



BES2610WH

Brief Datasheet

Ultra-low Power Dual-mode Wi-Fi 6 and Bluetooth 6.1 Chip for Wireless Connectivity

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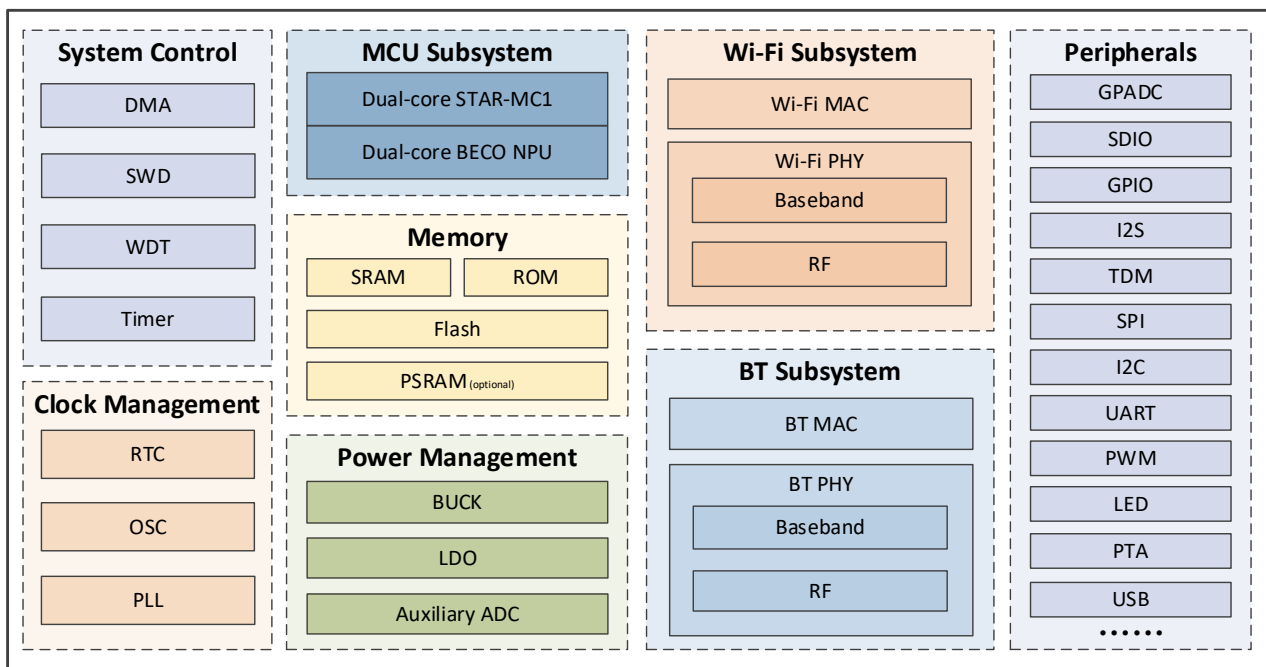
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1 General Description

The BES2610WH is an ultra-low power, highly integrated wireless connectivity chip. The platform incorporates a Wi-Fi 6 subsystem and a dual-mode Bluetooth 6.1 subsystem, offering high-throughput wireless connectivity at high standards and cost-effective transmission over long distances. In addition, the platform incorporates a MCU subsystem comprising a dual-core STAR-MC1 processor with a dual-core BES proprietary coprocessor (BECO) for advance signal processing and NN workloads, substantial SRAM, flash, PSRAM (optional), and a variety of interfaces.

The platform integrates an intelligent MAC design that includes a highly efficient offload engine and hardware data processing accelerators to completely offload Wi-Fi tasks from the host processor. The BES2610WH supports standards-based features for security, Quality of Service (QoS) and international regulations, delivering consistent reliable performance.



System Block Diagram

1.1 Applications

- Wireless connectivity for smart watches
- Wireless connectivity for speakers
- Other smart wearable/wireless devices

1.2 Features & Specifications*

Wi-Fi/Bluetooth Subsystem	Dual-band Wi-Fi IEEE 802.11a/b/g/n/ax
	Dual-mode BT 6.1 with Channel Sounding
CPU Subsystem	Dual-core STAR-MC1
Memory and Storage	Shared 768 KB RAM
	boot ROM
	Flash and PSRAM (optional) in package
Peripheral Interfaces	GPADC/SDIO/GPIO/I2S/TDM/SPI/I2C/UART/PWM/LED/PTA/USB.....
Package	117-pin BGA

* The content in the table is subject to change without notice.