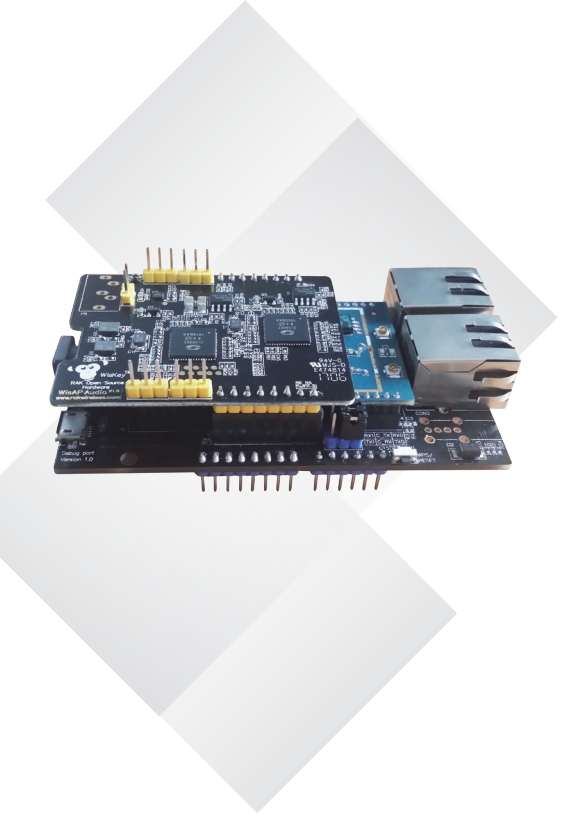
- Enable Your Product with Amazon Alexa -

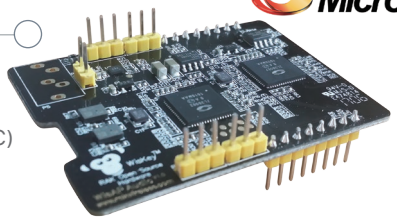
WisCore



Powered by Microsemi

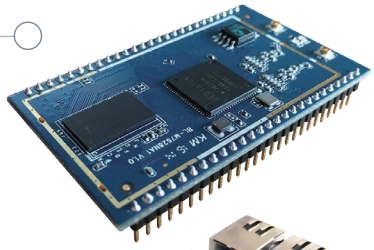
Audio Sub Board

- Far field voice wake up
- Integrated Sensory with"alexa" key word wake up
- Full Duplex Stereo Acoustic Echo Cancellation (AEC)
- 2-Mic handfree system



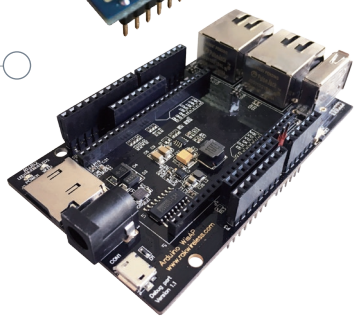
WisCore Micro-computer Board

- MTK7628 2x2 MIMO
- MIPS24K 580MHZ
- 16MB flash & 128MB DDR2



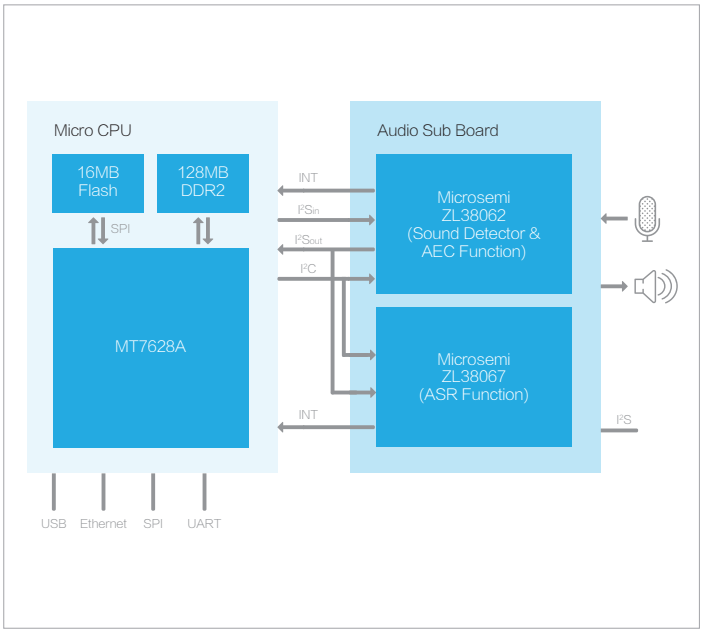
Mother Board

- 1xWAN &1xLAN
- 1xUSB Host and 1xMini USB
- GPIO/2xUART/I2C/SPI
- SD Card
- Compatible with Arduino

