

WT3000A Series Wireless Voice Module

Module Composition-WIFI

WT25Q32-8S

SPI Flash

WT2606A6-40N

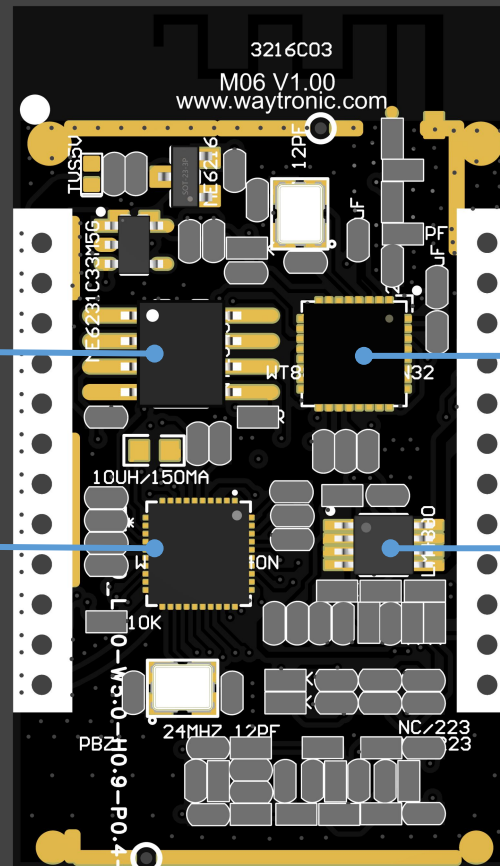
Voice IC

WIFI IC

WTW100A6-QFN32

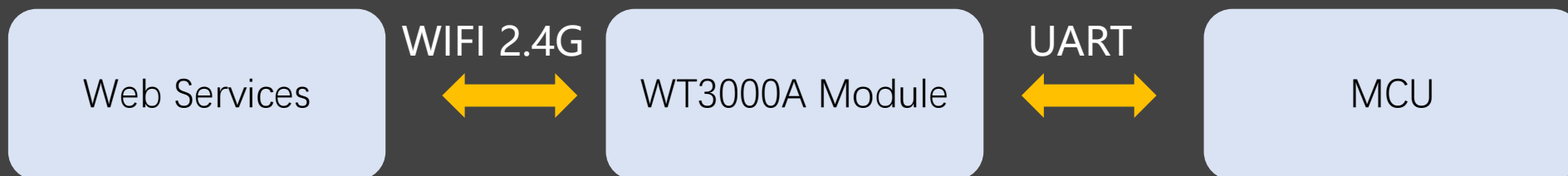
PA IC

WT8302-8S



Module Function Description

- **AI Conversation:** The wake-up word "Xiao Ai, Xiao Ai" supports stories, weather, nursery rhymes, and news;
- **Online TTS:** The Weichuang Home app sends the synthesized text for playback/sends the synthesized command for playback via the serial port;
- **Offline and online speech recognition:** Offline local command entry control/serial port command forwarding/online recognition cloud command forwarding
- **Local serial port commands:** Basic commands (local broadcast/query commands, etc.), extended commands (TTS synthesis/shouting)



Introduction to Chip on Module

◆ WT2606A6-40N

Codec, voice interrupt wake-up, UART serial port command interaction

Wake-up interrupt

Support dual-microphone
interruption wake-up

Chip RAM resources

600KB

Processor performance

It uses a 32-bit
processor with a
maximum main
frequency of 160MHZ.

Operating voltage

The operating voltage
range is 2.4-4.5V.

Audio processing capabilities

Equipped with 24-bit
high-precision audio ADC
and DAC.

