PWM module Product Brief

A two-channel PWM module that extends microcontroller PWM signals to drive high-power loads, featuring clearly labeled screw-terminal connectors and a JST 1mm 4 vias header for easy plug-and-play connectivity.

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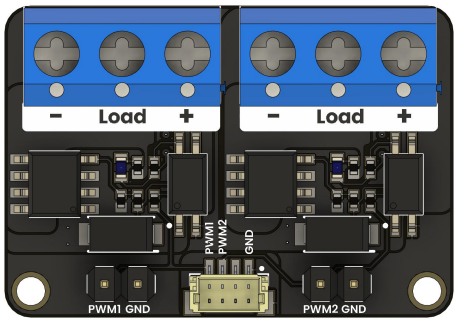
Introduction

This two-channel PWM module PCB is purpose-built to amplify pulse-width modulation signals from a microcontroller, allowing it to switch external loads at voltages and currents well beyond the device's native limits. Its compact design, featuring clearly labeled screw-terminal connectors, is ideal for applications such as motor speed control, high-power LED dimming, or any project requiring precise PWM regulation. Additionally, a JST 1mm 4 vias header is included for convenient plug-and-play wiring and daisy-chaining of power and PWM signals.



Functional Description

- The module is designed to extend the PWM capabilities of microcontrollers, enabling them to control high-power loads such as motors or LEDs.
- It features two independent channels, each with its own input and output control.
- The input control accepts PWM signals from the microcontroller, while the output control drives the connected load.
- The module is equipped with a JST 1mm 4 vias header for easy connection to power and PWM signals.

Electrical Characteristics

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Features

- The module contains two devices that share the same features but are connected to separate input and output controls, allowing for independent operation.

Applications

- The module is suitable for applications requiring high-power PWM control, such as:
- Motor speed control
- High-power LED dimming
- Any project requiring precise PWM regulation
- The module can be used in robotics, automation, and other projects where high-power loads need to be controlled with precision.

Settings

Interface Overview

Interface	Signals / Pins	Typical Use
-	-	-

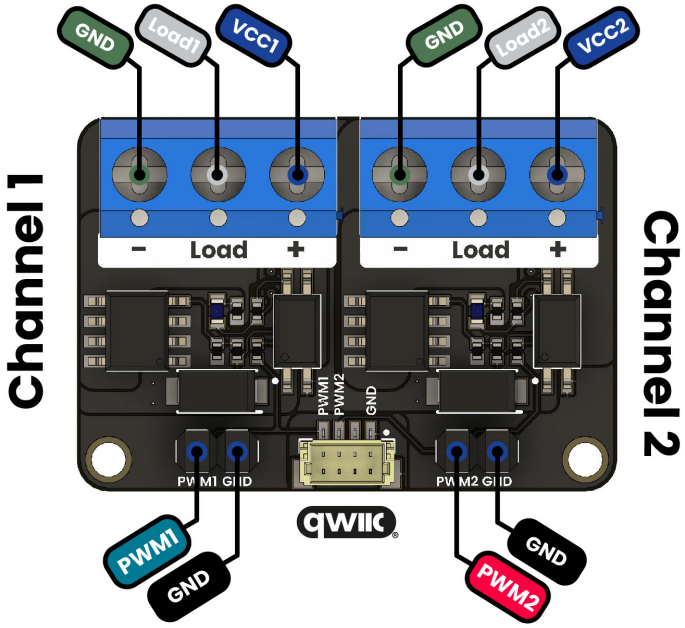
Pin & Connector Layout

Device	Input Control	Output Control	Features
PWM 1	Dedicated input for control	Dedicated output for driving	MOSFET driver with precise control and transient protection
PWM 2	Dedicated input for control	Dedicated output for driving	MOSFET driver with precise control and transient protection

