

# TMC2208 V3.0 Stepper Motor Driver



**Produktkode:** 1013

**Tilgjengelighet:** 2

**Custom Field 5 (Location):** P29

**Pris: kr. 85,00**

## Short Description

TMC2208 V3.0 Stepper Motor StepStick Driver UART 3D Printer Parts Suit SKR MKS

## Beskrivelse

- TMC2100 V1.3:

1. High quality and Ultra-quiet. TMC2100 module adopts German imported chips. On the other hand, the price is much higher than other stepper drivers. But it still a very good choice for those users who have high requirement for the printer.
2. The working temperature is high. Without fan, the working temperature is about 70 degree in 0.5A, and more than 150 degree in 1A, which may cause losing step. Recommend to do a good job of cooling, the best work current is 0.5A. Algorithm and Adjustment of TMC 2100 Module Driving Current-----And the NOTES! 1. The drive current algorithm:  $i = v_{ref} * 1.9 / 2.5$ , the default  $V_{ref}$  is about 0.65V, so the default current is 0.5A, and the maximum current 1A. 2.  $V_{ref}$  measures the voltage of Gnd and potentiometer middle.
3. Please DO NOT connect the motors when measuring the voltage, or it's easy to burn the drive.
4. Please connect the power supply when measuring voltage as well, do not connect only the USB power.
5. Please pay special attention to the direction, do not insert wrongly!!! Use of the TMC2100 drive module 1. When use in the Ramps1.4 or MKS Gen, or Lerdge touch screen motherboard, please remove the 3 jumper cap under the socket. 2. Please pay attention to direction. 3. TMC class chip fever easily?so please must attach heat sink,the heat sink directly attached to the PCB. 4. The motor direction

is opposite to that of A4988 and DRV8825, please adjust the firmware or adjust the motor wiring if you want to change to 4988. And if you use the Lerdge motherboard, please set the direction directly in the setting page of direction of the motor.

#### TMC2208 V1.2:

TMC2208 single-axis stepper motor drive chip, power tube built-in drive current 1.4A peak current 2A, voltage range 4.75V-36V, 256 subdivision; with patented technology spreadCycle ? high chopper frequency, dcStep ?, stallGuard2 ? stall detection technology, CoolStep ? current dynamic adjustment technology, can save 70% of the energy, StealthChop mute technology  
Flexible microPlyer interpolation unit, the component can provide up to 256 microstep / step resolution, even in the pulse rate is limited system can still be perfect to achieve sinusoidal control; As stealthChop fine music technology is widely used in 3D printing, so These components are also designed to be compatible with existing 3D printer electronics, eliminating the need for costly redesign. Both components have pulse / direction input, can be completely independent operation. The configuration is implemented via digital input.

