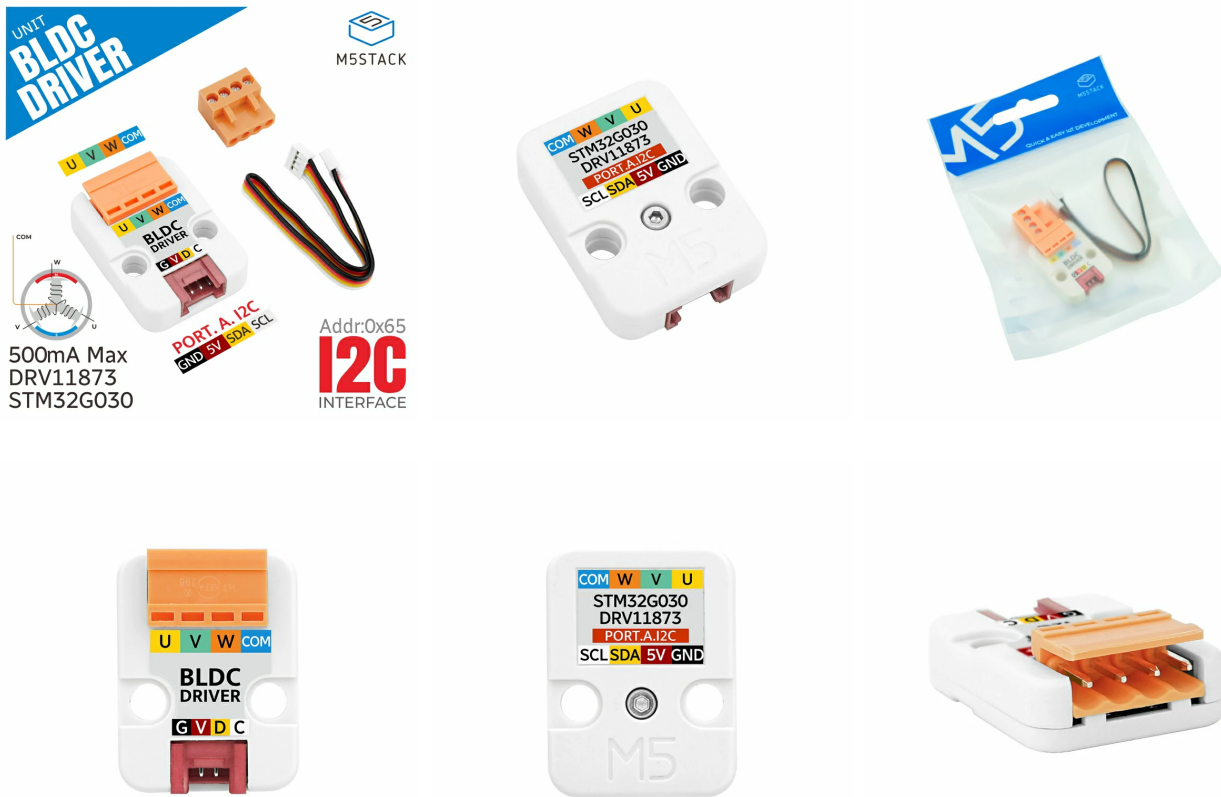


Unit BLDC Driver

SKU:U181



Description

The **Unit BLDC Driver** is a driver unit specifically designed for Brushless DC (BLDC) motors. It uses the STM32 as the main control chip and achieves precise control of the DRV11873PWR motor driver chip through I2C communication, enabling PWM speed control, monitoring, direction switching, and other functions. The driver chip features a simplified control interface and integrated stall protection, ensuring efficient and low-noise operation of three-phase small BLDC motors. The onboard STM32 upgrade interface facilitates firmware updates and functional expansions, making it suitable for industrial automation, smart robotics, precision instruments, and other fields.

