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Cerence
ASR Speech Recognition

High Accuracy. Superior Functionality. Scalability.

Cerence ASR is a unique SDK for embedded and connected speech recognition applications. This feature-rich development suite supports creating voice-based HMIs for home appliances, logistics, smart homes, and many more. Natural language understanding and speech signal enhancement are available to create robust and intuitive voice control solutions.

Automotive

Consumer electronic devices
- Personal navigation devices
- Smart phones
- Gaming
- Smart watches

Industrial applications
- Warehousing/distribution
- Medical

Home appliances, utilities and entertainment

Accessibility products for the blind and disabled

This advanced speech recognition engine delivers a new level of speaker-independent and continuous speech recognition capabilities with unique features. It provides superior functionality, unmatched accuracy, and high performance for a variety of applications that benefit from speech control.

Designed as a modular and scalable engine, Cerence ASR can accommodate a large range of embedded platforms. Deployments can be customized with optimized footprints as dictated by the required functionality for each application.

A new level of
speaker independent
speech recognition

AI for a World in Motion

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Cerence ASR

Applications

Cerence ASR is optimized for a wide variety of applications and has been deployed in automotive, accessibility, industrial, and consumer electronics solutions for over 15 years.

Feature	Benefits
Scalable modular architecture	Supports a range of operating points so that smaller applications are not affected by higher CPU & RAM required for larger applications.
Software Development Kit (SDK)	Includes sample applications and all tools required to build speech recognition applications.
Large vocabulary support	Enables embedded recognition for large lists up to millions of items.
High accuracy across a wide range of noise environments	Cerence ASR is developed for mobile applications with high accuracy operation to SNR levels as low as SdB.
Part of the Cerence speech & language technology family	Cerence ASR is part of an unrivaled portfolio of speech and language solutions, working on its own or as a fine-tuned chain of technologies, including noise reduction, speech recognition, language understanding, dialogue, text to speech, voice biometrics, and more.
All Inclusive Main Menu (aIM)	Enables all commands from all domains to be spoken in a single utterance on the main menu.
Wake-up word	Always listening mode with key-word activation removes the need for a "press to talk" button.
Barge-in	Allows user to speak over spoken dialog prompts and be recognized.
Global language support	Global support for over 30 languages provides universal functionality.
Embedded message dictation	Recognizes free-form dictation text, together with a message command, all in a single utterance.
Full Flexible POI Recognition	Recognizes every possible word in a database in every possible order, especially suited for Points of Interests (POI).
Domain-specific solutions	Dedicated solutions for key domains, such as music, destination entry, telephony, and more. Multilingual recognition (e.g. for domains, such as music and destination entry).
Spelling module	Spelling module available as backup to whole word recognition.
Hardware Acceleration	Support Spansion and Neon Expansions to speed up the speech recognition tasks.

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