

Overview

WQ5301 supports functions including local voice wakeup, acoustic source localization, directional recognition, offline speech recognition (pure offline dictation), offline natural language processing, offline always on (based on offline NLP), arbitration between offline and online results, offline voice broadcasting, and active offline interaction.

Functions

- Built-in four 32-bit RISC-V CPUs @ 400 MHz.
- Adopts the dedicated NNU processor, supporting INT8 200 GOPS.
- Supports DDR3/DDR3L@1066 Mbps and the capacity can be expanded to a maximum of 1 GB.
- Provides various audio interfaces, and supports analog MIC, I2S, and TDM used for audio input.
- Supports eMMC-based local firmware boot and USB-based remote firmware boot.

Applications



Car audio



Smart appliance



Acoustic robot



Intelligent man-machine interaction

Block Diagram