Features

- STM32 Main Control
- I2C Communication (0x65)
- DRV11873 Driver Control
- BLDC (Brushless DC Motor)
- PWM Speed Configuration and Control, Direction Switching, etc.
- Stall Protection

- Firmware Upgradable

Includes

- 1 x Unit-BLDC Driver
- 1 x HY2.0-4P Grove Cable (20cm)
- 1 x VH3.96-4P

Applications

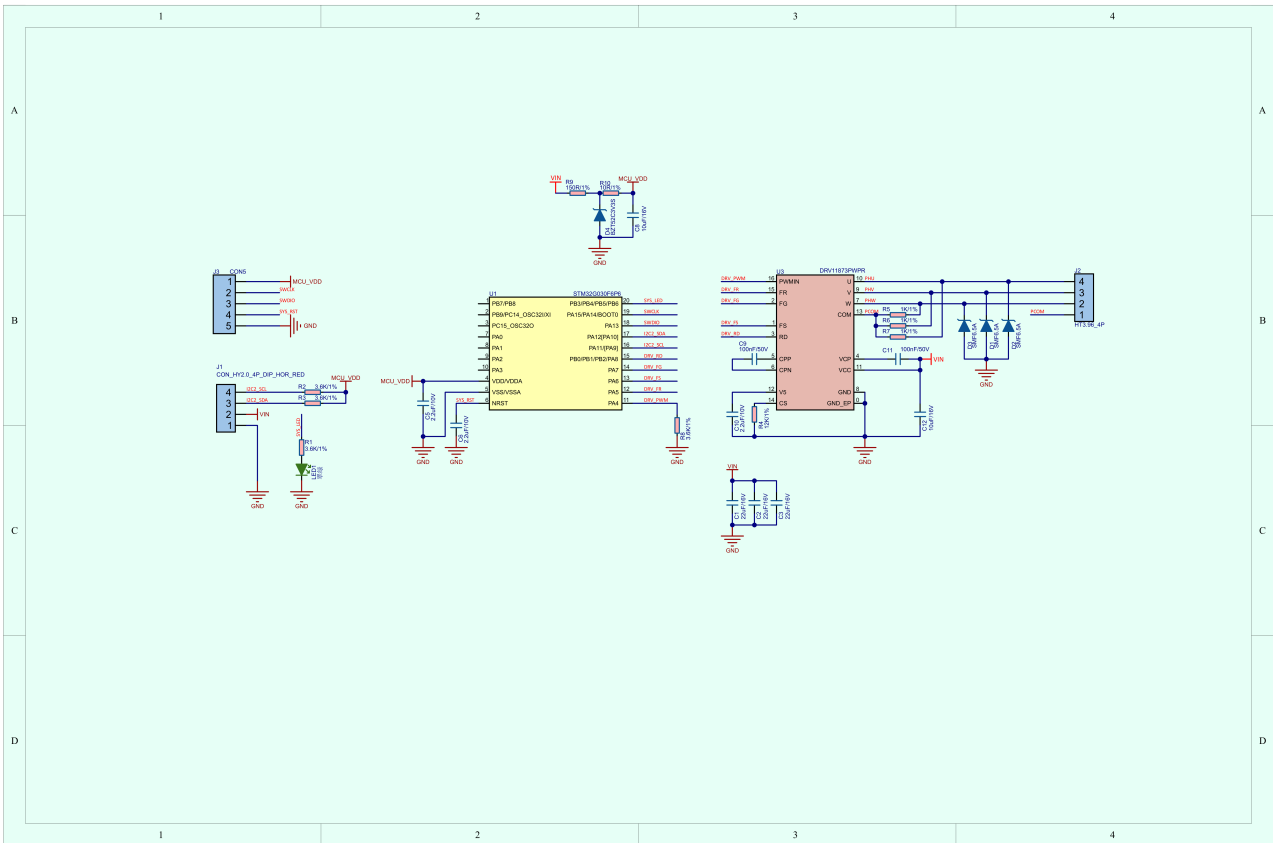
- Industrial Automation
- Smart Robotics
- Precision Instruments

Specifications

Specification	Parameter
MCU	STM32G030F6P6
Motor Driver Chip	DRV11873PWPR
Motor Type	Three-Phase Sensorless Brushless DC (BLDC) Motor
Motor Drive Voltage	5V (Powered by Grove Port)
I2C Address	0x65
Output Load Capacity	DC 5V/508mA
Power Consumption	Standby Current: DC 5V/10.62mA Operating Current: DC 5V/13.20mA
Operating Temperature	0 ~ 40°C
Product Size	32.0 x 24.0 x 11.3mm
Product Weight	6.2g
Package Size	138.0 x 93.0 x 12.3mm
Gross Weight	13.4g

