



# BES2720IMP

Brief Datasheet

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## Ultra-low Power Bluetooth Wearable Platform

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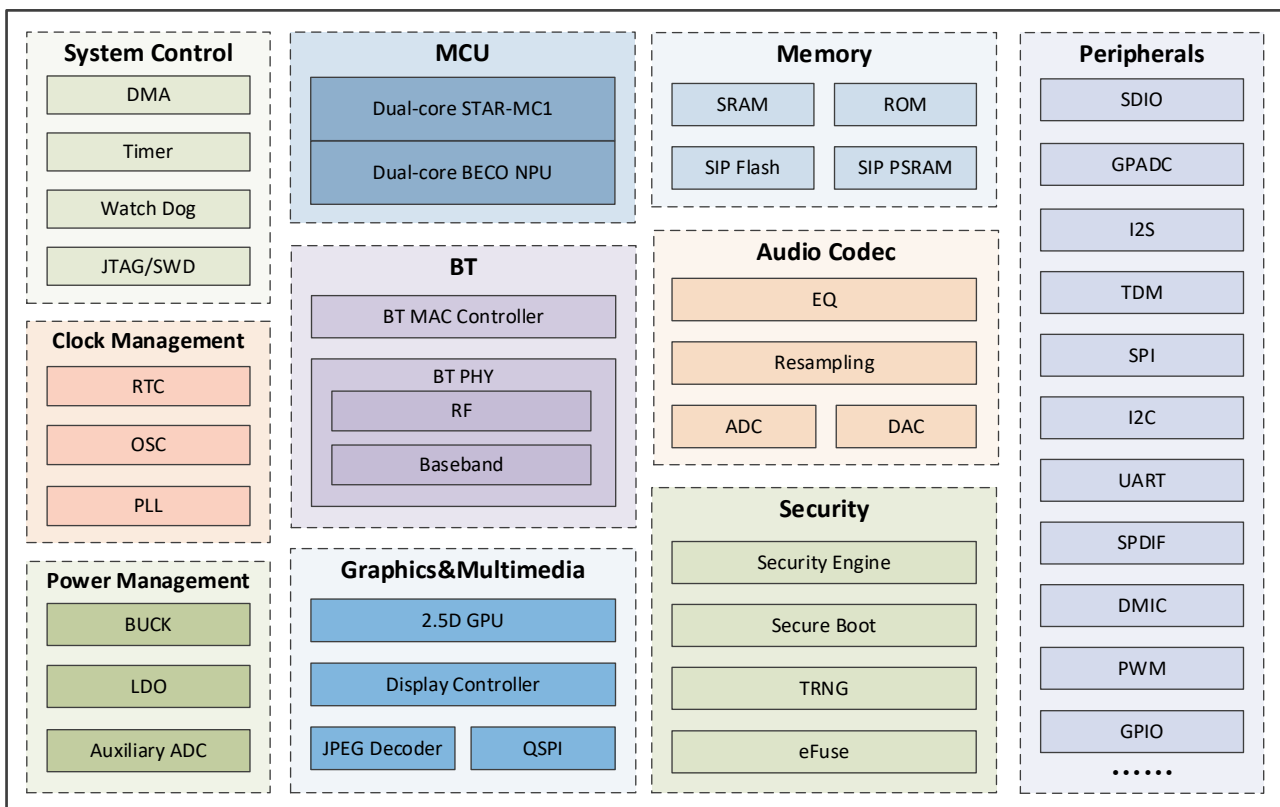
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## 1 General Description

The BES2720IMP is an ultra-low power, high performance Bluetooth wearable SoC. The platform incorporates a high performance CPU subsystem comprising a dual-core STAR-MC1 processor with a dual-core BES proprietary coprocessor (BECO) for advance signal processing and NN workloads, RAM/ROM, PSRAM and flash for software features and product customization, as well as a variety of interfaces. This combination minimizes external components, reduces BOM costs and offers a cost-effective Bluetooth wearable solution.

The platform incorporates a dual-mode Bluetooth 6.1 subsystem, a codec subsystem and a graphics subsystem that includes a 2.5D GPU for advanced graphics features, an LCD controller with up to 3-layer alpha blending, and a JPEG decoder. It also integrates a Power Management Unit (PMU).



System Block Diagram

### 1.1 Applications

- Sports watches
- Smart watches
- Bluetooth wristbands
- Other wearable devices

## 1.2 Features & Specifications\*

CPU Subsystem	Dual-core STAR-MC1
Memory and Storage	Shared 1.8 MB SRAM
	Flash and PSRAM in package
	boot ROM
Bluetooth Subsystem	Dual-mode BT 6.1 with Channel Sounding
Graphics & Multimedia	2.5D Vector GPU
Audio & Voice Features	1x DAC
	2x ADCs
Peripheral Interfaces	SDIO/GPADC/I2S/TDM/SPI/I2C/UART/SPDIF/DMIC/PWM/GPIO.....
Package	170-pin BGA

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