



# RA Ecosystem Partner Solution

## Aizip Speaker Identification



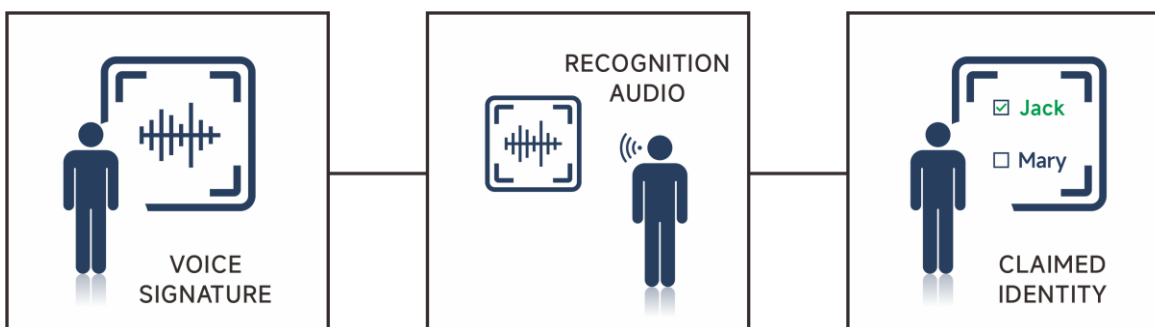
### Solution Summary

Aizip's Speaker Identification algorithm provides accurate identification of registered speakers for biometric parameter recognition. The offline, low power, compact and efficient TinyML model is suitable for a wide range of IoT applications in the consumer and enterprise markets. This turnkey solution runs efficiently on [RA4E1](#) and [RA6E1](#) devices and is available for the Renesas RA4 and RA6 families of MCUs.

### Features/Benefits

- The detection and inference is done locally, no Internet connection to the cloud is required
- Provides efficient and effective identification of the speaker among registered users
- User registration done by recording pre-selected keywords three times
- Good accuracy and very compact size achieved due to Aizip's leading efficient AI technology
- RA4E1/RA6E1 devices provide a turn-key solution. No action by the user is required.

### Diagrams/Graphics



Accuracy at 92% can be achieved for registered users

### Target Markets and Applications

- Smart Cities
- Smart Homes
- Smart Sensors
- Building Automation
- Consumer Electronics

[Robust Efficient Scalable AI, Everywhere - Aizip](#)



## The powerful tiny AI engines for an intelligent world



### Customer Focused

Aizip focuses on TinyML models for IoT market applications and provides its business customers with a total solution. Aizip technical team covers the full spectrum required for TinyML customers, from compact and robust model design to efficient deployment. The seasoned management team has established an excellent operation platform to enable on-time and high-quality delivery. Aizip is committed to support its customers' success.

### Aizip Technologies

Aizip has developed extensive proprietary technologies in the TinyML area, including

- Automated design tools for fast development, speedy optimization, and excellent specs;
- Breakthrough neural networks for low-power TinyML applications with superior performance;
- High performance achieved with multimodal AI technology in a continuous monitoring setting.

These technologies allow Aizip to provide differentiated solutions with great ROI for its customers.

### Product Portfolio



#### AIV: Aizip Intelligent Vision

- Visual wake word (VWW)
- Object detection
- Face recognition
- ...



#### AIA: Aizip Intelligent Audio

- Keywords spotting (KWS)
- Speaker identification
- Deep noise reduction
- ...



#### AIT: Aizip Intelligent Time-Series

- Predictive maintenance
- ECG and EEG
- Human activity recognition
- ...

### Value Proposition

Through its leading expertise, superior design platform, customer driven business model, and service focused culture, Aizip has proven to provide its customers worldwide with the following value:

- Superior specs
- Fast to market
- One-stop shopping
- Excellent ROI

[www.aizip.ai](http://www.aizip.ai)