



BES2700BP

Brief Datasheet

Ultra-low Power Bluetooth Wearable Platform

CONTACT US:

Company: Bestechnic (Shanghai) Co., Ltd. (“BES”)

Address: 2F, Building B, Lane 2889 Jinke Road, Pudong, Shanghai (201203)

Phone: (86)21 6877 1788

For product inquiries and more information, please visit www.bestechnic.com.

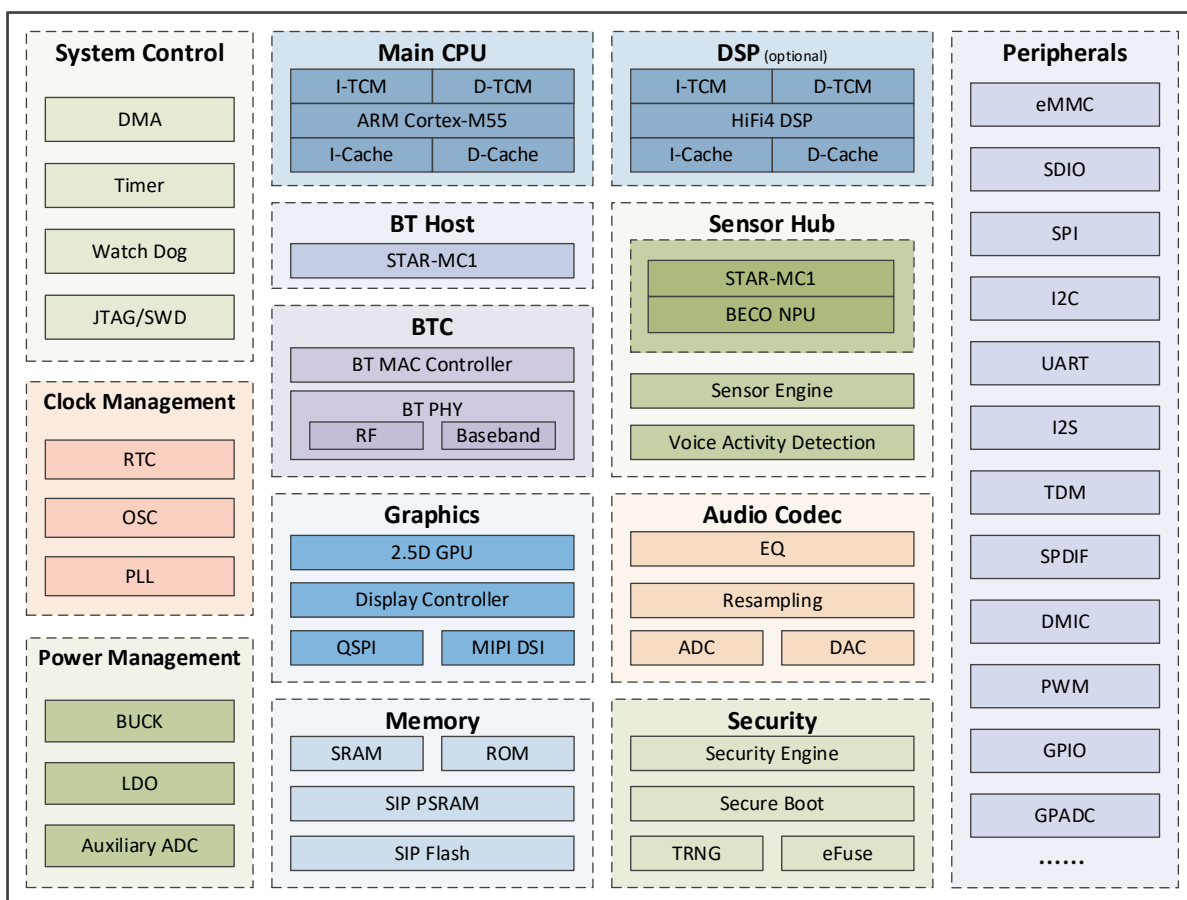
DISCLAIMER:

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose, without the express written permission of BES. BES retains the right to make changes to this document at any time, without notice. BES makes no warranty of any kind, expressed or implied, with regard to any information contained in this document, including, but not limited to, the implied warranties of merchant ability or fitness for any particular purpose. Further, BES does not warrant the accuracy or completeness of the information, text, graphics, or other items contained within this document.

1 General Description

The BES2700BP is an ultra-low power, high performance Bluetooth wearable SoC. The platform incorporates a powerful CPU subsystem comprising an Arm Cortex-M55 processor and a Tensilica HiFi 4 DSP (optional), an audio codec subsystem, as well as a sensor hub subsystem comprising a STAR-MC1 processor with a BECO NPU, a BES proprietary coprocessor for advance signal processing and NN workloads. This combination significantly reduces power consumption while providing substantial application processing capabilities.

The platform incorporates a dual-mode Bluetooth 5.4 subsystem for both Bluetooth classic and LE audio. Furthermore, it integrates a multimedia subsystem that includes a 2.5D GPU for advanced graphics features, an LCD controller with up to 4-layer alpha blending, and a 2-lane DSI with up to 500x500x32bit 60fps resolution.



System Block Diagram

1.1 Applications

- Smart watches
- Sports watches
- Smart glasses
- Other wearable devices

1.2 Features & Specifications*

CPU Subsystem	ARM Cortex-M55
	Tensilica HiFi 4 DSP (optional)
Sensor Hub Subsystem	STAR-MC1
	Sensor engine
Memory and Storage	Shared 4 MB SRAM
	Flash and PSRAM in package
	boot ROM
Bluetooth Subsystem	STAR-MC1
	Dual-mode BT 5.4 with LE audio
Graphics & Multimedia	2.5D Vector GPU
	MIPI DSI
Audio & Voice Features	1x DAC
	2x ADCs
Peripheral Interfaces	eMMC/SDIO/SPI/I2C/UART/I2S/TDM/SPDIF/DMIC/PWM/GPIO/GPADC.....
Package	257-pin BGA

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