

## Category Award

### Automotive AI Audio DSP



Realtek Semiconductor Corp.  
瑞昱半導體股份有限公司

[Company Website](#)

## Winning Reason

This device has AI two-way noise cancellation technology to ensure a superior voice call experience. With a graphical sound effect algorithm development kit, this offering by Realtek allows clients to create brand-specific sound features for their products. The continuous development of AI audio algorithms allows for an expansion into novel applications such as police siren detection and the fusion of audio and visuals. Its applicability to ADAS systems promises further improvements in driving safety.

## Product Feature

The ALC5575, developed by Realtek Semiconductor, is an industry-leading DSP with an embedded self-developed Neural Network Processing Unit (NPU). It boasts computing capabilities and supports various AI audio algorithms for automotive applications. These include 2-way AI noise suppression and target speaker tracking for calls, a graphic audio effect design tool for music playback, multi zone voice recognition for in-car voice control, and emergency siren sound detection to enhance driver safety.

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