

ATOM H-DRIVER

SKU:K050



Description

ATOM HDriver is a H-bridge motor driver accessory for M5Atom. It integrates the DRV8876 motor driver chip, which supports 9-24V/DC voltage input (The inline DC/DC circuit supplies power to the whole device, the ADC pin G33 is directly connected to the voltage divider circuit and can monitor the power input at any time) The current output is 1.5A, max 2A, it can be used for DC motor speed regulation and forward and reverse control. The driver integrates N-channel H-bridge, charge pump regulator, current detection and regulation, current proportional output and protection circuit (protection function integration: power supply undervoltage lockout (UVLO), charge pump undervoltage (CPUV), output overvoltage Current (OCP) and device over temperature (TSD), fault conditions are also indicated by the FAULT pin).

Product Features

- N-channel H-bridge motor driver
 - Drives one bidirectional brushed DC motor
 - Other resistive and inductive loads – DRV8876: 700-mΩ (High-Side + Low-Side)
- High output current capability
 - output 1.5A, Peak 2A – H-bridge control modes
- 3.3-V logic inputs
- Spread spectrum clocking for low electromagnetic interference (EMI)
- Integrated protection features
 - Undervoltage lockout (UVLO)
 - Charge pump undervoltage (CPUV)
 - Overcurrent protection (OCP)
 - Automatic retry or outputs latched off (IMODE)
 - Thermal shutdown (TSD)
 - Automatic fault recovery
 - Fault indicator pin (nFAULT)

Included

- 1x ATOM Lite
- 1x ATOM H-driver
- 1x 3.96*4P Male
- 1x M2 Hex Key
- 1x M2*8mm Hexagon socket cup head machine screw
- 1x TYPE-C USB Cable(20cm)

Application

- DC motor control

Specification

Specification	Parameter
Power Input	9-24V/DC
Current Output	output 1.5A, peak 2A
Net weight	16g

Gross weight	36g
Product Size	24*48*18mm
Package Size	54*54*20mm

EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification.

Related Link

Datasheet

[DRV8876PWPR](#)

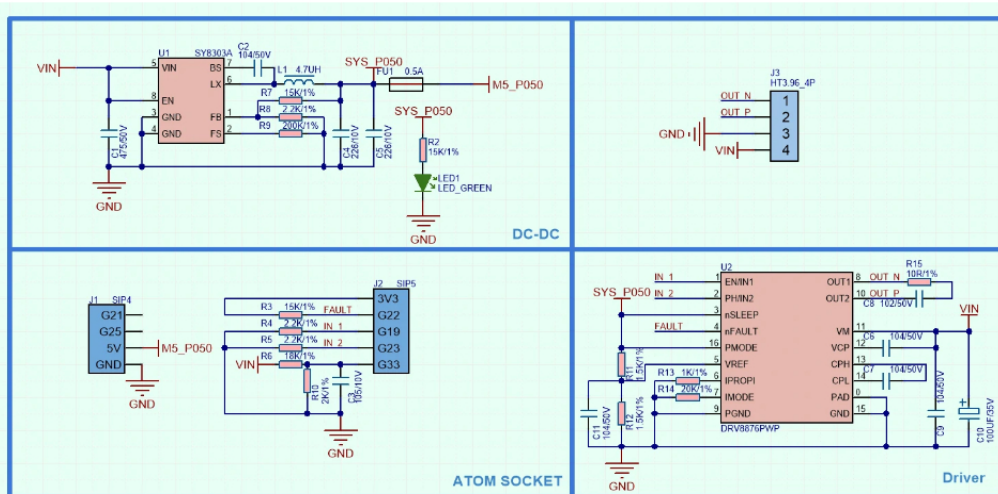
PinMap

ATOM	G22	G19	G23	G33
Hdriver	FAULT	IN1	IN2	VIN-1/10



Tip: When a fault occurs, the FAULT (G22) pin will be triggered to pull down. G33 can obtain 1/10 of the input voltage and can be used to detect the current power input.

Schematic



Example

[Click here to download the Arduino example](#)

PURCHASE