Architecture

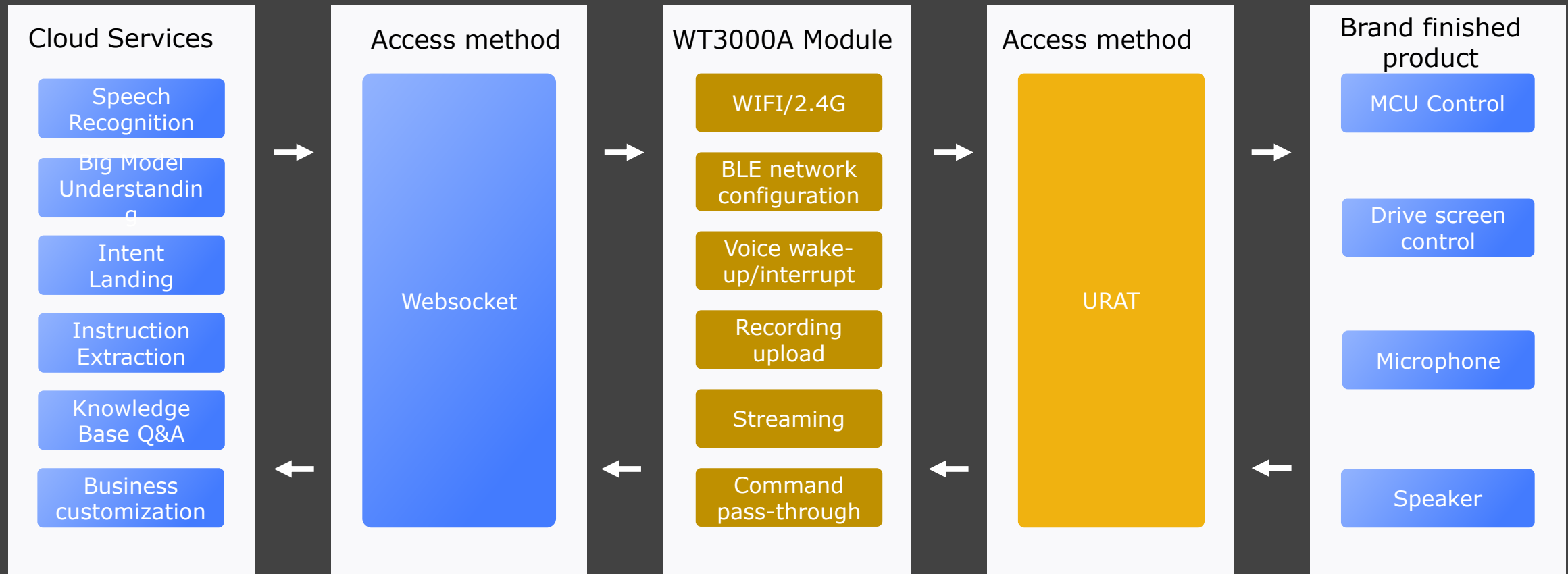
Adopts RISC-V
architecture.

WT3000A-M6 Functional parameters

Function	Functional Parameters
Awaken	Supports key press wake-up and voice wake-up. Voice wake-up supports batch customization. Wake-up distance: 1 to 3 meters.
Noise Reduction	AEC echo cancellation, human voice gain enhancement
Interrupt	Support for interruption during playback: Button interruption, Wake-up interruption
Instruction	Voice control instruction: 200 local items, no limit on online quantity.
Distribution Network	BLE networking
Network	2.4G WIFI
ProtocolInt	Audio transmission protocol: Websocket; command transmission protocol: MQTT; control command: UART
Power consumption	Input voltage: 3.3-5V Standby power consumption: 120mA Working power consumption: 200mA
Audio Input	OPUS 16k
Audio Output	MP3 16K

Product side/cloud service integration product process

It can provide full-link AI intelligent voice end-side application solutions such as access services for major AI intelligent entities, cloud platforms, modules, etc., enabling the implementation of product applications in thousands of industries



Note:At present, AI conversion, Waytronic is connected to the Huoshan Doubao model under ByteDance, which is limited to Singapore and Russia overseas. The cloud service is not yet connected to ChatGpt.