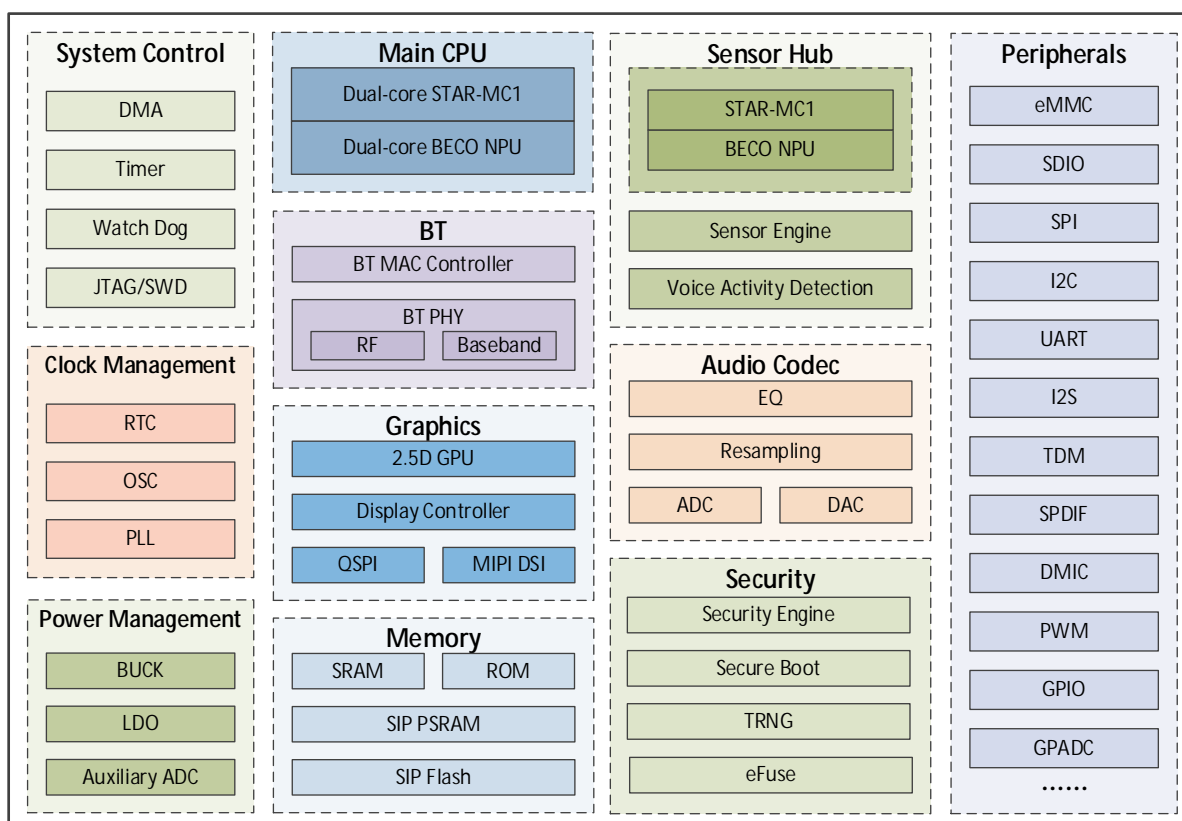




1 General Description

The BES2700iBP 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 BECO NPU, a BES proprietary coprocessor for advance signal processing and NN workloads, as well as a sensor hub subsystem comprising a STAR-MC1 with a BECO NPU. This combination minimizes external components, reduces BOM costs and offers a cost-effective Bluetooth wearable solution.

The platform incorporates a dual-mode Bluetooth 5.3 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 1-lane DSI with up to 500x500x24bit 60fps resolution.



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
Sensor Hub Subsystem	STAR-MC1
	Sensor engine
Memory and Storage	Shared 2.2 MB SRAM
	Flash and PSRAM in package
	boot ROM
Bluetooth Subsystem	Dual-mode BT 5.3 with LE audio
Graphics & Multimedia	2.5D Vector GPU
	MIPI DSI
Audio & Voice Features	1x DAC
	2x ADCs
Peripheral Interfaces	GPADC/eMMC/SPI/I2C/SDIO/UART/I2S/TDM/SPDIF/DMIC/PWM/GPIO.....
Package	219-pin BGA

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