

Atomic HDriver Base

SKU:A092



Description

Atomic HDriver Base is an H-bridge motor driver compatible with the Atom series controllers. It features a built-in DRV8876 motor driver chip that supports DC 9~24V power input. An integrated DC/DC circuit powers the entire device, while the ADC pin G33 is connected directly to a voltage divider circuit for real-time monitoring of the input power supply. The output current reaches 1.5A with a peak capacity of 2A, making it suitable for DC motor speed control and forward/reverse rotation control. The driver integrates an N-channel H-bridge, charge pump voltage regulator, current sensing and regulation, current ratio output, and protection circuits. Protection features include undervoltage lockout (UVLO), charge pump undervoltage (CPUV), output overcurrent protection (OCP), and thermal shutdown (TSD), with fault conditions indicated via the FAULT pin.

Features

- N-channel H-bridge motor driver
- High output current capability
- 3.3V logic input
- Spread spectrum clock to reduce electromagnetic interference
- Integrated protection features

Includes

- 1 x Atomic HDriver Base
- 1 x HT3.96-4P terminal

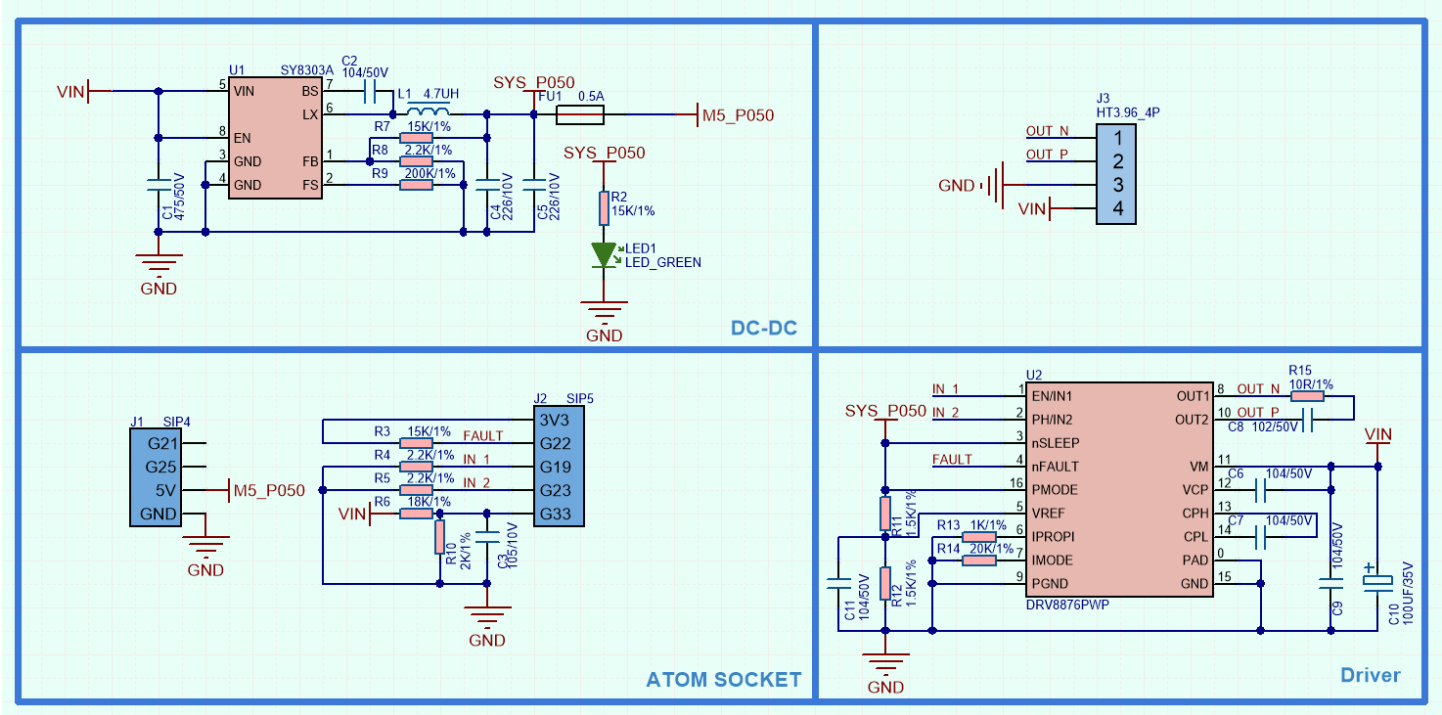
Applications

- DC motor control

Specifications

Specification	Parameter
Input Voltage	DC 9~24V
Output Current	1.5A typical, 2A peak
Product Size	48 x 24 x 17.5mm
Package Size	136 x 92 x 13.7mm
Product Weight	15.7g
Gross Weight	20.8g