Schematics

- Unit BLDC Driver Schematics PDF



PinMap

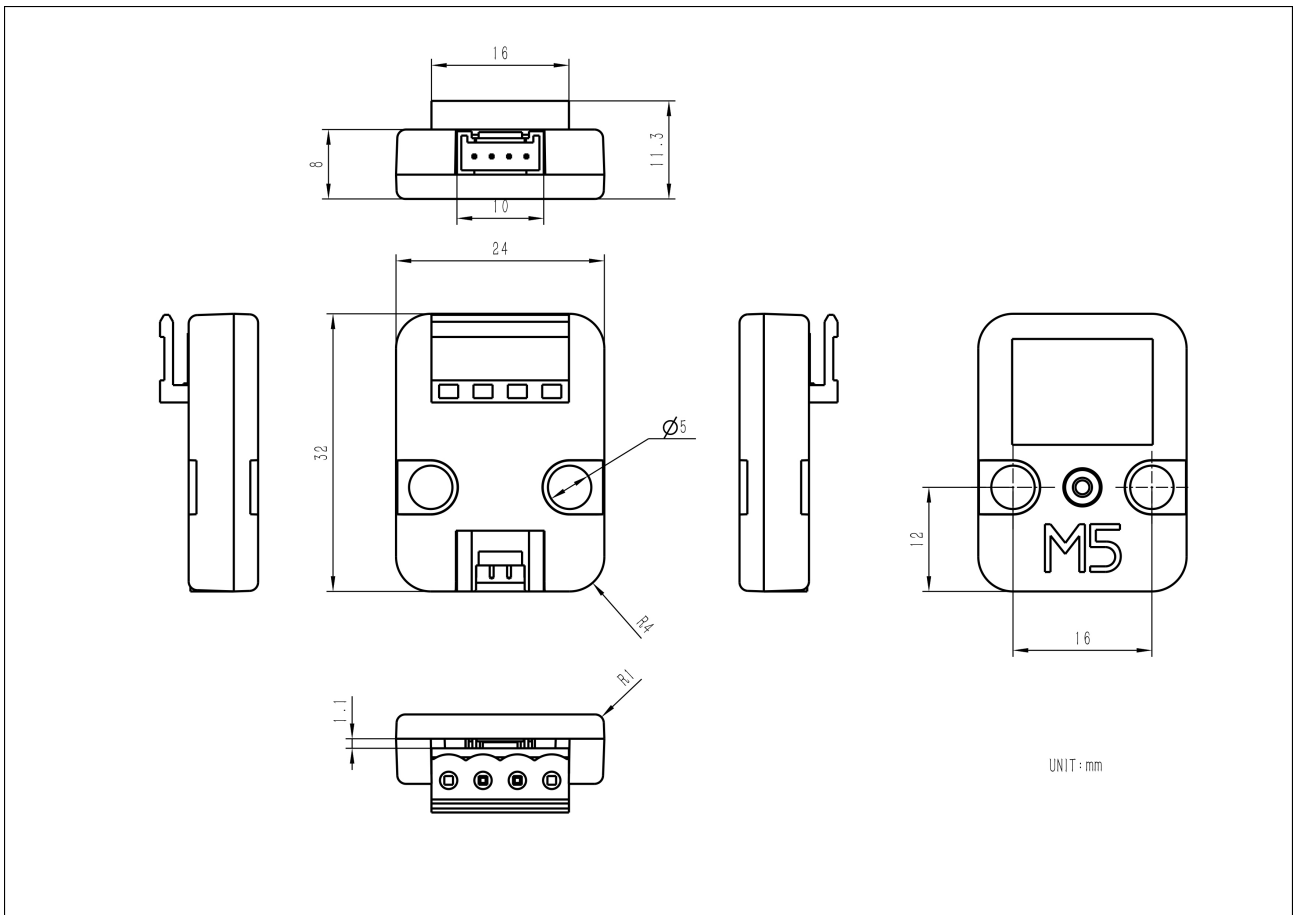
Unit BLDC Driver

HY2.0-4P	Black	Red	Yellow	White
PORT.A	GND	5V	SDA	SCL

Indicator LED

STM32	PB3/PB4/PB5/PB6
Indicator LED (Green)	SYS_LED

Model Size



Datasheets

- [DRV11873](#)

Softwares

Arduino

- [Unit BLDC Driver I2C Address Modify Example](#)
- [Unit-BLDC-Driver PWM Example](#)
- [Unit-BLDC-Driver RPM Example](#)

UiFlow1

- [Unit BLDC Driver UiFlow1 Docs](#)

Video

- [Unit BLDC Driver Product and Feature Introduction](#)

[U181 BLDC Driver UNIT 视频.mp4](#)

