

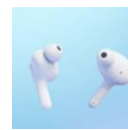
Overview

WQ7033 is a high-standard Bluetooth audio SoC chip that supports BT/BLE 5.3 dual protocol stack and BLE Audio. Embedded with the HiFi 5 DSP and NPU, as well as integrated with Hybrid ANC, the chip supports complex multi-microphone uplink noise reduction algorithms and key word spotting in low power. WQ7033 features various interfaces and high-level integration. It is applicable to advanced TWS noise reduction earphones that require noise reduction in large bandwidth and depth and other low-power products that require sophisticated audio processing and voice AI capabilities.

Functions

- Supports BT /BLE 5.3 dual protocol stack.
- Integrates two high-performance RISC-V CPUs, HiFi 5 DSP and NPU.
- Adopts hybrid (FF+FB) ANC.
- Supports multi-Mic+AI call noise reduction, significantly improving call experience.
- Supports ultra-low power consumption with 3.x mA in average for a longer battery life of headsets.
- Supports the W-TWS+ solution, realizing senseless and intelligent primary-secondary switchover.
- Supports the multi-link mechanism, with one pair of earbuds connecting to two devices.

Applications



TWS earphone

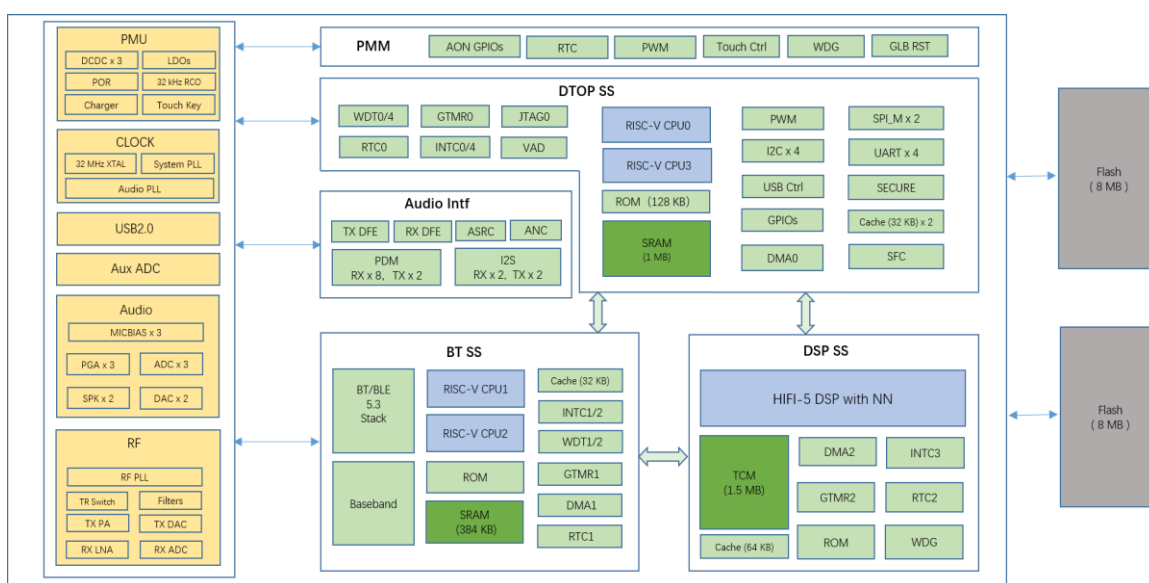


Gaming headset



Bluetooth speaker

Block Diagram



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