RYC TB6600-T4 4 Axis Motor Driver Board

RYC TB6600-T4 4 axis driver board, using the Toshiba TB6600HG driver chip, the maximum output of 4.5A current, current stepless adjustable, 4 stepper motors can be driven at the same time, suitable for NEMA17, NEMA23 stepper motor, has a 12Vpower supply,can be used for MACH3 interface board or CNC controller; have large driver current, smooth running, quiet small volume, convenient installation, high cost performance, It is suitable for making CNC machines and other automation equipment.

Characteristics：

1.DC Power input type:+14V~40V；

2.Output current:0～4. 5A，current stepless adjustable；

3.12V Power output : Maximum output 2A current, for CNC controller or Mach3 interface board power supply;

4.Automatic half current function: when the motor stops running, the standby current is automatically reduced to half of the working current to reduce the heat of the driver；

5.Microstep：1、2、4、8、16；

6. Automatic decay function: the chip adjusts the current decay mode according to the motor parameters and running speed to reduce the noise of the driver.

7.Protect form : Overheated protection、over-current protection

8.The maximum pulse rate is 200KHZ.

9.Using the PWM chopper - type single - chip bipolar sinusoidal Micro - step current control mode

10.Dimensions：192mm*88mm*34mm

11.Weight：417 g.

12.Working environment：Temperature-15～50℃ Humidity<90%。

Support stepper motor:

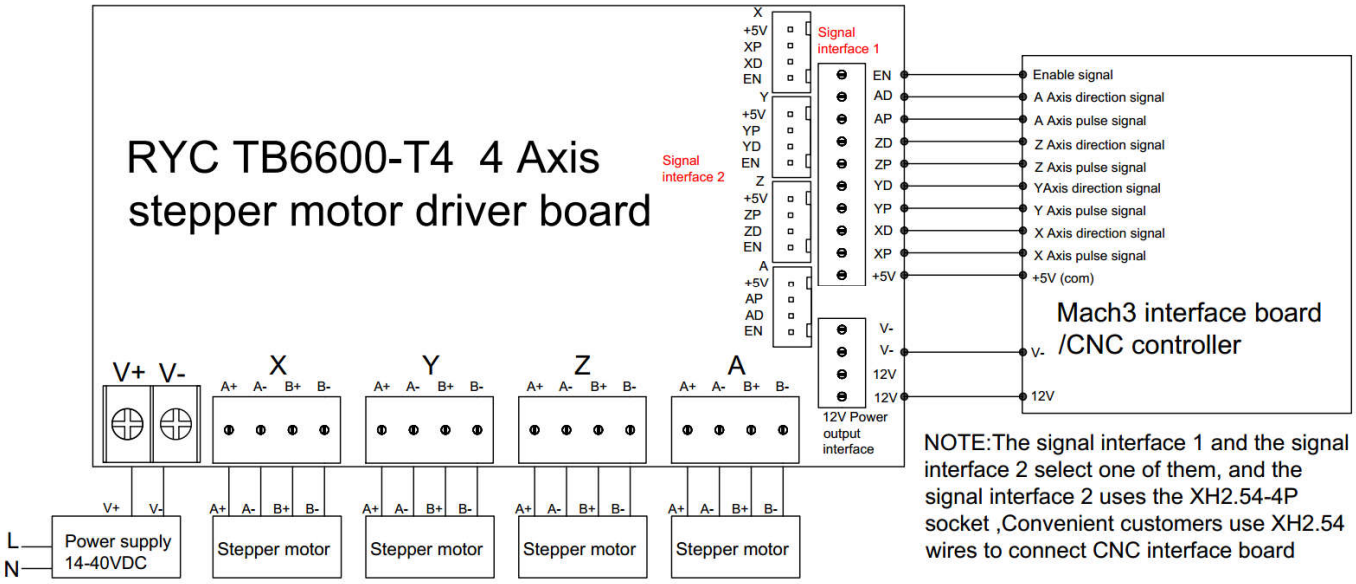
NEMA17 NEMA23 stepper motor, Step motor with a height of less than 112mm.

I/O Ports：

The text on PCB	Explain
V+ V-	Positive and negative pole of power supply
A+ A-	Stepping motor one winding
B+ B-：	Stepping motor other winding
+5V	Input signal +5V （COM）
XP	X Axis pulse signal
XD	X Axis direction signal
YP	Y Axis pulse signal
YD	Y Axis direction signal
ZP	Z Axis pulse signal
ZD	Z Axis direction signal
AP	A Axis pulse signal
AD	A Axis direction signal
EN	All axis enable signal
GND	Power negative for measuring reference voltage
VX	X Axis reference voltage test point
VY	Y Axis reference voltage test point
VZ	Z Axis reference voltage test point
VA	A Axis reference voltage test point
12V	12V power output positive pole, maximum output 2A current
V-	12V power output negative

POWER	Power indicator　LED(red)
RUN	Motor running indicator LED(Green)
ALARM	Fault indication LED(red), Overheated、over-current.，the red LED is on

Typical Connection:



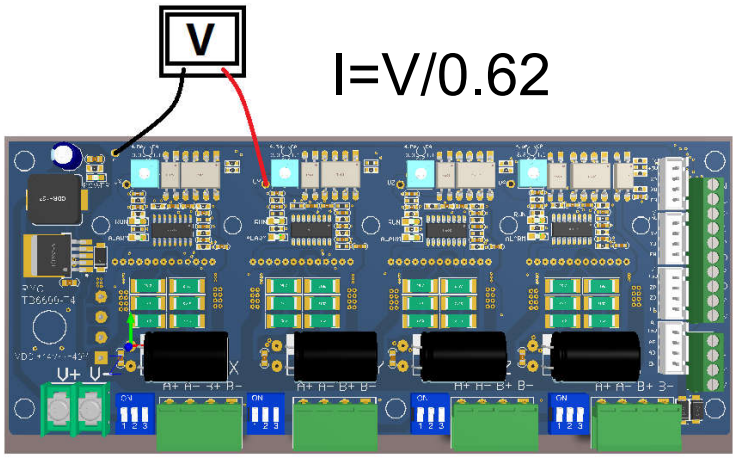
NOTE:The signal interface 1 and the signal interface 2 select one of them, and the signal interface 2 uses the XH2.54-4P socket ,Convenient customers use XH2.54 wires to connect CNC interface board

Switch Choice:

1、Microstep choice:

SW1	SW2	SW3	Pulse/rev	Microstep
OFF	OFF	OFF	Standby	Standby
OFF	OFF	ON	200	1
OFF	ON	OFF	400	2 (A)
OFF	ON	ON	400	2 (B)
ON	OFF	OFF	800	4
ON	OFF	ON	1600	8
ON	ON	OFF	3200	16
ON	ON	ON	Standby	Standby

2、Output current regulation：



Take adjust the Y axis current for an example: measuring the voltage between VY and GND, working current I = V / 0.62, such as V = 1.86 V working current is I = 1.86/0.62 = 3A. Use a screwdriver rotate the potentiometer, clockwise to increase the output current, counterclockwise reduce the output current

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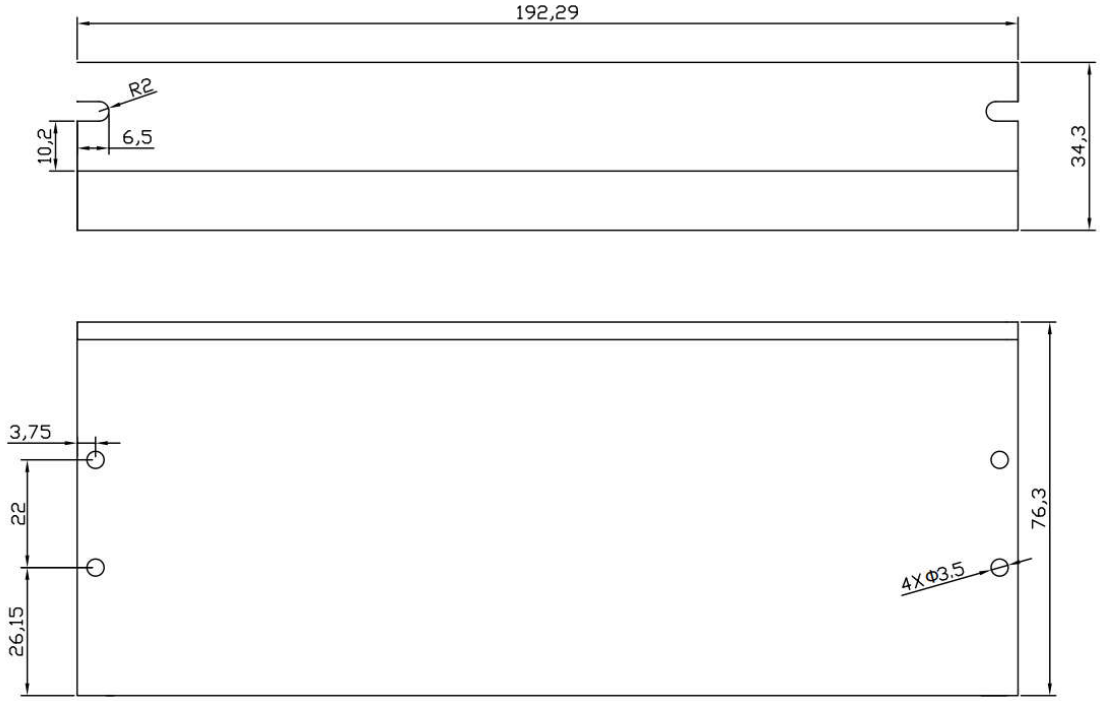
Choose the power supply：

With four NEMA23 3 A stepping motor as an example, suggest to choose 24 v 14.6A or 36 V10A switching power supply, you can increase or decrease power according to the actual situation.

Installation Dimensions:



Note:

1.When the drive is powered, do not plug terminals and operating switch；

2.Ensure that the driver has good cooling conditions and prevent dust entering the electronic control box；