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Gravity: DF2301Q Offline Voice Recognition Sensor



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SKU: SEN0539-EN

Gravity: DF2301Q Offline Voice Recognition Sensor uses an offline chip (no internet needed). It has 121 built-in fixed commands and supports 17 custom ones via self-learning. Features dual mics (noise resistance, long distance), real-time voice feedback, and compatibility with I2C/UART + controllers like Arduino, micro:bit, Raspberry Pi. Ideal for smart home, robotics, toys, etc.

DOWNLOADABLE RESOURCES

SVG CAD GitHub

Docs Tech Specs Projects

1. Getting Started

The article discusses how to set up and manage wake-up and command words for voice assistants, covering processes such as learning new phrases, deleting existing ones, and using unique IDs for program control to enable effective communication with voice-enabled devices.

2. Example Code for Arduino-I2C Control LED

Control the voice recognition module via I2C, get the recognized command ID and play the corresponding reply audio according to the ID; get and set the wake-up state duration, and control the LED to turn on/off based on the command ID.

3. Example Code for Arduino-UART Control LED

Control the voice recognition module via UART, get the recognized command ID and play the corresponding reply audio according to the ID; set the wake-up state duration, set mute mode, set volume, and control the LED to turn on/off based on the command ID.

4. MakeCode Example: Controlling the Micro:bit LED Matrix

The article illustrates how to use MakeCode to control the Micro:bit LED matrix with a voice recognition module, providing step-by-step instructions for setup, coding, and displaying patterns like smiley faces, sad faces, and hearts on the LED matrix through voice commands.

5. Example Code for Mind+-Arduino Uno Mode

This article provides detailed guidance on using Mind+ with Arduino Uno and SEN0539 voice recognition module, including hardware and software setup, wiring instructions, and sample code to achieve voice control functions such as toggling an LED.

6. Example Code for Mind+-Python Mode Unihiker

Use Mind+ in Python mode (Unihiker) to control the voice recognition module and achieve voice control functions.

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