Schematics

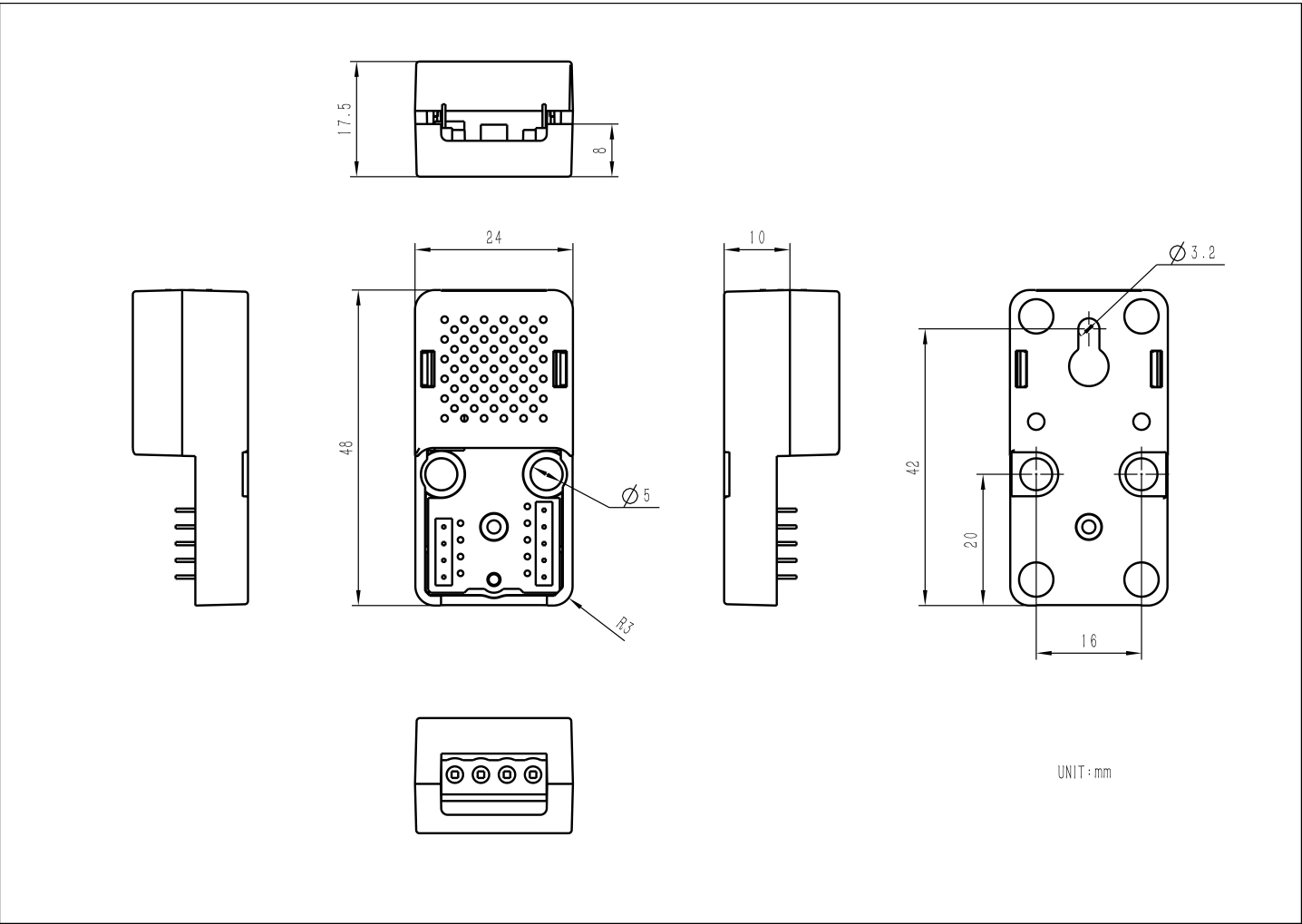


PinMap

PIN	LEFT	RIGHT	PIN
		1	3V3
	2	3	FAULT
	4	5	IN1
5V	6	7	IN2
GND	8	9	VIN-1/10

Model Size

- Atomic HDriver Base Model Size PDF



Datasheets

- DRV8876PWPR Datasheet

Softwares

Arduino

- Atomic HDriver Base Arduino Quick Start
- Atomic HDriver Base Example - with Atom

- [Atomic HDriver Base Example - with AtomS3](#)

UiFlow1

- [Atomic HDriver Base UiFlow1 Docs](#)

UiFlow2

- [Atomic HDriver Base UiFlow2 Docs](#)

| Video

- Atomic HDriver Base Feature Introduction

[ATOM_HDRIVER.mp4](#)