SmartSonic™ Platform
by Chirp Microsystems

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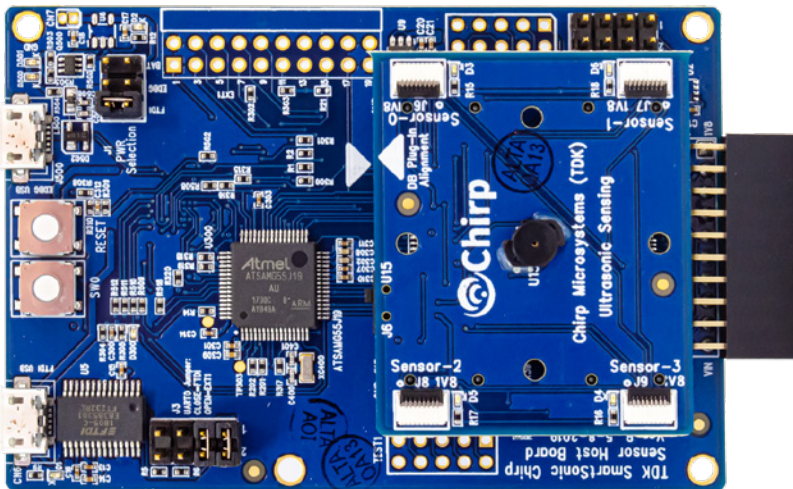
DK-CH101

Development Kit for CH-101 Ultrasonic Time-of-Flight Sensor

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)*

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