX-ULPGN-BTZ – Low Power Wi-Fi, BLE, 802.15.4 SoC



Solution Summary

SX-ULPGN-BTZ is a dual band Wi-Fi , Bluetooth low energy (BLE) , 802.15.4 combo module for the Internet-of-Things (IoT). It is a single stream 1x1 WLAN , BLE 5 + 802.15.4 based on Qualcomm's QCA4020 System-on-Chip (SoC). It enables seamless integration of three popular wireless connectivity technologies (802.11, Bluetooth and 802.15.4) used in most IoT applications.

Features/Benefits

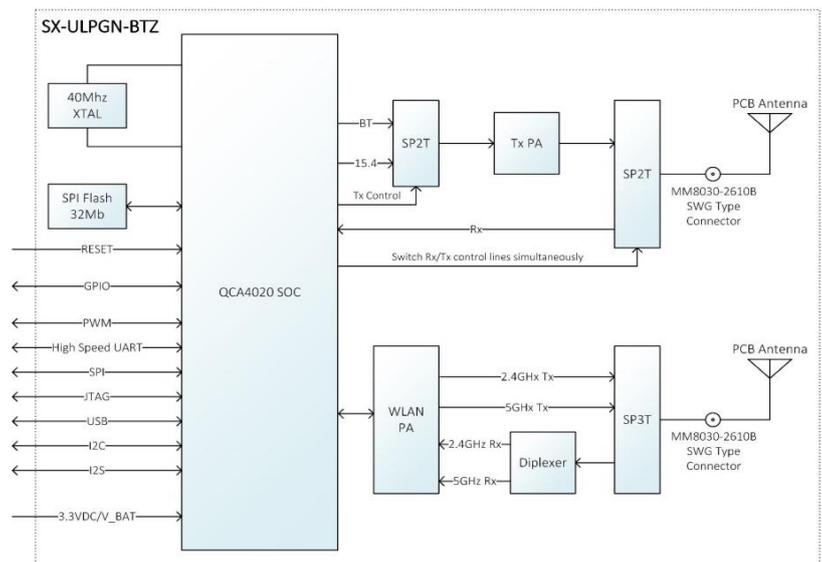
- Dual Band 802.11 a/b/g/n Wi-Fi + Bluetooth Low Energy + 802.15.4 connectivity
- Ecosystem Support: Amazon AWS, OpenThread, Microsoft Azure
- Supports WPA and WPA2 Enterprise Security
- Integrated multi-radio co-Existence : 802.15.4+BLE+Wi-Fi coexistence on 2 antennas
- Integrated PMU to generate power supplies for internal circuitry either from an external battery or a 3.3 V supply
- Supports Renesas RA MCU product line with Silex EVK

Block Diagram



EVK Features:

- Evaluation base board for SX-ULPGN-BTZ
- On-board FTDI2232 IC for 4-wire JTAG debugging
- Comprehensive set of headers, test-point for power measurement, direct connect to battery, boot-configuration, other measurements
- Reference design schematics and layout information available
- Supports JTAG and USB factory programming interfaces.



4. Target Markets and Applications

- Single Chip Gateways
- Energy Management
- Lighting
- Industrial Automation
- White goods Appliances
- Home Security
- Applications requiring multi-radio functionality

Why Choose Silex Technology?



At Silex Technology, our expertise is built on more than 40 years of hardware and software connectivity know-how and IP, custom design development experience, and manufacturing capabilities. With relentless attention to quality, exclusive access to Qualcomm Atheros silicon and expertise, and strategic partnerships with leading real-time operating system (RTOS) and semiconductor providers, we are the trusted leader in reliable Wi-Fi connectivity.

Silex Technology Support from Design through Deployment



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