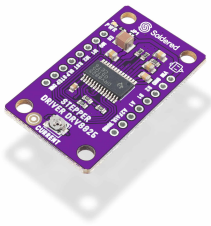


PRODUCT DATASHEET



Stepper Motor Driver DRV8825 Board

333000

The DRV8825 Stepper Motor Driver provides precise control and microstepping for smooth operation in 3D printers, CNC machines, and robotics.

Full product documentation, files and tutorials: solde.red/333000

CORE ATTRIBUTES

SKU 333000

WEIGHT 7 g

DIMENSIONS 38.0 × 22.0 × 5.0 mm

BARCODE 691835835723

DESCRIPTION

The **Stepper Motor Driver DRV8825** enables **precise control** of stepper motors, making it an ideal choice for **3D printers, CNC machines, and robotics projects**. This breakout board features the **DRV8825 chip**, which supports **microstepping** for smoother and quieter motor operation.

The module is designed for **bipolar stepper motors** and allows **adjustable current limiting**, as well as **overcurrent and overtemperature protection** for reliable performance. It supports **up to 1/32 microstepping**, improving positioning accuracy and reducing vibration compared to lower microstepping drivers like the A4988.

A built-in **potentiometer** enables easy **current regulation**, allowing you to fine-tune motor performance based on your project's needs. With a **wide voltage range of 8.2V - 45V**, this driver can be used with a variety of power sources, making it highly versatile for different applications.

Whether you're building a precision 3D printer, upgrading a CNC machine, or developing advanced robotics applications, the DRV8825 offers the perfect combination of performance, protection, and versatility. With its microstepping resolution and protection features, this driver ensures reliable, precise motor control for your most demanding projects.

TECHNICAL DETAILS

- **Voltage:** 8.2V - 45V
- **Current:** 1.5A per phase without heatsink, 2.2A per phase with heatsink
- **Dimensions:** 38 × 22mm / 1.5 × 0.9 inch

SPECIFICATIONS

INTERFACE	Digital Gpio
QWIIC COMPATIBLE	No
BREADBOARD COMPATIBLE	Yes
IC PART NUMBER	DRV8825
SUPPLY VOLTAGE MIN V	8.2
SUPPLY VOLTAGE MAX V	45
LOGIC LEVEL	3V3 Or 5V
MAX OUTPUT CURRENT A	2.2
PROTECTION FEATURES	Overcurrent, Undervoltage, Thermal Shutdown

LINKS

Open Source Hardware Files	https://github.com/SolderedElectronics/Stepper-motor-driver-DRV8825-board-hardware-design
Full Documentation	https://docs.soldered.com/drv8825/overview/
Hardware Details	https://docs.soldered.com/drv8825/hardware/
Arduino: Get Started	https://docs.soldered.com/drv8825/arduino/geting-started/
Arduino Library	https://github.com/SolderedElectronics/Soldered-Basic-Stepper-Driver-Arduino-Library
mim_package	https://checkmim.com/packages/solderedelectronics+Soldered-DRV8825-MicroPython-Library
MicroPython Module	https://github.com/SolderedElectronics/Soldered-DRV8825-MicroPython-Library
Pinout	https://cms.soldered.com/products/333000/media/333000_pinout-png_9ebb8f.svg

GALLERY