#### TMC2130 V1.0

Driver capability up to 1.2A(RMS) continuous coil current

Step/dir interface with up to 256 microsteps

SPI interface or CFG pins for configuration

Motor voltage: 5.5-45V

Logic voltage: 3.3-5V

Stealthchop- for quiet operation and smooth motion

spreadCycle-highly dynamic motor control chopper

coolStep-current control for energy savings

stallGuard-sensorless motor load detection

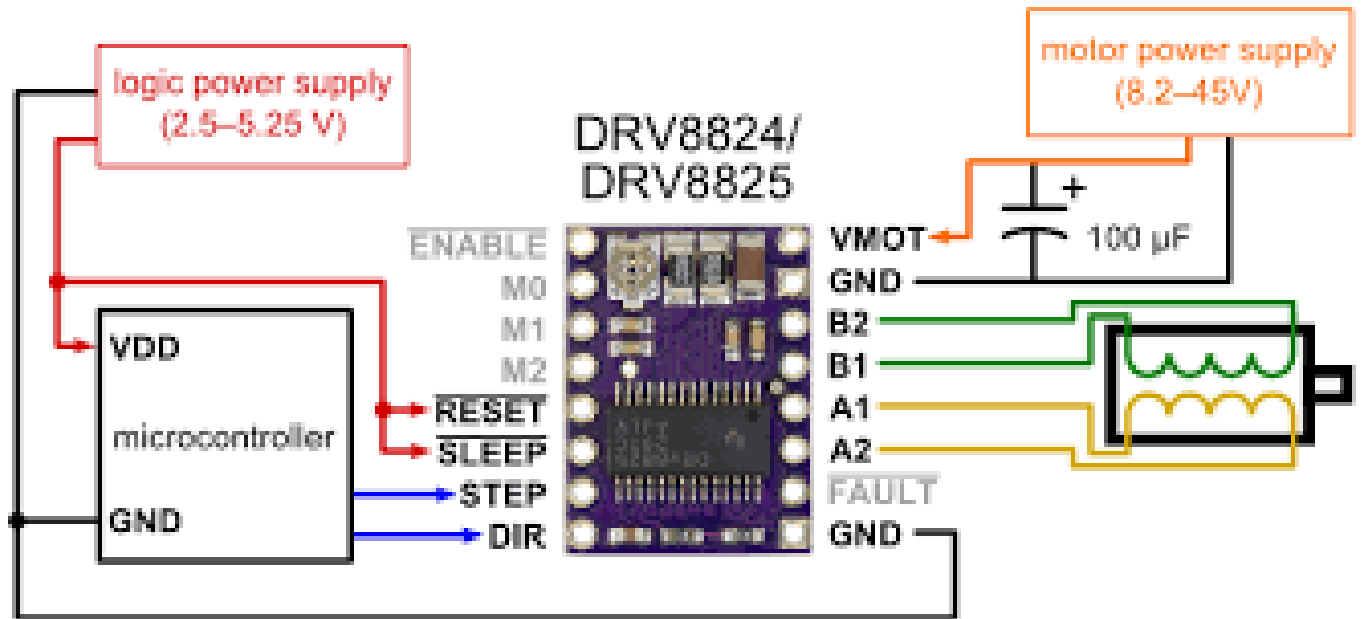
dcStep-load dependent speed control

- **Note:**
- **Manual measuring, please allow 1-2cm error,thank you.**
- **Due to the difference between different monitors, the picture may not reflect the actual color of the item. Thank you!!!**

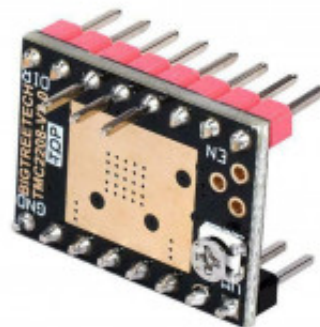
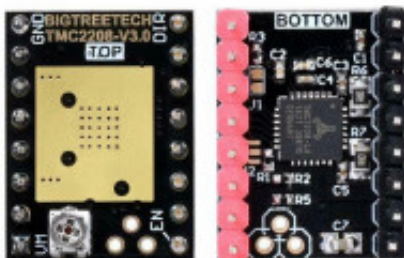
### **Package includes:**

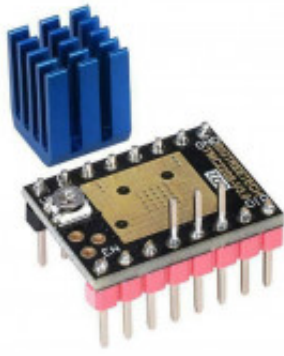
- 1 x Stepper Motor StepStick Mute Driver
- 1 x Stepper Driver Heatsink (Without retail package)

## Pinout



## Product Gallery





## Specification

Configuration:	STEP DIR or UART
Microstep:	Up to 1/256
MicroPulse:	1/256
Logic voltage:	3.3V/5V
Input voltage range:	4.75-36V
Motor Phase Current:	1.0A RMS, 2.0A Peak
Single Wire UART:	For advanced configuration options
LOW RESOM:	LS 280mΩ & HS 280mΩ (typ. at 25°C)