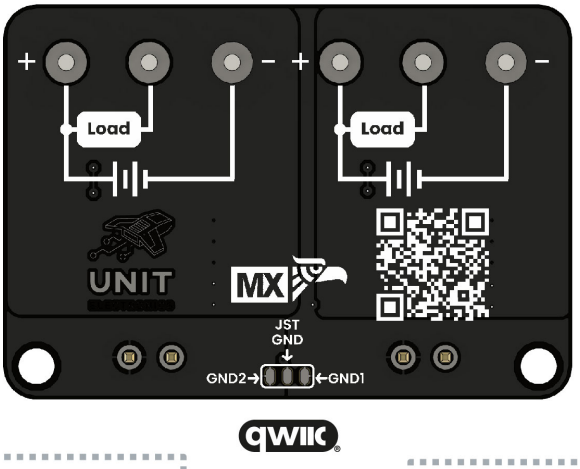
Block Diagram

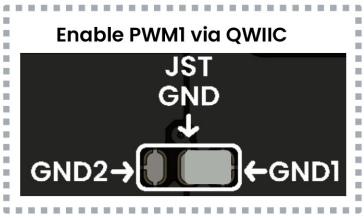
PWM Module

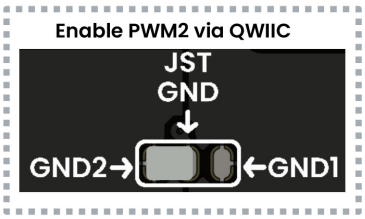
Top view



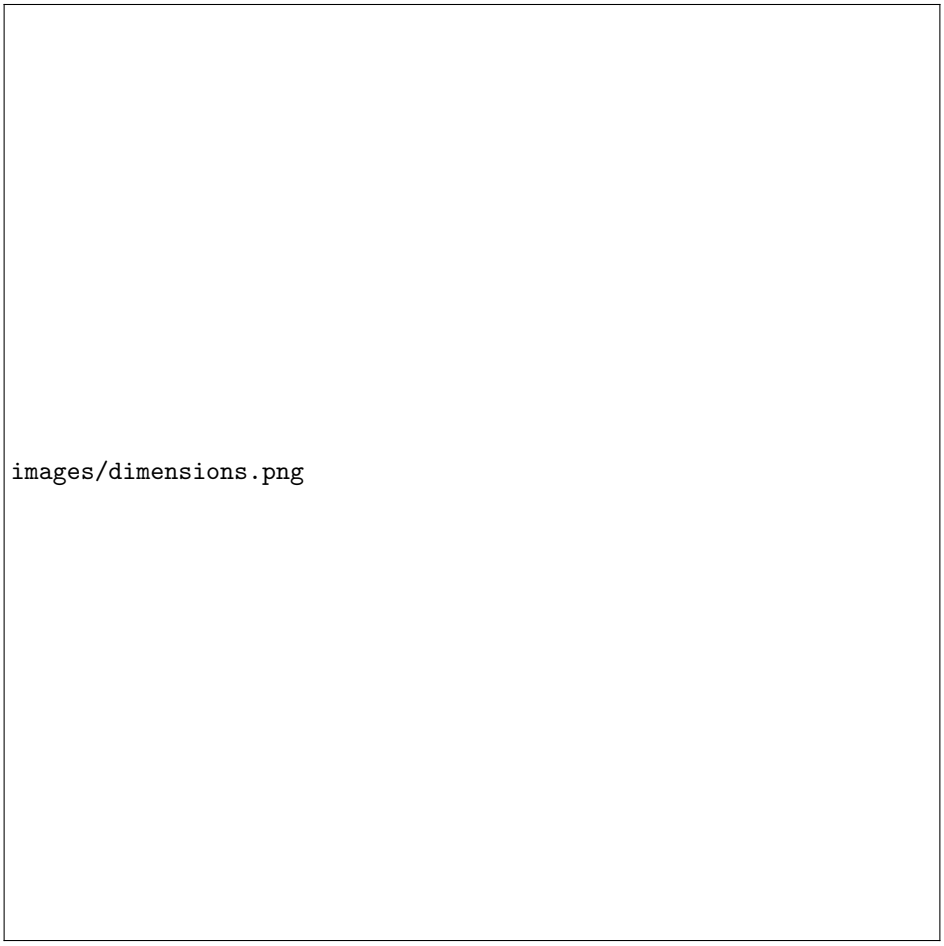
Bottom view







Dimensions



Usage

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