



BES2720Y

Brief Datasheet

Ultra-low Power Smart Bluetooth Audio 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.

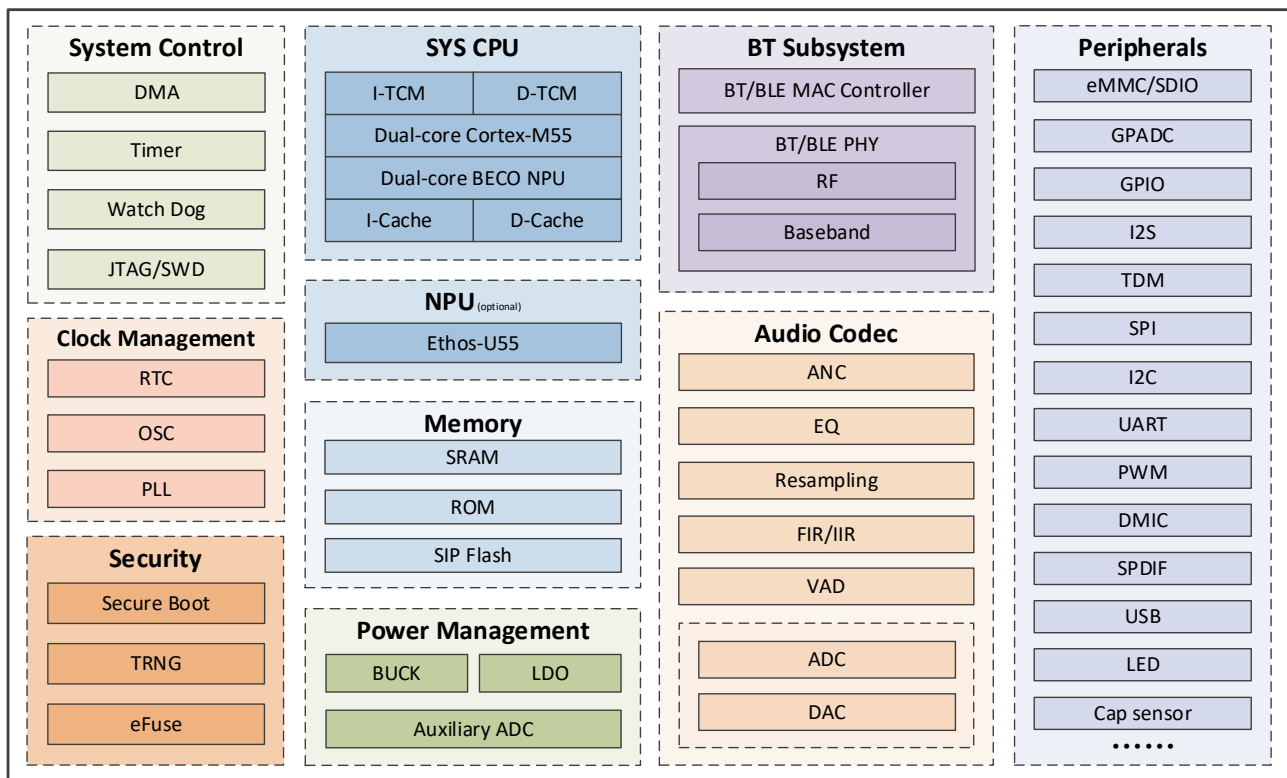
DISCLAIMER:

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 BES2720Y is an ultra-low power, high performance Bluetooth audio SoC. The platform incorporates a powerful CPU subsystem comprising a dual-core Arm Cortex-M55 processor with a dual-core BES proprietary coprocessor (BECO NPU) for advance signal processing and NN workloads, and an Ethos-U55 NPU (optional). This combination significantly reduces power consumption while providing substantial application processing capabilities.

The platform incorporates a dual-mode Bluetooth 6.1 subsystem for both Bluetooth classic and LE audio, as well as an audio codec. The highly integrated solution is optimized through the use of IBRT technology, a BES patented sniffing technique that incorporates Forward Error Correction (FEC) for enhanced RF performance in TWS systems.



System Block Diagram

1.1 Applications

- Smart Bluetooth TWS earbuds with real-time adaptive ANC
- Other portable audio devices

1.2 Features & Specifications*

| | |
|------------------------|---|
| CPU Subsystem | Dual-core Arm Cortex-M55 |
| | Ethos-U55 NPU (optional) |
| Memory and Storage | Shared 3 MB SRAM |
| | Flash in package |
| | boot ROM |
| Bluetooth Subsystem | Dual-mode BT 6.1 with Channel Sounding |
| Audio & Voice Features | 2x DACs |
| | 3x ADCs |
| Peripheral Interfaces | eMMC/SDIO/GPADC/GPIO/I2S/TDM/I2C/UART/PWM/DMIC/SPDIF/USB/LED/CAP..... |
| Package | 153-pin BGA |

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