



BES2710Y

Brief Datasheet

Ultra-low Power Bluetooth Audio Platform

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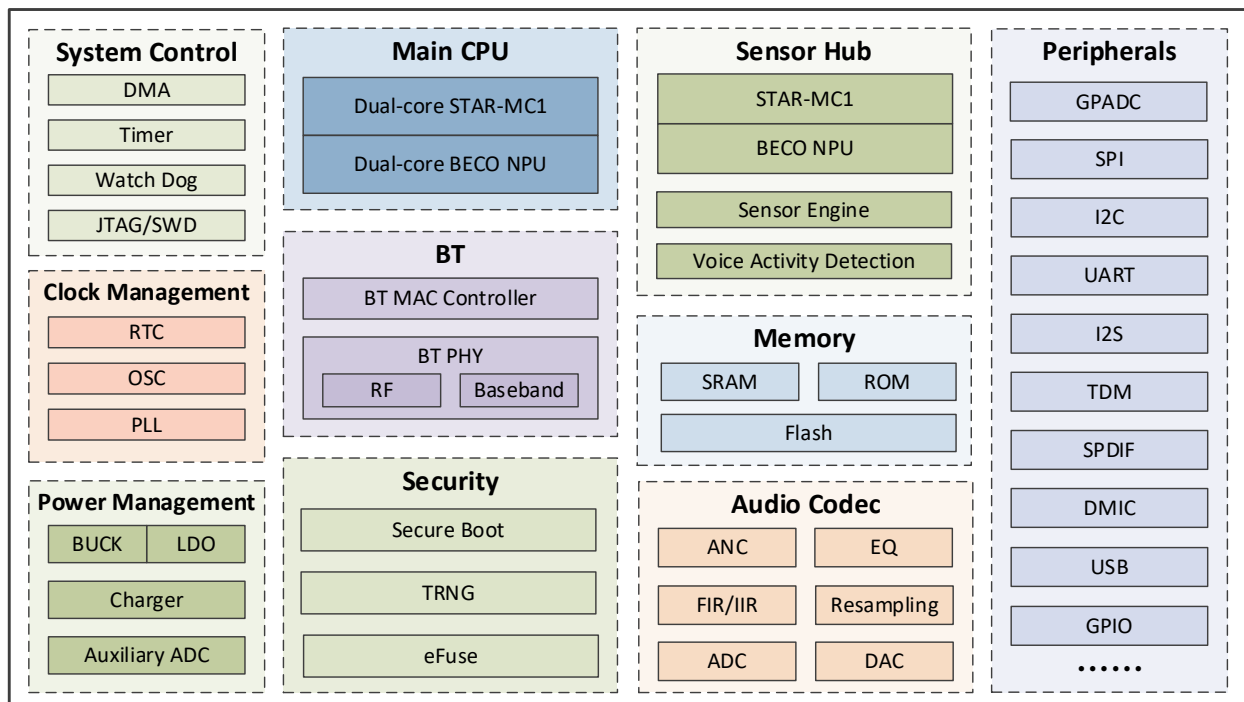
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1 General Description

The BES2710Y is an ultra-low power, high performance Bluetooth audio SoC. The platform incorporates a CPU subsystem comprising a dual-core STAR-MC1 processor with a dual-core BECO NPU, a BES proprietary coprocessor for advance signal processing and NN workloads, as well as a sensor hub subsystem comprising a STAR-MC1 processor with a BECO NPU. This combination significantly reduces power consumption while providing abundant application processing capabilities.

The platform incorporates a dual-mode Bluetooth 6.1 subsystem for Bluetooth classic and LE audio, a codec subsystem supporting voice activity detection, and a Power Management Unit (PMU) with an integrated charger. The highly integrated design minimizes external components, reduces BOM costs and offers a cost-effective Bluetooth audio solution.



System Block Diagram

1.1 Applications

- TWS earbuds with real adaptive ANC
- Smart headphones/headsets with real adaptive ANC
- Bluetooth speakers with LE audio
- Other portable audio devices

1.2 Features & Specifications*

CPU Subsystem	Dual-core STAR-MC1
Sensor Hub Subsystem	STAR-MC1
	Sensor engine
Memory and Storage	Shared 2.2 MB SRAM
	Flash in package
	boot ROM
Bluetooth Subsystem	Dual-mode BT 6.1 with LE audio
Audio & Voice Features	2x DACs
	5x ADCs
Peripheral Interfaces	GPADC/SPI/I2C/UART/I2S/TDM/SPDIF/DMIC/USB/GPIO.....
Package	110-pin BGA

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