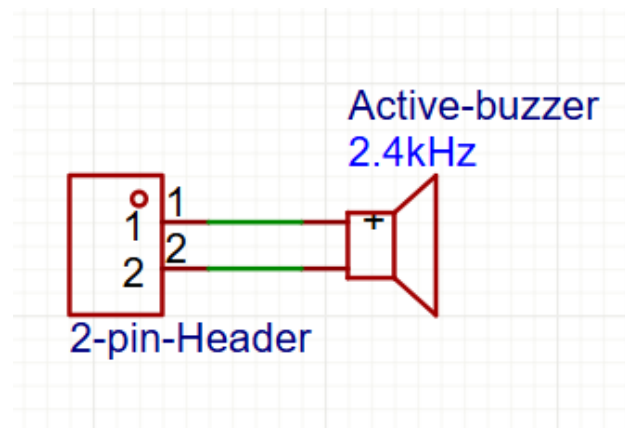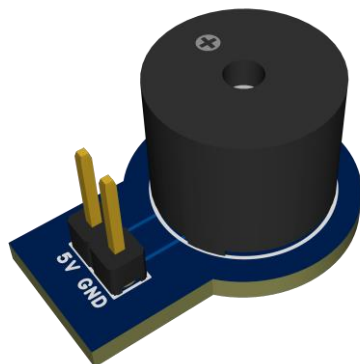# Active and Passive buzzer: How to use, and what makes them different

If you're not familiar with what a "buzzer" is or what differentiates between active and passive buzzers, this document will help you clarify these distinctions. A buzzer is an electronic component that produces sound, typically high-pitched, to alert or just to be used in prototyping projects. It operates by using either an electromagnetic coil or a piezoelectric element, which vibrates a diaphragm rapidly to generate sound. Active and passive buzzers differ mainly in how the sound is controlled and generated, making each suitable for specific applications.

Introduction

- An active buzzer only works when you connect it to the power supply (in this case 5V); You don't need to send signals (inputs) to emit a sound.

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  *Look at how simple the active buzzer connections are

- Although a passive buzzer requires an input signal to emit any sound. Connect the power supply to the module, connect the input pin to a digital pin on your microcontroller, and then run your code to make it work.

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