

BES2710IA

Brief Datasheet

Ultra-low Power Bluetooth Audio Platform for Smart Speakers

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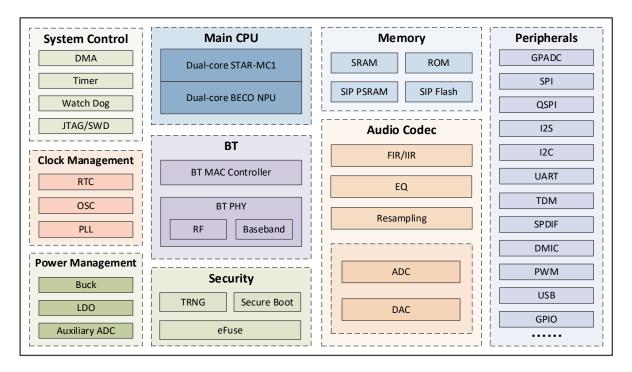
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1 General Description

The BES2710IA is an ultra-low power Bluetooth audio SoC for portable speakers. The platform incorporates a high performance 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, RAM/ROM, PSRAM and serial flash for software features and product customization, as well as a variety of interfaces. This combination minimizes external components and reduces BOM costs.

The platform incorporates a dual-mode Bluetooth 5.4 subsystem for Bluetooth classic and LE audio, a codec subsystem, and a Power Management Unit (PMU). It is fabricated by using an advanced low-power CMOS process and assembled within an 83-pin QFN package.



System Block Diagram

1.1 Applications

- Bluetooth portable speakers
- Other portable audio devices



1.2 Features & Specifications*

CPU Subsystem	Dual-core STAR-MC1
Memory and Storage	Shared 768 KB SRAM
	Flash in package
	boot ROM
Bluetooth Subsystem	Dual-mode BT 5.4 with LE audio
Audio & Voice Features	2x DACs
	3x ADCs
Peripheral Interfaces	GPADC/SPI/QSPI/I2S/I2C/UART/TDM/SPDIF/DMIC/PWM/USB/GPIO
Package	83-L QFN

 $[\]ensuremath{^{*}}$ The content in the table is subject to change without notice.