Block Template

March 28, 2023 16:02

Device Name: Ultrasonic Sensor

Model Number: HC-SR04

Supply Voltage Range: 5V

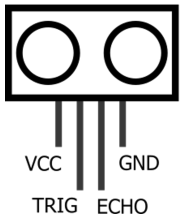
Input Type(s): Digital

Output Type(s): Digital

Interface: GPIO

Description: The HC-SR04 ultrasonic sensor is a device that uses ultrasonic waves to detect and measure distance. It has four pins: Vcc, Trig, Echo, and GND. The Vcc pin is connected to the 5V pin of the Raspberry Pi. The Trig pin is used to send a pulse to the sensor and the Echo pin is used to measure the time taken for the sound wave to bounce back. The distance can then be calculated using the formula: distance = time * speed of sound / 2.

Symbol:



Device Name: Servo Motor

Model Number: MG90S

Supply Voltage Range: 4.8V-6V

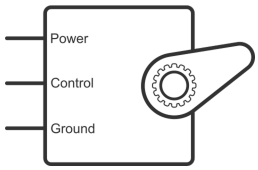
Input Type(s): PWM

Output Type(s): Mechanical rotation

Interface: GPIO

Description: The SG90 servo motor is a small and lightweight device that can rotate to a specific angle. It has three pins: V_{cc}, GND, and Signal. The V_{cc} pin is connected to the 5V pin of the Raspberry Pi. The GND pin is connected to any GND pin on the Raspberry Pi. The Signal pin is used to control the rotation of the servo motor by sending PWM signals.

Symbol:



Device Name: MQ-3 Sensor

Model Number: MQ-3

Supply Voltage Range: 5V

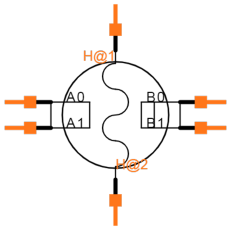
Input Type(s): Analog

Output Type(s): Analog

Interface: Analog Input

Description: The MQ-3 sensor is an alcohol sensor that measures the concentration of alcohol in the air. It has four pins: V_{cc}, GND, A0, and D0. The V_{cc} pin is connected to the 5V pin of the Raspberry Pi. The GND pin is connected to any GND pin on the Raspberry Pi. The A0 pin is used to output the analog signal that represents the alcohol concentration level. The D0 pin is a digital output pin that can be used to trigger an alarm if the alcohol concentration level exceeds a certain threshold.

Symbol:



Device Name: LED

Model Number: N/A

Supply Voltage Range: 3.3V-5V

Input Type(s): Digital

Output Type(s): Light

Interface: GPIO

Description: The LED is a simple device that emits light when a voltage is applied. It has two pins: Anode and Cathode. The Anode pin is connected to a GPIO pin on the Raspberry Pi and the Cathode pin is

connected to any GND pin on the Raspberry Pi. The LED can be turned on or off by sending a digital signal to the
GPIO pin.

Symbol: