



BES3001-SP

Brief Datasheet

Single Chip Audio Codec

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.

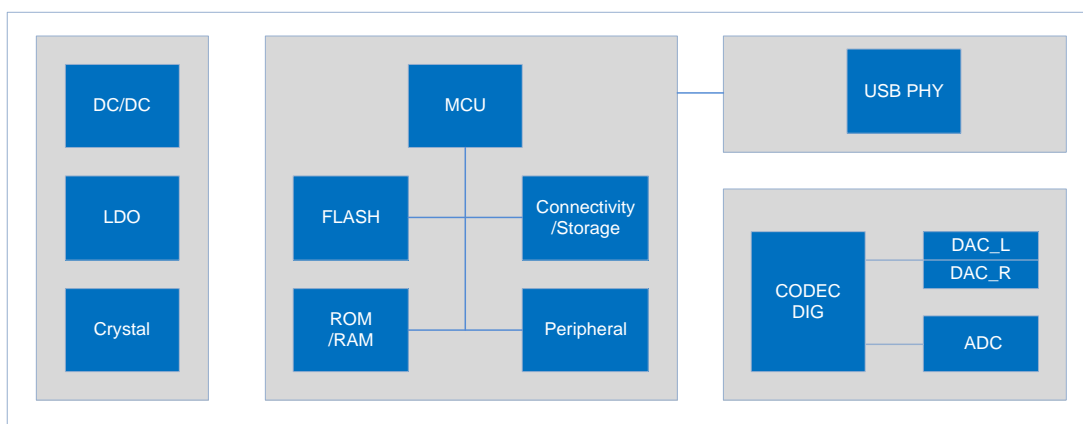
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1 General Description

The BES3001-SP is a single-chip audio codec designed for USB Type-C headphones / headsets. The platform integrates a high performance Cortex-M4F, making it ideal for high performance audio and voice applications. The signal path, from the analog input through the hardware DSP core to the analog output, is optimized for low latency and low noise performance.

The platform integrates serial flash for custom defined software. It also includes a variety of interfaces, including UART or USB interfaces for download. The BES3001-SP has been designed with the highest level of integration to minimize the number of external components. It is manufactured by using an advanced low power CMOS process and assembled within a 48-pin BGA package.



System Block Diagram

1.1 Applications

- Smart USB Type-C audio headphones/headsets
- Other portable audio devices

1.2 Features & Specifications*

CPU Subsystem	ARM Cortex-M4F
Memory and Storage	128 KB SRAM
	Flash in package
	boot ROM
Audio & Voice Features	2x DACs
	1x ADC
Peripheral Interfaces	USB/I2S/SPDIF/SPI/PDM.....
Package	48-pin BGA

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