Overview

The DK-CH101 is a comprehensive development platform for CH-101, a miniature ultrasonic time-of-flight range sensor with a range of 4 cm to 120 cm. The development kit is equipped with an on-board CH-101 sensor and up to four external MOD_CH101 sensor modules can be connected to the board via flat-flex cables for easy prototyping.

Part of the SmartSonic platform, the DK-CH101 is designed around Atmel’s SAMG55 Cortex-M4 MCU, and can be used by developers for rapid evaluation and development of CH-101 based solutions. The DK-CH101 includes an on-board Embedded Debugger so external tools are not required to program or debug the SAMG55 MCU. The DK-CH101 includes an on-board Embedded Debugger so external tools are not required to program or debug the SAMG55 MCU.

The development kit comes with necessary software including SonicLink, a GUI based development tool and embedded drivers for CH-101.

SonicLink is a GUI based development tool included with the platform. It can be used to capture and visualize the sensor data from the on-board CH-101 ultrasonic sensor and external MOD_CH101 sensor modules.

Key Features

- Ultralow power range sensing
- Accurate range measurement regardless of target size
- Detects objects of any color, including optically transparent ones
- Immunity to ambient noise
- Works under any lighting condition
- Synchronized multi-sensor operation enables 2D and 3D range sensing
- Wide field of view (FoV)