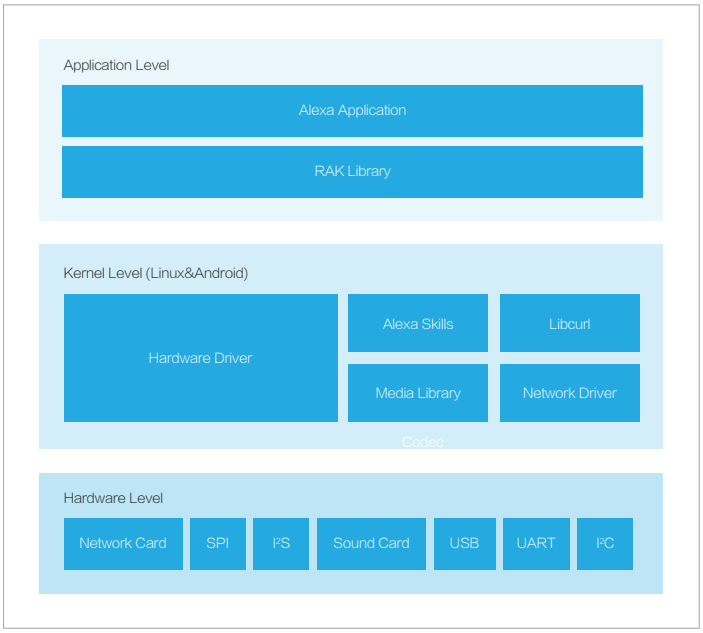


IoT Gateway Module Base on Linux/OpenWRT

Hardware Diagram



Software Diagram



Item	Description
CPU	MT7628A(MIPS24KEc CPU with 580MHz)
Codec	MicroSemi ZL38062，support audio input/output MicroSemi ZL38067，support ASR trigger by key word `Alexa` For field function support 5m Support echo cancellation
Microphone	Digital Mic
Power Supply	12V Adapter or Micro USB

Item	Description
RF Spec	WiFi: Internal Support IEEE 802.11b/g/n standard, 2.4GHz frequency band Support 2×2 MIMO，reach to 300Mbps Optional: External Bluetooth: Reserve UART interface to connect external module ZigBee: Reserve UART interface to connect external module Z-wave: Reserve UART interface to connect external module
Memory	Flash：16MB；DDR2：128MB

◎ Application

Work with many accessory, build different IoT applications. Include the applications as following:

The robot built in Alexa

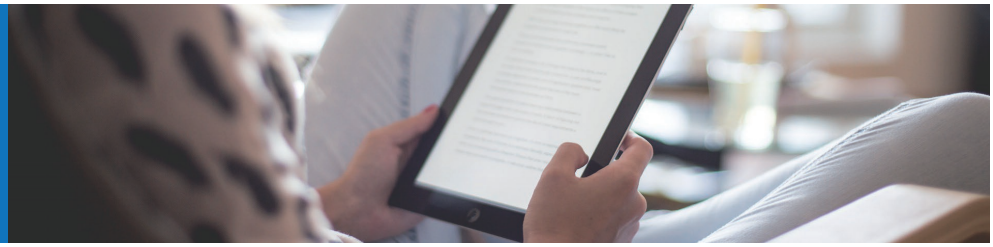
Using Alexa EVK to connect with current robot. User can control the robot move through UART interface. If user add a WisCam module, this demo will support voice control and video

Talking Smart Fridge

When user need to purchase some food, user can ask Alexa directly to order them which you want. Also, when you are cooking in the kitchen.

The middleware of embedded gateway

Base on Alexa EVK, user can work some accessories to build a home alarm system. Such as WisCore-Z-wave, WisCore-Bluetooth or WisCore-LTE accessories.



The Choice of Intelligent Security System Model:

⊙ Stay Arm Mode: Somebody is in the house, such as morning or evening.
⊙ Away Arm Mode: There is no body in the house, such as the working day.
⊙ Night Arm Mode: People are sleeping in the house
⊙ Disarmed Mode: Will not trigger the alarm

◎ More

Z-Wave Function

RAK provide the Z-wave gateway solution, using our middleware, user can add all of the Z-wave devices which support Z-wave Plus protocol. Combine above mode to protect the home and make sure safe.

Cloud Server Platform

RAK provide a perfect SaaS layer network service. This cloud help designer and user to use the function quickly and simply. Support IFTTT, Alexa Skills, MQTT data transmission, data storage on the cloud, CMS service

4G-LTE Function

Then the local network is not working, user can use LTE module to connect with cloud. Make sure the connection with cloud every time.

App Support

RAK provides the corresponding App control interface, through the App on the entire gateway device to operate, set up different scenarios, allowing users to experience more perfect.

RAK
The simplest, the best

Twitter @RAKwireless

YouTube RAK Channel

Shenzhen RAKwireless Technology Co., Ltd. was established in June 2014. Based in Shenzhen with a R&D center in Shanghai, office in Beijing. RAK devoted to developing and supplying advanced IoT technology and services.

Based on rich experiences on IoT industry, RAK founder and his team focus on developing IoT Middleware, which is the company core competence, and supply end to end IoT solutions to customers. Besides accumulated many experiences of most of main protocols such as HomeKit, Amazon Echo, NEST, IFTTT, Z-Wave and LoRa. RAK is also Apple Homekit licensee, Amazon IoT Consulting Parter, Z-Wave Alliance Member and Google Thread Member.

At present, RAK has been worked with over 150 customers and has capability of developing its own core competence on IoT field. Thanks to all customers, RAK international service network covers a lot of countries include China main land, Hong Kong, Korea, India, Russia, USA, Japan, Singapore, Germany, Sweden and Denmark.

More Detail Information Please Contact:

Ken.yu@rakwireless.com