

DEEPCRAFT™ Voice Assistant

DEEPCRAFT™ Voice Assistant is an Edge AI solution that enables natural voice interfaces to run locally on edge devices, optimized for power and performance on Infineon's PSOC™ Edge MCUs

Edge device providers are looking for ways to enable AI features in their products without requiring their customers to go through the hassle of cloud connectivity. Local AI processing can ensure reliability and brand consistency by eliminating the risk of cloud provider APIs changing over time. DEEPCRAFT™ Voice Assistant is a cutting-edge voice recognition solution designed to address these needs and to enable optimal performance and system level power efficiency. Device providers are increasingly seeking intuitive and human-centric ways to allow users to interact with their products. DEEPCRAFT™ Voice Assistant allows you to build a custom voice interface that is flexible to phrasing variations and aligned with your product's brand. Voice Assistant is optimized for PSOC™ Edge MCUs, enabling AI-powered voice capabilities in many applications like wearables, robotics and smart home devices.

The no-code Voice Assistant Configuration Tool makes it easy to customize for your use case and is specifically focused on enabling quick design, testing and implementation

- Design your voice interface using the phrasing and words that provide a great user experience to your customers, without the need for audio samples or audio/AI expertise
- Easily assemble your voice interface components to create a tailored speech recognition model for your product
- Configure voice sensitivity and performance settings to optimize for your product's requirements
- Generate and test your model directly in the tool and on device using the ModusToolbox™ development environment
- Achieve your accuracy targets by removing real-world noise with DEEPCRAFT™ Audio Enhancement

Key benefits

- Allows for flexible command phrasing, enabling a human-centric interface
- AI processing is done locally with no requirement for connectivity to cloud APIs
- Entire solution runs on PSOC™ Edge MCUs, enabling optimal system-level power and performance

Key features

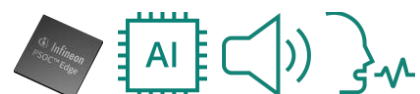
- Power-efficient AI acceleration and audio pipeline
- Easy-to-use, no-code configuration tool for quick prototyping and deployment
- High accuracy under real-world noisy environments
- Low-power, always-on listening enables extended battery life

Get started today with DEEPCRAFT™ Voice Assistant tools, code examples, and training to accelerate your voice product development from concept to production.

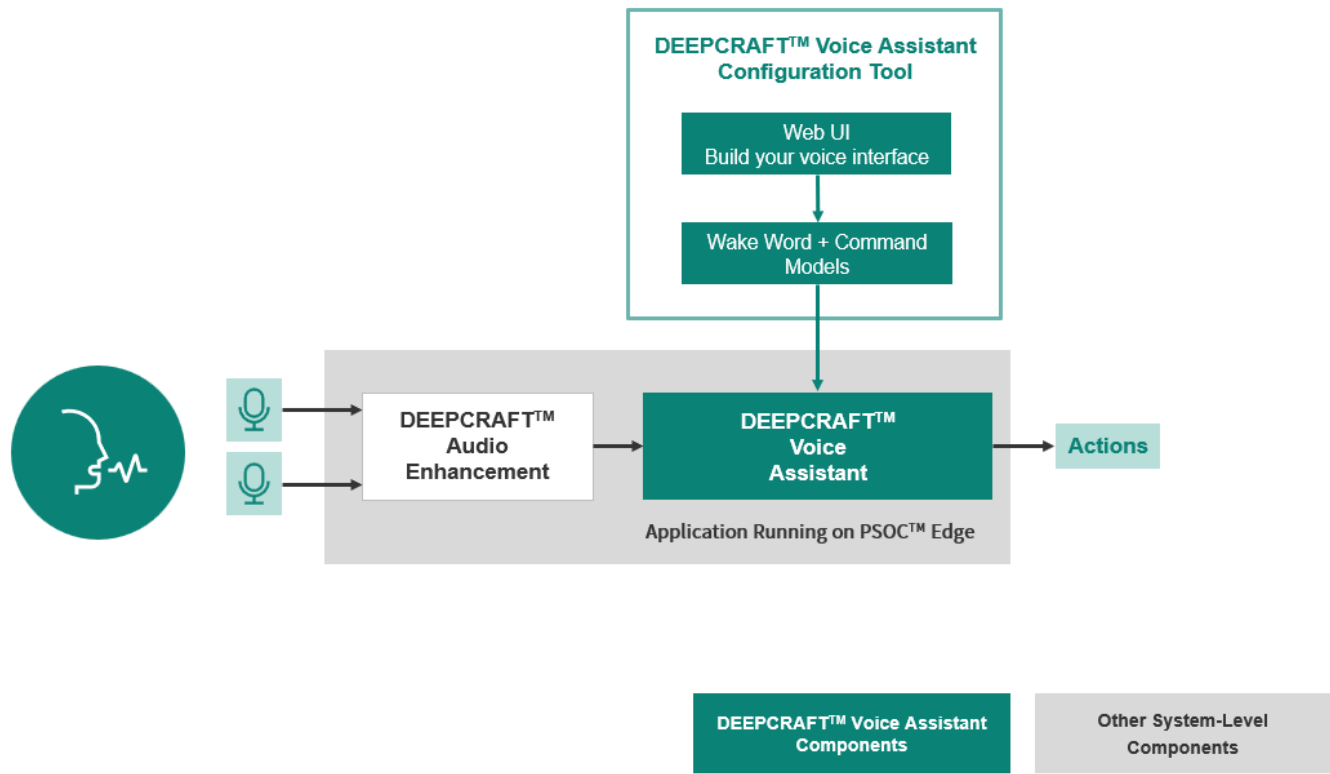
Find out more about [DEEPCRAFT™ Voice Assistant](#).

Key applications

HMI	Smart Home	Wearables	Robotics	Security
Appliances Industrial Device UI Factory Automation	Thermostat Speakers Door Locks	Fitness Watches AR/MR/VR Glasses Audio Accessories	Vacuum Cleaners Vacuum Robots Service Robots Industrial Robotics	Security Cameras



DEEPCRAFT™ Voice Assistant System Overview



Specification and compatibility

Supported microcontrollers:	PSoC™ Edge MCUs
Supported compilers:	Arm® Compiler for Embedded, LLVM
Supported operating systems:	FreeRTOS
Supported hardware platforms:	PSoC™ Edge E84 Evaluation Kit , PSoC™ Edge E84 AI Evaluation Kit
Compatible software products:	DEEPCRAFT™ Audio Enhancement

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