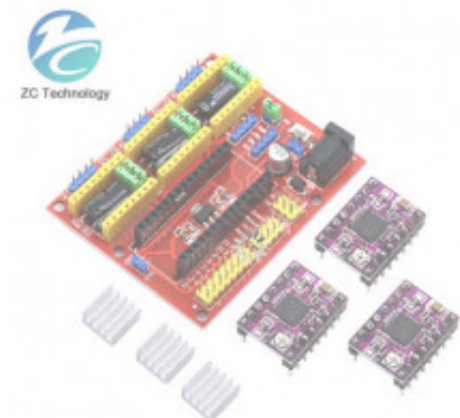


CCNC Shield v4 Engraving Machine / 3D Printer /



AT2100 Kit

Produktkode: 345435

Tilgjengelighet: 1

Pris: kr. 550,00

Short Description

CNC Shield v4 Engraving Machine / 3D Printer / + 3pcs A4988 / DRV8825 / AT2100 Stepper Motor Driver for Arduino

Beskrivelse

Product description

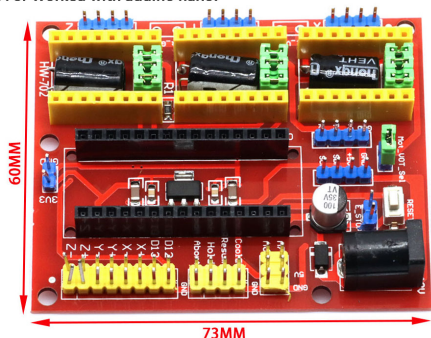


V4 Description:

CNC shield V4 needs to work with Nano board. It can be used as driver expansion board for engraving machines and 3D printers. It has in total 3 channel slots for A4988 stepper motor driver modules (not included) for driving 3 channel of stepper motors. Each channel of stepper motor only needs 2 IO ports, which means 6 IO ports is sufficient to manage 3 stepper motors. This shield can make quick work for managing stepper motors in your project.

Specification:

1. 3 axis stepper motor driver
2. Compatible with micro-drive laser engraving machine, three-axis CNC engraving machine,.
3. 2A can be controlled within the two-phase four-wire stepper motor.
4. Released the digital IO interface, easy to connect to other modules, such as ENDSTOP.
5. Released the I2C interface, you can connect to the LCD I2C or other I2C module.
6. Power DCSV interface, 7.5-12V voltage input.
7. GRBL compatible
8. For Worked with aduino nano.

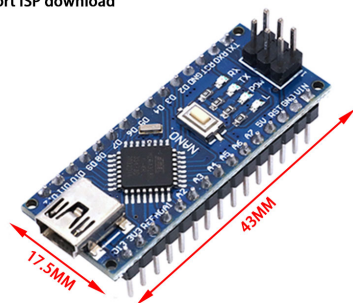


Product description



Technical parameters

CH340G Replace FT232RL
 8 analog inputs ports : A0-A7
 14 Digital input / output ports : TX , RX . D2 - D13
 6 PWM ports : D3 , D5 , D6 , D9 , D10 , D11
 1 pairs of TTL level serial transceiver ports RX / TX
 Using Atmega328p-au MCU
 There is bootloader installed in it
 Support USB download and Power
 Support for external 5V - 12V DC power supply
 Support power supply by 9V battery
 Support ISP download



Product description



Description:

A4988 is a complete microstepping motor driver with built-in translator for easy operation. This product is available in full, half, 1/4, 1/8 and 1/16 step modes operate bipolar stepper motors, output drive capacity of up to 35 V and ± 2 A. A4988 includes a fixed off-time current regulator, the regulator in slow or mixed decay modes. A4988 converter is the key to the easy implementation. As long as the "step" input inputting one pulse drives the motor one microstep. There are no phase sequence tables, high frequency control lines, or complex interfaces to program.

output.

The AT2100 supports voltage decay mode, with 256 automatic interpolation subdivision, so that the motor is in a completely silent working mode, achieving a smooth motion trajectory, even in full steps. The AT2100 can operate in an internal current sense mode, eliminating the need for two external current-sense resistors to save cost. At the same time, the AT2100 supports automatic half-current lock function, which automatically reduces the output current by half when there is no STEP change, reducing the system lock power consumption.

Product Features

- Low on-resistance RDS(ON), 2.5A peak-current output;
- Simple STEP/DIR interface for up to 16 segments;
- Support for interpolation and automatic interpolation to 256 subdivisions;
- Supports compatibility with 3.3V and 5V Support for thermal shutdown Support output over-current protection;
- Supports voltage attenuation, ultra-quiet operation, and smoother motion;
- Supports mixed current attenuation, high torque output;
- Support built-in current detection function, eliminating external current-sense resistor;
- 3.3V/5.0V optional Compatible with 3.3V and 5V logic levels.

DIR	Direction control input
STEP	STEP pulse input
EN	Enable
GND	GND
VDD	3.3V-5V(DC)
O1B	Full bridge B output 1 end
O1A	Full bridge A output 1 end
O2A	Full bridge A output 2
O2B	Full bridge B output 2
VBB	Motor power

Applications

- Printer, Scanner;
- 3D printer;
- Game machines/Robots;
- Medical equipment/ATM;
- Automated office equipment.
- Precautions:
 - AT2100 driver, there is no current adjustment when shipped. client When using, please pay attention, if it will not be biased, when adjusting the current.
- Note that if the driver is burned out due to personal reasons, we will not be responsible for!
- If you have not used a driver like a driver, please read and use the module correctly
- Comparison report between AT2100 and TMC2208

